THE UNIVERSITY OF HULL

PROMOTING FAMILY-CENTRED CARE THROUGH PRIMARY NURSING PRACTICE IN NIGERIA: AN ACTION RESEARCH PROJECT

Being a Thesis submitted for the Degree of

DOCTOR OF PHILOSOPHY

in the University of Hull

by

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January 1995

To my family

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Part three: The Empirical Research

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ABBREVIATIONS

AD	See ADNS
ADNS	Assistant Director of Nursing Services
AN	Associate Nurse
ANA	American Nurses Association
ANNE	Association of Nigerian Nurse Educators
CNO	Chief Nursing Officer
CNO	Chief Nursing Officer
DHSS	Department of Health and Social Security
DRGs	Diagnosis Related Groups
ECTEA	An acronym referring to the norms of a planned change; *Experimental, Collaborative, Task-oriented, Educational, Anti-individualistic.*
ENT	Ear, Nose and Throat
EPI	Expanded Programme on Immunisation
FCT	Federal Capital Territory
Fig.	Figure
FSI	Family Satisfaction Instrument
FTEs	Full Time Equivalents.
GDP	Gross Domestic Product
GRGS	Geriatric Residents' Goals Scale
IAP	Industrial Arbitration Panel
ICU	Intensive Care Unit
LPN	Licensed Practical Nurse
MCH	Maternal and Child Health
NA	Not Available
NAQ	Nursing Administration Quarterly
NAT	Nurse Anaesthetist

NLNE	National League for Nursing Education
NMCN	Nursing and Midwifery Council of Nigeria
NO I	Nursing Officer I
NO II	Nursing Officer II
NPAQ	Nursing Productivity And Quality assessment tool
NUC	Nigerian Universities Commission
OAU	Obafemi Awolowo University
OPD	Out Patient Department
ORT	Oral Rehydration Therapy
PCQ	Patient - Centred Quality
PN	Primary Nurse
PNC	Primary Nursing Co-ordinator
PNG	Primary Nursing Group
PNM	Primary Nursing Module
PNO	Principal Nursing Officer
PNOC	Primary Nursing Orientation Course
PNP	Primary Nursing Practice
PSI	Patient Satisfaction Instrument
PSS	Patient Satisfaction Scale
PTS	Preliminary Training Session
PUO	Pyrexia of an Unknown Origin
QUALPACS	Quality Patient Care Scale
RGN	Registered General Nurse
RN	Registered Nurse
RTA	Road Traffic Accident
SD	Standard Deviation
SNO	Senior Nursing Officer
SPSS	Statistical Package for Social Scientists
TENDA	The European Nursing Development Agency

UNEC	University of Nigeria, Enugu Campus
UNICEF	United Nations Children's Fund
UNTH	University of Nigeria Teaching Hospital
USAID	United States Agency for International Development
VVF	Vesico Vaginal Fistula
WATSAN	Water and Sanitation
WHO	World Health Organisation
WO	Ward Orderly

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ABSTRACT

The context of the family in developing countries, especially in Nigeria, is very wide and embraces the immediate as well as the extended family members. The involvement of the family in health care can not be over-emphasised in the Nigerian society where every family member assumes the role of his/her brother's keeper. The expectations of and the role of the Nigerian extended family system in the health care of its members, the problem of incompatibility of the nursing process with the Nigerian nursing organisational pattern, which is predominantly functional nursing, and the increased call for the improvement of the quality of nursing care in Nigeria informed this study.

The 'outsider' model of action research project using an 'insider' was undertaken to promote family-centred care through the introduction of primary nursing in Nigeria. The project involved introduction and evaluation of change in a model ward in a Nigerian hospital. The change was implemented in phases. A 37-bed medical-surgical ward in a 400-bed tertiary health institution formed the nucleus site for the change. Twenty-eight nursing staff (25 trained and 3 untrained), all patients and their families in the model ward and others took part in the change. In the pre-change evaluation study, 10 patients and 8 family members were assessed, while 8 patients and 6 family members were involved in the post-change evaluation. Data collection was carried out before and after the introduction of the change through observation, review of records, interview and self-report questionnaire. Measures used in the study included: QUALPACS, nurse-patient and nurse-family interaction sheets, modified Riser satisfaction questionnaire for patient and family satisfaction, questionnaire to determine the focus of nursing care and questionnaire to assess the practice of primary nursing in the model ward.

Families and patients were supportive of the change, nurses were receptive of the change, hospital administration was helpful and other health care practitioners were neutral about the change. Other wards in the hospital and other hospitals expressed willingness to join in the change. After the introduction of primary nursing into the

model ward, there appeared to be (1) marked improvement in the quality of nursing care received by the patients, (2) higher levels of family and patient satisfaction with nursing care, (3) an increase in the frequency of nurse-patient and nurse-family interactions, (4) improvement in the level of patient and family involvement in interactions and (5) an increase in the number of nurse-patient and nurse-family interactions in which supportive nursing activities were involved.

Despite the study limitations, further research and replication studies are suggested to enable the spread of family-centred nursing care into other hospitals. Possibilities for continuity measures, outcomes for nursing staff and other health care practitioners have been raised as necessary variables for future evaluative studies. The need for more long term studies on primary nursing, and an in-depth study to ascertain the association between presence of family at patient's beside while the patient is under care and the level of patient satisfaction with nursing care have been implicated from this study.

ACKNOWLEDGEMENTS

It would have been impossible for the aims of this work to be brought to fruition without the support and encouragement received from my family, friends, project supervisor and colleagues.

I wish to thank Prof. Margaret Clarke, my supervisor for her criticisms and suggestions some of which have shaped the entire work. I am indebted to Sue Wilkinson of the Department of Social Sciences, Loughborough University for her contribution to the work and to Dr Thompson of the University of Hull for his support on statistics. I owe a debt of gratitude to my friends and colleagues Dr Patience Abangma for her tremendous moral support and to Armstrong Takang and Dr Nsanyi Kometa all of the University of Hull who have spent several hours reading through the manuscript and making very relevant and significant suggestions.

Allison Binnie and A. Titchen of the Institute of Nursing - Oxford, Lesley Sissons - the charge nurse of Ward 21, Kingston General Hospital - Hull; Stephen Wright - the Director of TENDA; Marie Manthey (the originator of primary nursing) of the Creative Nursing Management Inc. Minneapolis, Minnesota - U. S. A; Dr Ian Gibbs of the University of York; the Primary Nursing Network, UK; Julie Baker, the Director of Emfield Nursing Home, Cottingham; Claire Wood, the Director of Nursing, Hull Royal Infirmary; Mrs M. Clough - the Area Manager of St. Andrews Home, have contributed greatly through their technical support, personal discussions and suggestions that have formed the basis of this work.

My thanks also go to Dr Y. Kadiri; Dr and Mrs Eskor Inyang; Dr and Mrs Walter Udoeyop; Dr and Mrs Ransom Essien; Dr and Dr (Mrs) Ekopimo Ibia; Mr and Mrs Patrick Nkereuwem; Dr and Mrs Essien Essien; Mr and Mrs Nyong Sampson; Mr and Mrs Andrew Onyeama; Mr and Mrs B. P. Umoren; Ms Jean Smith and other friends and colleagues too numerous to mention, for their moral support and incessant

encouragement throughout the course of my study. Thanks are also due to the staff of the Institute of Nursing Studies, the University of Hull - England; the Department of Nursing Sciences, University of Nigeria, Enugu Campus - Nigeria, for their contribution. I would like to thank Alison McNab and the entire staff of the Brymor Jones Library, Computer centre and the Print Room of the University of Hull for their assistance.

My very sincere thanks go to the University of Nigeria for funding my studies. Special thanks to the University of Hull, Northern Dairies Educational Trust and the Africa Educational Trust for some financial assistance towards this thesis. I wish to thank Chief Udenze, the Registrar and staff of the Nursing and Midwifery Council of Nigeria; Chief (Dr.) Benson Ino-Ekanem, former Hon. Commissioner for Health, Akwa Ibom State of Nigeria; Mrs A. O. Essang - Assistant Director of Nursing (Education) for Akwa Ibom State of Nigeria; Mr Macaulay Etuk - Assistant Director of Nursing (Administration) for Akwa Ibom State of Nigeria; Mr Raphael Effiong - Assistant Director of Nursing for Akwa Ibom State of Nigeria; for granting me permission to introduce primary nursing into the Nigerian Nursing System and their immeasurable support. I would also thank Mr Akwaowo of the Ministry of Information, Akwa Ibom State of Nigeria for providing the necessary information on Nigeria and Akwa Ibom State.

To Uwem Carpus, my research partner, I am deeply grateful to him for being such a wonderful ally and providing all the needed support and encouragement to make the project a success. I am also thankful to my research assistants, without whom data collection exercise in this project may not have been such an easy task. I am indebted to all the resource persons, the staff of St Luke's Specialist Hospital Anua - Uyo as a whole, and staff members of the model ward in particular, for their unceasing involvement in the change to improve the quality of nursing care rendered to patients under their care. Without the patients' and families' co-operation, this study would have remained a vision, I am particularly grateful to them.

Lastly, I wish to acknowledge my deep appreciation to Emma, my husband for his patience, understanding, encouragement, his regular visit to the model ward and unflagging support during the course of my studies. Emem, Medara, Ndifreke and Ifiok, my beloved children deserve special thanks, for demonstrating great tolerance and forbearance for my absence. I am thankful to my mum and my sister for looking after my children in my absence and to my mother-in-law for all her encouragement. I am equally grateful to other members of my family and in-laws for their understanding and prayers.

Uduak E. Archibong

PART ONE: BACKGROUND TO THE STUDY

CHAPTER ONE

BACKGROUND TO THE STUDY

1.0. Introduction

The focus of nursing care is shifting from individual family members to the family as a whole (Friedman 1986). The family is now seen as a member of the health team (Fromer 1979). Early in the team approach, families were excluded from team membership (Clements and Roberts 1983) because of the underestimation of their role. The family involvement in the care of the patient is crucial and this calls for the study of family dynamics. According to Litman (1974), "the family unit constitutes the most important social context within which health promotion and health maintenance occur" (p 495). It is not enough to study only the impact of an individual's illness on the family or the role of the whole family in the illness of an individual, but also to study the role of the family in evaluating health programmes in general and nursing systems in particular, in caring for an individual.

'Family-centredness' is a vital consideration in providing comprehensive and total patient care and nursing systems generally acknowledge its importance (Watson 1977). In order to achieve holistic, family-centred care, nursing delivery has to be organised in particular ways. Since its inception, the nursing profession has been searching for an appropriate organisational design that will meet these criteria (Clifford 1980, Marram, Barrett, and Bevis, 1979). Nursing organisational designs are ways of distributing nurses to patients or clients in any health setting. Organisation of work has an impact on the quality of care and the psychological equilibrium of clients and the nurse-clinician (Marram *et al.* 1979). A well organised nursing delivery system also makes significant enhancement of humanistic health care. Four commonly used organisational designs are case nursing, functional or task nursing, team nursing and primary nursing. These are represented diagrammatically in Figure 1.1.

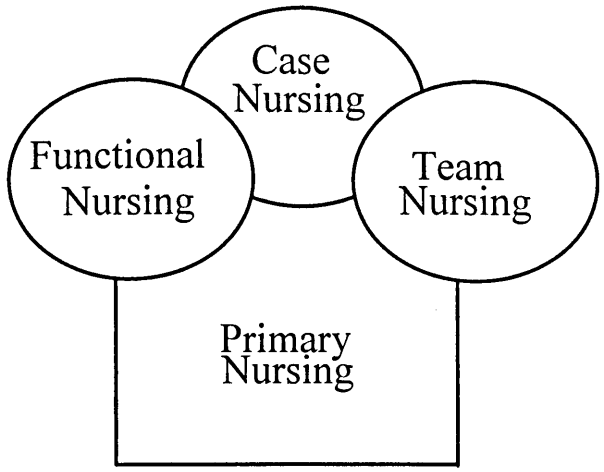


Fig.1.1. Common Assignment Patterns in Nursing.

The search for an acceptable design commenced with nursing's adoption of a one-to-one patient-nurse relationship that existed in case method of organising nursing care which characterised the pre-Nightingalian and early Nightingalian nursing eras. The nurse met the total needs of the patient and nursing care took the form of 'private duty nursing' in the patient's homes (Hegyvary 1977). Although the concepts of individual responsibility for and continuity of care were cornerstones of nursing care, the standards of care remained questionable. Nursing practice included many other roles that would not be considered appropriate today. For instance, roles of housekeeper, cook, and numerous other household chores. Nurses had little independent therapeutic function, and were inadequately trained to deal with the social, psychological and physical conditions they had to manage.

The organisational pattern of nursing care then moved to the task-oriented system of care which was characterised by fragmentation of care and lack of involvement of patient/family (Hegyvary 1977, Manthey 1980a). This shift in pattern of care at the time was as a result of the need of the profession to move in line with other professions that utilised the management principle of division of labour. Division of labour involves breaking down each job into its simplest components. In nursing, the division of labour principle resulted in the sorting of nursing functions into levels of complexity. The functions were shared such that the apparently simplest task was given to the nursing

aide, the next level was taken by the vocational nurse, while the registered nurse functioned in the apparently more complex tasks. Each person kept strictly to his/her function, with little or no attention provided to the patient as a total person. Therefore one patient would surely be taken care of by four to five nurses. In which case his/her uniqueness has been compromised, his/her wholeness broken down into parts and his/her needs reduced to a check-list on paper. According to Metcalf (1986), this pattern is an established bureaucratic method for managerial convenience. Webb (1981) states that the nurse using the task method of care delivery, "operates within an explicit hierarchy." Jobs are ordered into a hierarchy of status on the perceived hierarchy of skill necessary for the performance of each job (Ersser and Tutton 1991).

In some countries, the task nursing system has been seen to drag on and progression to the next mode has faced some difficult times. In Nigeria, for example, the task nursing pattern has gained the upper hand and most nursing units are still practising the task allocation system of nursing care delivery. Attempts to move on to the next pattern of nursing has not been very successful. This same overwhelming clinging onto the task system in England was reported by Menzies (1960c) who had described the fixation on the task method as a way to prevent a close nurse-patient relationship. Menzies argues that the protection against anxiety was built into the system of delivery of nursing care and that this encouraged the task list system. Menzies (1960c) explains:

> The core of the anxiety situation for the nurse lies in her relation with the patient. The closer and more concentrated this relationship, the more the nurse is likely to experience the impact of anxiety. The nursing service attempts to protect her from the anxiety by splitting up her contact with patients. It is hardly too much to say that the nurse does not nurse patients. The total work-load of a ward or department is broken down into lists of tasks, each of which is allocated to a particular nurse. She performs her patient-centred tasks for a large number of patients, perhaps as many as all the patients in the ward, often 30 or more in number. As a corollary, she performs only a few tasks for, and has restricted contact with, any one patient. This prevents her from coming effectively into contact with the

> totality of any one patient and his illness and offers some protection from the anxiety this arouses (p 101).

Cited advantages of functional nursing emphasise cost and quality. In situations in which only a few persons are skilled in specific and highly complicated tasks, functional nursing limits the assignment to those most qualified to perform them (Douglas and Bevis 1970). Favourable outcomes of functional nursing include less pain and greater convenience for patients and prevention of untoward complications and side effects of therapy (Friedman, Schoen, Glover and Schulman 1972, Hart 1976). Functional nursing may conserve costs and human energy resources, when the ratio of care givers to patients is low.

This pattern encourages rigid routinisation of care which does not fit into the patients' needs, thus forcing the patients into passivity. Patients' requests are seen as 'interrupting nursing routines.' Functional nursing is criticised for its fragmentation of care (Manthey 1992a, Hunt and Marks-Maran 1980, Marram *et al.* 1979), and its non-consideration of patients' needs (Webb 1981, Ersser and Tutton 1991). It is also blamed for its questionable quality of care, its stereotyped communication system, its centralisation of decision making, authority and autonomy on the ward sister, leading to a lack of sense of commitment on the part of other nurses (Manthey 1992a, Wright 1990, Ersser and Tutton 1991).

Efforts to break away from the industrialised approach inherent in task-centred nursing led to the development of team nursing (Walters 1985). This produced a need to organise nursing in such a manner that a group of ancillary nursing staff were supervised by the few available qualified nurses. This gave birth to the team approach to nursing care organisation (Hegyvary 1977). The team approach is based on the philosophy that optimal use of all personnel is possible when the preparation of each team member is matched with the client's assessed needs (Marram *et al.* 1979). In team

nursing, several nurses are put under the supervision of one nurse, the team leader, to provide care to a group of patients (Walters 1985).

Inherent merits of team nursing include advantages to both patients and personnel. It focuses on the patient rather than on tasks (Germaine 1971, Kramer 1971). Advantages to the patient include: availability of the professional nurse's judgemental skills for a larger number of patients (Peterson 1973); limitation in the number of personnel caring for a single patient (Fogt 1964) which leads to greater continuity of planned individualised care (Kron 1971); continuous supervision of lesser-trained personnel, thus providing for better patient services (Williams 1964); and increases in the number of professional nurse-patient interactions in which psychological aspects of care can be addressed (Schmieding and Roberts 1967) which foster greater patient involvement in the care process and improved assessment of patients and families (Georgette 1970). For nursing personnel, team nursing is reported to provide: greater opportunities for initiative and shared responsibility; maximal use of individual abilities (Auld 1970); reduction of time spent performing non-nursing activities (Brown and Reche 1966; Fielding 1967); opportunities to maintain or acquire knowledge and skills applicable to patient populations whose needs vary greatly (Georgette 1970); and affiliation with a work group (Deming 1971).

Many problems have been found to have arisen with team nursing:

(a) The ideal number of nurses and patients and the duration of their allocation are not specified (Hegyvary 1977).

(b) The mode of assignment of patients to nurses is vague. It could either be task-oriented, patient-centred or both. Since team nursing was meant to facilitate effective utilisation of auxiliary workers, the most appropriate work assignment would be task-oriented. This therefore contributed to the fragmentation of care and hence a reduction in quality of care.

(c) Ideally since the team leader carries the responsibility for care planning but does not necessarily carry out direct care nursing, Marram *et al.* (1974)

and Manthey (1992a), reiterate that this leads to disjointed care. Also Ersser *et al.* (1991) see the team leader, who incidentally is the most experienced nurse, as providing the least 'hands-on care.'

(d) Communication in team nursing is very complex. Inordinate amount of time is spent in communication between team members, between the team leader and the team members, between the team and the patient, and even between one nursing team and the other and the overall health team. It is difficult to know exactly who to ask about the total care of a particular patient.

In Marram *et al.*'s (1979) review of team nursing, they summarise that team nursing does not achieve the desired level of development of patient-centred care. Team nursing has not solved the problem of fragmentation in nursing and it has still left nursing with the need to design care for patients that is more personalised, individualistic and comprehensive. This has led to an urgent need to reorganise patient/family-centred care, and the suggested model is now primary nursing practice.

Primary nursing is seen as a philosophy of nursing as well as a mode of organising nursing care (Hegyvary 1977, 1982). This philosophy mandates nursing to be concerned with all aspects of a patient's need - physical, social and psychological. Primary nursing is believed to be a return of the case method, perhaps a rediscovery of what is the heart of nursing (Wright 1990). It is known to have originated in the United States of America in the 1960's, and was first used in the University of Minnesota hospital in 1969 (Manthey 1992a, 1992b). Primary nursing concept was first discussed in the British nursing literature in the late 1970s by Kratz (1979b) and Lee (1979), both of whom discuss its merits having seen it on trial in Australia. These authors encouraged British nurses to introduce primary nursing to their wards and units. The central concept of primary nursing is that the nursing care of a particular client is under the continuous guidance of one nurse from admission to discharge. Primary nursing is aimed at providing continuity, accountability, autonomy, comprehensiveness, and

professionalisation of nursing which are absent in functional and team modes of assignment.

A review of related literature shows that while primary nursing has been introduced into most parts of the world (Wright 1990), no study exists to indicate its practice in Nigeria. Several qualitative and quantitative studies on primary nursing have been conducted in critical care settings (Manley 1989), acute care settings (MacGuire 1989) and long term care settings (Wilson and Dawson 1989). The findings of these studies have varied claims for the effectiveness of primary nursing.

The impact of primary nursing on patient well-being as reflected on the quality of care received has been addressed in a number of studies. Scores on the Quality of Patient Care Scale (QUALPACS) have been found to be significantly higher in primary nursing situations (Felton 1975, Steckel *et al.* 1980). Eichhorn and Frevert's (1979) study shows increases in mean scores following the implementation of primary nursing. Reed (1988) obtained a higher quality score in a primary nursing unit in comparison with a team nursing unit. Shukla (1981), demonstrated that a primary nursing unit scored higher in five out of six QUALPACS subscales, although only significantly higher in one of these subscales. In a follow up study carried out in 1983, this time equalising nursing competencies, staff level and work load, Shukla found no significant differences in quality scores in primary nursing unit compared with the control unit. Wainwright and Burnip (1983) indicated that the quality of nursing care had improved and that there was some evidence to suggest that better outcomes for patients were being expected. Hegedus (1980), however, found no difference in scores on the QUALPACS between primary and team nursing units, but she found that lower stress was experienced by patients on primary nursing units when using Volicer's Hospital Stress Rating Scale (Volicer and Bohannon 1975).

Patient satisfaction with care is another variable reflecting patient well being and has been assessed in many primary nursing evaluative studies. Mayer (1982) found

significantly more satisfaction on seven out of twenty-five questions when patients were asked if they knew their primary nurses' names. Daeffler (1975), Watson (1978) and Hegedus (1979) provide some evidence to suggest that patients under a system of primary nursing were more satisfied with the care they received and regarded their care as being more personalised. McCarthy and Schefalacqua (1978) discovered that patients who received primary nursing care were significantly positive in their perceptions of nursing care. Although Ventura *et al.* (1982) found no difference on this measure in support of primary nursing, and Fairbanks (1981) found no difference in patient satisfaction with care between primary and team nursing practices, Giovannetti (1980) found patient satisfaction with care to be higher with team nursing practice. Also Steckel *et al.* (1980) failed to obtain any significant difference between primary nursing and control groups on measures of patient satisfaction. Blair, Sparger, Walts and Thompson (1982) did not observe any significant effects of primary nursing implementation on patient satisfaction in an emergency department.

Patients' perception of individualisation and their involvement in care was found to be greater with the introduction of primary nursing (Fairbanks 1981). Mills' (1979) study revealed no significant differences in team and primary nursing units regarding patients' participation in care, although comparison of pre-test and post-test responses revealed substantial positive changes. Hamera and O'Connelle (1981) found no significant differences between primary and team nursing groups in quantity of interactions between nurses and patients, but observed a significant difference in the quality of interactions that existed in the two groups.

Not many studies have been carried out to assess the impact of primary nursing on patients' families and their involvement in the care that concerns their sick family member. Watson (1978) found that patients on primary nursing ward perceive that nurses demonstrated concern about their families. Also Hymovich (1977) found no significant difference on the effects of team and primary nursing on the perceptions of mothers in a paediatric unit. Haff, McGowan, Potts and Streekstrat's (1988) study of the

staff, family and patients' opinions of the process and outcomes of primary nursing showed that the patients and their families are the most positive groups regarding the delivery of primary nursing.

Significant advantages of primary nursing can be summarised as follows: fixed accountability (Christman 1977, Smith 1977); increased comprehensiveness and continuity (Bakke 1974, Bolder 1977, Cicatiello 1977, Smith 1977) leading to improved quality of care (Felton 1975, Leonard 1975, Marram 1976); faster recuperation for select patient populations resulting in decreased length of hospital stay and a decrease in cost per patient per day (Brown 1976, Henderson 1964, Jones 1975); increased patient satisfaction (Isler 1976, Nenner, Curtis and Eckhoff 1977); increased patient participation in care (Ciske 1974); patient abilities to better articulate what they have learned (Cicatiello 1977, Corpuz 1977); and reduction in errors of commission and omission (Christman 1977).

Advantages of primary nursing for professional nursing personnel include: a nursing process that becomes visible and felt to be important (Christman 1977); increased self-esteem of registered nurse (Evanston 1977) accompanied by increased job satisfaction as reflected in lower turnover rates and decreased absenteeism (Ciske 1974, Isler 1976, Knecht, Schlegel and Marram 1973); improved interpersonal relations with other health disciplines, particularly the nurse-physician relationship (Cicatiello 1977); and a work environment which is consistent with the goals of educational programs in nursing and professional ideas (Knecht *et al.* 1973).

Primary nursing is not without shortfalls but these constraints have been explored in order to provide anticipatory guidance and allocate resources that will help reduce the likely problems that may be faced. These constraints include: stress resulting from over involvement with the patient / family; conflict between the primary nurse and other health care practitioners; poor knowledge of all patients by all nurses; need for a stable staffing pattern; and role conflict for the ward sister (Archibong 1993).

Primary nursing is viewed as an organisational vehicle which has allowed the application of the nursing process[1] in everyday nursing practice (Bowers 1989). Bowers' contention that primary nursing is a more realistic structure in which the nursing process can function can thus be used to argue why nursing process emerged as a professional ideology in the United States in the 1950's (Brown 1989), but was not practised until 1960s (Little and Carnevali 1976) when primary nursing came into being. The nursing process on its own is not enough because a change of shift and daily allocation of patients to nurses still incur the splitting of the nurse-patient relationship, except in primary nursing practice which provides a solution to this problem (De La Cuesta 1983).

Marks-Maran's (1978) statement that patient allocation can be used in a modified way without the nursing process but the nursing process cannot function without a system of patient allocation of which primary nursing is the major type, confirms the special relationship that exists between these two concepts. This relationship may account for the ambiguity and uncertainty that arise in non-primary nursing systems when introduction of the nursing process into the service areas is attempted. Primary nursing and the nursing process have comparable advantages of increasing nursing profesionalisation, enhancing individualistic nursing care, and improving communication.

There is an increasing body of critical literature and comments on the efficacy of our present health care system in meeting consumers needs. Criticisms come from social commentaries, consumers and health care workers themselves (Brooker, Duffield and Rook 1979). It is observed and reported by Brooker *et al.* that nurses have generally made piecemeal attempts to improve their contribution to health care, one which is pivotal in effective care and cure. Generally, most of the attempts to increase the quality

[1] *Nursing process is the scientific method of problem solving specifically designed to assess, plan, provide and evaluate nursing care appropriate to the needs of a client.*

of nursing care have been attempts to invent new and additional classes of nursing personnel. These efforts have culminated in a form of care in which the registered nurse oversees and co-ordinates a large number of lesser trained workers. Thus patient care, the function for which the RN is prepared, is implemented in a fragmentary and perhaps unskilled way by various workers performing a series of repetitious and stereotyped tasks. Indeed, the patient being the only constant is bound to suffer when no one person seems to be responsible for or interested in his/her care.

In order to advance nursing care, a real change in practice and role is needed - one in which the nurse can be a true advocate to the patient; the nurse can be held accountable for the care rendered, the trained nurse gives direct nursing care to patients and does not delegate it to others. Primary nursing seems to fit into the above description. It attempts to ensure that the total care of an individual patient is the responsibility of one nurse. Primary nursing is founded on the philosophy that the patient is the central focus of the nurse and accountability of nurses for and to their patients is paramount. Since the patient-family unit is the central focus of all nursing activities, it is important to look at nursing practice in the light of its effect on this unit.

The need for consumer (patient and family) involvement in planning and evaluating the quality of services delivered (Zusman *et al.* 1972) cannot be over-emphasised. Evaluation of health care services from the patient's point of view takes on an additional significance (Riser 1975). As Donabedian (1969) points out, the patient and the provider of health care services may differ significantly in their perception of what quality of care is and to what extent it is present. Wiedenbach (1964) identifies the patient's perception of his/her conditions as the nurse's area of responsibility. Therefore Riser (1975) reaffirms that Wiedenbach's contention is true, and that if nursing accepts this responsibility, it is inappropriate to leave the evaluation of nursing care in the hands of government inspectors or nursing auditors. She insists that it is only when evaluation of health care services from the patient's perspective is added to other methods of evaluation will a complete picture be obtained. This suggests the need to involve the

patient and family in the practice and evaluation of nursing care, which the present study aims to achieve.

1.1. Statement of the problem

As suggested, introduction of the Nursing Process presents a problem in the Nigerian Nursing system. In a study carried out by Onwubere (1989) to determine the conception about nursing process held by trained nurses at the University of Nigeria Teaching Hospital, Enugu, she found that nurses who had studied the nursing process when they were students did not use it after graduation from their schools of nursing. This suggests that they may have used the concept as students to pass their examinations only to drop it after qualifying as registered nurses.

Non-utilisation of the nursing process has given so much concern to the Nursing and Midwifery Council of Nigeria, that repeated workshops are organised on the nursing process and most qualifying examinations have compulsory questions on it. A very important reason for the difficulty involved in the utilisation of the nursing process may be the lack of use of a compatible assignment pattern in organising nursing care in Nigeria. This is confirmed by Brown (1989) who views primary nursing as an organisational vehicle which allows for the application of the nursing process.

Also, there is increasing concern and mounting reports on poor nursing care in tropical hospitals (Cole 1992). Patients and others are known to have complained of nurses' nonchalance and lack of concern for their self worth and their persons. Many workshops have been arranged by professional bodies to discuss issues of poor nursing care and modes of improving quality of care and how nursing care can be made more patient-centred. For example, the Association of Nigerian Nurse Educators (ANNE) organised a workshop in Uyo in December 1991 to improve nursing care in secondary health institutions in Akwa Ibom State of Nigeria.

Nurses concern for a person as a family member and therefore as a whole, will result in a higher level of wellness or stability for clients and a higher degree of satisfaction for nurses both personally and professionally (Kupferschmid, Briones, Dawson, and Drongowski (1991). This places much emphasis on family-centred care in the sense that families have the potential for becoming nurses' greatest ally when searching for client stability/wellness if they are particularly included in the nursing process. Family involvement and support is particularly important during the prevention phases of reconstitution and prevention of future illness or instability.

In the traditional Nigerian society (in particular) and African society (in general), the extended family undertakes various functions which in other cultures (for example in Western cultures) are shared between the nuclear family and other social institutions like the school, the church, the judiciary, etc. The extended family ideology thus forms the pillar on which rests the entire social organisation (Obikeze 1981), and it is the most important indigenous and a highly valued African institution (Obikeze 1987).

The basic (established) norm of the extended family system is that a person should be his/her brother's keeper and Nigerians hold strictly to this. In other words, 'better placed' members of the family are obliged in all circumstances to assist the 'less privileged' ones. Such circumstance may include helping to educate, feed, clothe, pay hospital expenses for, find employment for, and provide accommodation for extended family members. This stance is very obvious in Obikeze's (1987) study where 67.7% of his subjects viewed the sharing of their income with their family members as a duty and therefore must be carried out by them.

It is on the basis of this family norm in Nigeria (of being one's brother's keeper) that the family sets out to make sure that its member obtains the best care possible from health care providers. Family members want to be involved in the care that concerns their member, they want to interact appropriately with the care providers. In recognition of the problem of incompatibility of the nursing process and nursing organisational

designs, and the increased call for the improvement of the quality of nursing care in Nigeria and the role of the Nigerian extended family system in the health care of its members, this study has been designed with the intention of introducing a suitable assignment pattern in nursing in Nigeria which will allow for the operation of a patient-centred nursing care using the nursing process. Because of the central idea of primary nursing care as 'personalised care', an obvious and persistent question that this research wishes to answer is: Will the implementation of primary nursing practice in Nigeria promote family-centred care?

1.2. The significance of the study

This study could offer tremendous improvement in the quality of nursing care rendered in Nigerian hospitals. It could encourage the integration of the family into nursing care planning in hospitals. The introduction of primary nursing would increase the partnership between nurse and patients/family, and nurse and other health professionals; improve the communication in the health care industry in Nigeria which will be tailored to promote coexistence among all involved in patient care; and offer a model for others.

The Nursing and Midwifery Council of Nigeria would gain from the introduction of primary nursing by having a high standard of nursing care delivered in hospitals. Good quality care will increase the recovery rate of patients in hospitals. The Government of Nigeria; Federal, State and Local would benefit from the outcomes of the study as it will provide the health settings with a conducive atmosphere which promotes health and this will improve the health status of Nigerians.

1.3. Rationale for the study

Nursing care in Nigeria is presently fixated at the functional and team stages of the evolution of the nursing organisation pattern. The nursing process has been identified as a scientific way of giving nursing care but has not yet been successfully introduced in health care settings in Nigeria because the mode of organising care is not compatible with this concept. There is the need to introduce a more family-centred approach to

nursing care organisation in Nigeria as this will make the functioning of the nursing process realistic.

Other observations which call for the introduction of primary nursing into the Nigerian Nursing system are:

1. An increased fragmentation of care resulting from the fact that patients come in contact with large numbers of nursing staff day in, day out, with little consistency of personnel.
2. Little time spent on assessment, planning and evaluation of care given to patients and their families, although provision of physical care is adequate. This shows that only one phase of the nursing process is tackled with the other phases completely neglected.
3. Nursing personnel involvement in non-patient care activities. such as, errands.
4. Spending most of nursing time on charting and reporting of medical activities without due attention given to documentation of nursing care.
5. Non-commitment of nurses to nursing care because they are not accountable for the care they give. The ward sister answers all queries concerning patient care and therefore assumes the responsibility for care rendered to all patients in the ward.

It is important to note that the nursing system in Nigeria will be favourable for primary nursing implementation because it has an all-RN staffing structure. This reduces the difficulties faced when primary nursing is introduced into a non-all-RN nursing unit where confusion exists as to how the enrolled nurses and practical nurses will be used. Also conducive for primary nursing introduction in Nigeria is that there is no permanent night shift assignment of registered nurses. Primary nursing involves the formation of a bond between nurses and the family system; a partnership between nurses and family. In the traditional Nigerian Society in particular and African society in general, any care that involves the family would be embraced.

1.4. Summary

Primary nursing studies have presented inconsistent findings. This can in part be attributed to the difficulties encountered in evaluating one component of a complex, multivariate system such as a hospital. Primary nursing in itself is a complex phenomenon and this may also have influence on the findings. The researcher believes that more stringent research designs could result in more effective evaluation of primary nursing. This issue is addressed by Marram Van Servellen (1980) who advises that primary nursing research requires an experimental or quasi experimental design with at least pre -and post - measures. Of particular interest was the lack of evidence of primary nursing practice in Nigeria. Therefore, the intent of this study was to go beyond mere investigation to include use of findings which is the major strength of action research. The study was aimed at designing a model of primary nursing suitable for the Nigerian Nursing System, introducing and evaluating the impact of this model on families.

CHAPTER TWO

A PROFILE OF NIGERIA

2.0. Introduction

This action research project was to implement primary nursing practice and to evaluate its effectiveness in promoting family-centred care in Nigeria. The need for the introduction of primary nursing as a mode of promoting family-centred care in Nigeria has been established in the preceding chapter. The theme of this chapter is therefore to present a profile of Nigeria; its geography and climate, people, family system, culture and health and nursing care system and the area of the study - Akwa Ibom State of Nigeria and discuss the suitability of Nigeria for the practice of primary nursing.

2.1. Geography and Climate

The Federal Republic of Nigeria lies along the gulf of Guinea on the West African coast. It is bounded on the west, north and east by the Republics of Benin, Niger and Cameroon respectively and on the south by the Atlantic Ocean. Nigeria has an area of 923,768 sq. km (356,669 sq. miles). It is placed the fourteenth in size among African countries (Africa South of the Sahara 1992).

The climate varies from tropical in the coastal area bordering the Atlantic ocean to sub-tropical in the north, bordering the Sahara. The vegetation profile varies from coastal mangrove swamp and tropical rain forest to savannah. Semi-desert conditions also exist in the far north. There are two principal seasons, the dry and the rainy seasons. During the dry season (November to March), the dry-laden north east winds blow across the country. The moisture-laden south westerly winds blow from the coast during the rainy season (April to October). Rainfall decreases from about 1,500mm in the south to about 500mm in the north (Investors guide to Nigeria 1992). The temperature in the coastal areas rarely rises above 32^{o}C but humidity can reach 95%. In land, the climate is drier and temperatures range from 12^{o}C to 36^{o}C.

2.2. Demography

Nigeria, has been labelled the giant of Africa; the most populous country in the continent (Africa South of the Sahara 1992). The Population of Nigeria from the 1991 census stands at 88,514,501; 44,544,531 being males and 43,969,970 being females (see Table 2.1).

Table 2.1. 1991 Nigerian Census Figures

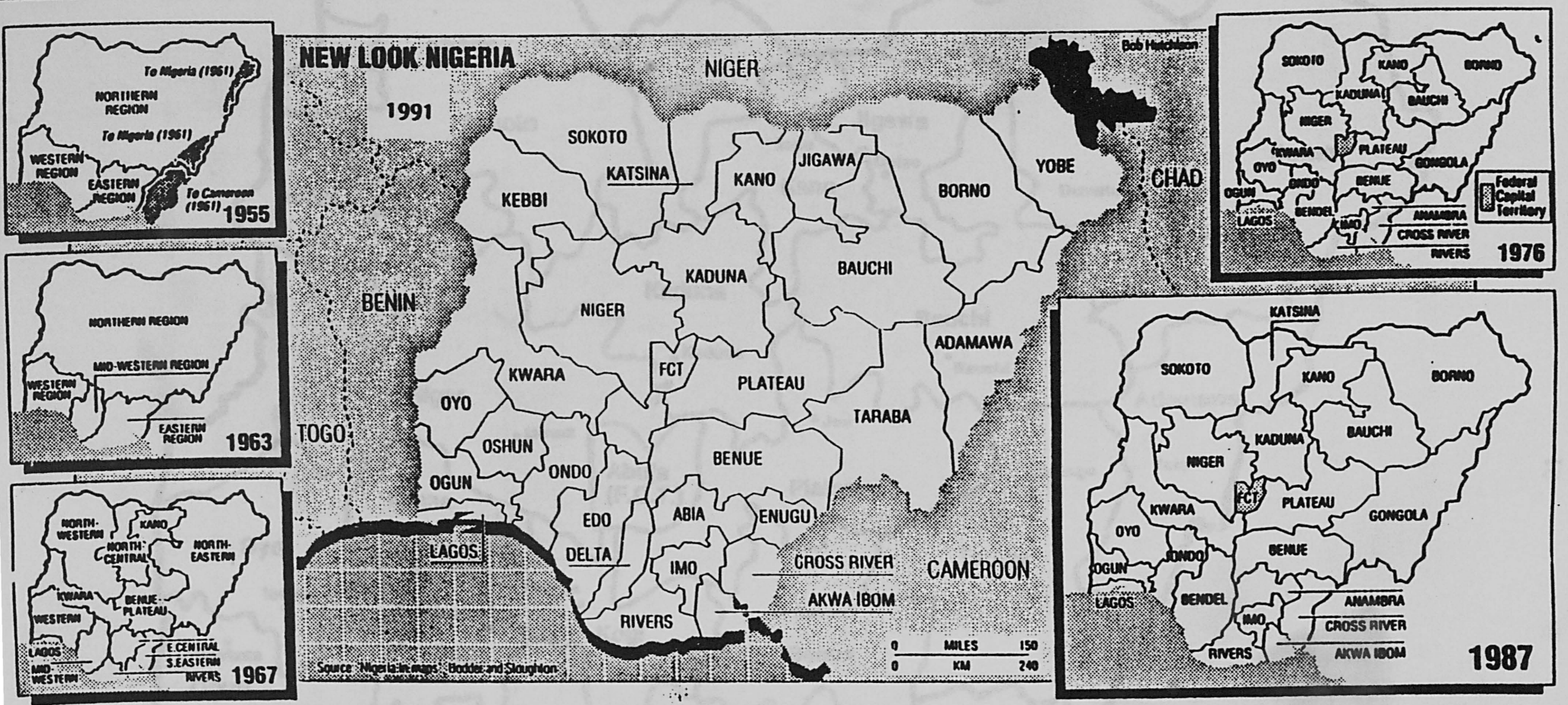
State	*Males*	*Females*	*Total*
Abia	1,108,357	1,189,621	2,297,978
Adamawa	1,084,824	1,039,225	2,124,049
Akwa Ibom	1,162,430	1,197,306	2,359,736
Anambra	1,374,801	1,393,102	2,767,903
Bauchi	2,202,962	2,091,451	4,294,413
Benue	1,385,402	1,394,996	2,780,398
Borno	1,327,311	1,269,278	2,596,589
Cross River	945,270	920,334	1,865,604
Delta	1,273,208	1,296,973	2,570,181
Edo	1.082,718	1,077,130	2,159,848
Enugu	1,482,245	1,679,050	3,161,295
Imo	1,178,031	1,307,468	2,485,499
Jigawa	1,419,726	1,410,203	2,829,929
Kaduna	2,059,382	1,909,870	3,969,252
Kano	2,858,724	2,773,316	5,632,040
Katsina	1,944,218	1,934,126	3,878,344
Kebbi	1,024,334	1,037,892	2,062,226
Kogi	1,055,964	1,043,082	2,099,046
Kwara	790,921	775,548	1,566,469
Lagos	2,999,528	2,686,253	5,685,781
Niger	1,290,720	1,191,647	2,482,367
Ogun	1,144,907	1,193,663	2,338,570
Ondo	1,958,928	1,925,557	3,884,485
Osun	1,079,424	1,123,592	2,203,016
Oyo	1,745,720	1,743,069	3,488,789
Plateau	1,645,730	1,637,974	3,283,704
Rivers	2,079,583	1,904,274	3,983,857
Sokoto	2,158,111	2,234,280	4,392,391
Taraba	754,754	725,836	1,480,590
Yobe	719,763	691,718	1,411,481
Abuja-F.C.T	206,535	172,136	378,671
TOTAL	44,544,531	43,969,970	88,514,501

2.3. States of Nigeria

Nigeria is presently made up of 30 states and the Federal Territory of Abuja. In 1963, Nigeria was made up of 4 regions, then in 1967, it grew into 12 states, thereafter in 1976, it yet increased from 12 to 19 states. Since Nigeria is a very populous country, there was the need to expand it again into 21 states in 1987 and then finally in 1991, it was further divided into 30 states. Table 2.2. and the maps (Figures 2.1 and 2.2) that follow show the different states of the nation in the different periods mentioned above.

Table 2.2. Nigeria and Its States

1963 4 Regions	1967 12 States	1976 19 States	1987 21 States	1991 30 States
Eastern	South Eastern	Cross River	Akwa Ibom Cross River	Akwa Ibom Cross River
	East Central	Anambra Imo	Anambra Imo	Anambra Enugu Abia Imo
Western	Lagos	Lagos Ogun	Lagos Ogun	Lagos Ogun
	Western	Ondo Oyo	Ondo Oyo	Ondo Osun Oyo
Northern	Kwara	Kwara Niger	Kwara Niger	Kwara Niger
	North Western	Sokoto	Sokoto	Kebbi Sokoto
	North Central	Kaduna	Kaduna Katsina	Kaduna Katsina
	Benue Plateau	Benue Plateau	Benue Plateau	Benue Kogi Plateau
	North Eastern	Gongola Borno Bauchi	Gongola Borno Bauchi	Adamawa Taraba Borno Yobe Bauchi
	Kano	Kano	Kano	Jigawa Kano
Mid Western	Mid Western	Bendel	Bendel	Delta Edo
		Federal Capital - Abuja		



State boundaries within the Federal Republic of Nigeria have changed radically since independence in 1960, when the federation comprised the Eastern, Western and Northern Regions, broadly reflecting the strongholds of Ibo, Yoruba and Hausa-Fulani people respectively, and the quasi-federal territory of Southern Cameroons. But the demand for new states proved irresistible, and on no fewer than five occasions since independence boundaries have been redrawn. The driving forces have been ethnicity (Nigeria has more than 250 ethnic groups), religious differences and decentralisation, but the process has been encouraged by the politicians for reasons of their own. The creation of a new state, with an infrastructure to build and a bureaucracy that offers jobs, has provided valuable patronage for successive governments. The three regions increased to four in 1963 and became 12 states in 1967; more states came into being in 1976 and 1987. On August 27 last year, President Ibrahim Babangida announced the formation of nine new states, taking the total to 30, plus the federal capital territory of Abuja. The changes introduced by President Babangida included the formation of nearly 50 new local government councils, bringing the countrywide total to 500.

Figure 2.1. Maps of Nigeria showing the changes in the number of states over time.

Source: Holman, M. (1992) Financial Time Survey: Nigeria. *Financial Times.* Monday March 16.

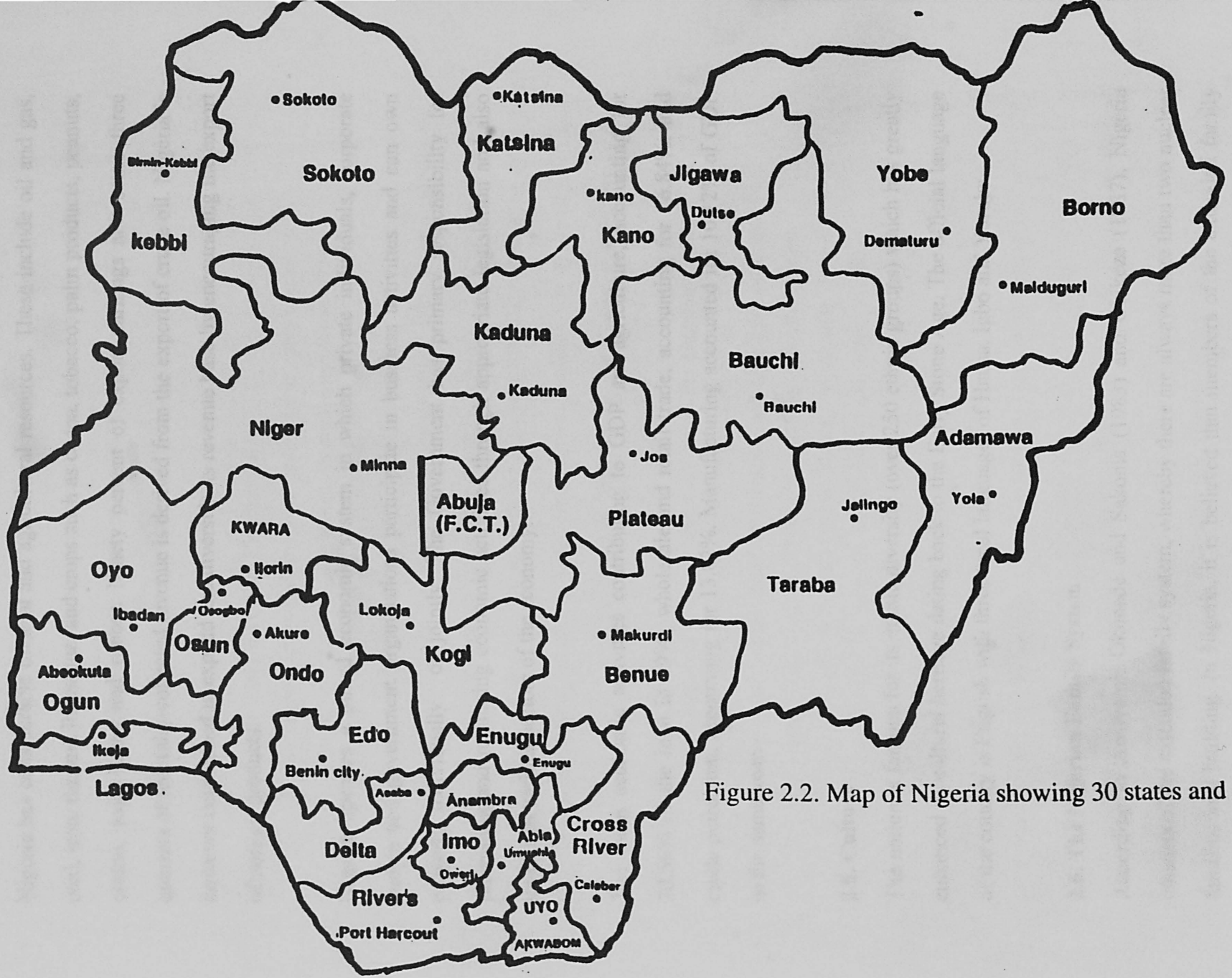


Figure 2.2. Map of Nigeria showing 30 states and Abuja

2.4. Economy

Nigeria has considerable mineral and agricultural resources. These include oil and gas, coal, iron, tin, and limestone, and crops such as cocoa, tobacco, palm products, peanuts, cotton, soya beans and rubber. Ninety percent of export earnings and some three quarters of federally-collected revenue is derived from the export of crude oil. Nigeria is however determined to expand and diversify its revenue base by encouraging the export of non-oil products.

Nigeria operates a mixed economic system in which private individuals, corporate bodies and government organisations participate in business activities and can own property individually or jointly. The Government has primary responsibility for promoting and regulating economic activities through appropriate legislation and also invests in various sectors of the economy.

The main economic activities contributing to GDP are agriculture, accounting for 30.56% of the total in 1990, wholesale and retail trade, accounting for 16.84%, and crude petroleum, accounting for 13.82%. Manufacturing accounted for 10.12% of GDP in the same year.

2.5. Culture

The nation is famous for its ethnic diversity (over 250 ethnic groups) which has greatly enhanced its cultural heritage dating back to the Early Stone Age. The official language of the country is English with three local languages of Hausa, Igbo and Yoruba.

2.6. The Nigerian Family System

According to Awoyemi, Okunade and Sakoma (1983) and Obikeze (1987), Nigeria consists of the extended family system, whereby there are always more than two nuclear families in a building. In Nigeria, it is believed that members of the extended family system are members of the immediate family.

The extended family system is the prevailing mode of family organisation in most countries of Africa, and indeed of the Third World countries in general. Obikeze (1987) views this family type as being structurally more varied and complex than the nuclear family system. The degree of extendedness varies greatly from locality to locality and from one social setting to another. Members of the extended family may live together in large compounds under a recognised head or they may be dispersed within the community. In either case, as Hunt (1966) has put it,

> the extended family exercises some controlling authority over all its members. It commands their loyalty, demands strict adherence to the norms of mutuai aid and makes major decisions (pp 6-7).

Dow and Werner (1983) write that members of the extended family are generally held together by what is described as "extensive kinship network of reciprocal social and economic obligations" (p 30). This, according to Obikeze (1987), portrays the extended family ethos or ideology in its true form. Marris (1961) in his study of the city of Lagos (Nigeria) further highlights the essential features of the Nigerian extended family ideology when he states:

> ...A strong sense of mutual obligations sustain ties of kinship as the dominant concern of everyday life. Every member of the family group has a status, rights and obligation; and enjoys the sense of security which comes from these. He is protected against unemployment, old age, the cost of sickness, and can appeal to it in any difficulty. In return, he will be expected to support others, to contribute to family celebrations, to attend meetings and reciprocate visits (p 39).

In the traditional Nigerian society (in particular) and in African society (at large) , the extended family undertakes various functions which in other cultures (for example in Western cultures) are shared between the nuclear family and other social institutions like the school, the church, the judiciary, etc. The entire social organisation in the Nigerian society rests on the extended family system, which is the most important indigenous and a highly valued African institution (Obikeze 1987).

Despite massive modernisation and industrialisation, Goode (1969) claims that " in all parts of the world, and for the first time in world history, all social systems are moving fast and slowly toward some form of the conjugal family system" (p 19). The Nigerian extended family has shown marked ability for adaptation and resilience (Obikeze 1987). It has either managed to remain very much the same or had to undergo some adaptive changes into what Litwak (1960) calls 'the modified extended family', under which condition geographical propinquity and regular face-to-face contact are no longer needed for maintaining extended relations.

Some studies have been carried out and they have not suggested any conclusive alterations concerning the extended family ideology in Nigeria. On the other hand, some other studies, in the tradition of Goode (1969), assert that a change in the extended family structure and practice is not only inevitable but is in progress. Thus in their study of Yoruba households of Western Nigeria, Okedeji and his associates (1976) observed that already "family relationships are altering under the impact of imported westernisation, transmitted through schools, churches, the media and officials and preaching on the whole, the message of the emotional nuclearisation of the family" (p 127). Similar report of changes in the traditional Sokoto family - a northern state in Nigeria by Trevor (1973) as cited by Obikeze (1987) insists that "in the last 20 years, the huge extended families of the Sokoto aristocracies have been breaking down into smaller conjugal units both from choice and because of economic pressures" (p 27).

These studies are the extreme and minority cases. In-between them are other research findings which hold that for the generality of Nigerians (both urban and rural) the extended family structure still persists. Obikeze (1987) argues that this change toward the nuclear family has become apparent only among a section of the societal elite. To further substantiate Obikeze's argument, in his study, Imaogene (1977) found that of the three types of elite known - the political, business and bureaucratic - only the bureaucratic elite type employs the 'social closure' principle to detach itself from the extended family. In other words, it was only when Imaogene isolated and analysed the

bureaucratic elite separately that a change toward nuclearisation was discernible. Otherwise , according to Imaogene (1977), "it is easy for a casual observer to conclude from the account that the new elite have not and are not creating barrier between their extended families and themselves, but on the contrary, their prominence has constituted a positive factor in the web of kinship relationships" (p 68).

The extended family system assumes everyone is his/her brother's keeper. Nigerians strictly adhere to this basic and hospitality norm. The hospitality norm enjoins that one should at all times show hospitality to other extended family members. In modern times, this is interpreted to mean that it is the responsibility of the closest kinsman of a person who arrives newly in a place to accommodate (and if possible also feed) him/her until he/she can take care of him/herself. According to Obikeze (1987) a large majority of Nigerians (over 90%) spend part of their earnings regularly on members of the extended family. Thus the extended family system can be viewed as "a levelling or equalising mechanism which helps to maintain the so-called native socialism of the African Society. On the other hand, some people hold that the extended family system places too much burden or responsibility on the more capable or fortunate members" (Obikeze 1987: p 38). This norm therefore drives the family into making sure that its member obtains the best care possible from health care professionals.

2.7. Health Care System in Nigeria

Health is among the high priority sectors in Nigeria. The Nigerian Health Care System consists of three levels of care; primary, secondary and tertiary. Each level of care is run by the different tiers of government; local, state and federal respectively (see Figure 2.3). The national health policy in Nigeria is a reflection of the 'Health For All' (WHO 1981) concept. It emphasises preventive care. The national health policy was launched by Professor Olikoye Ransome-Kuti, the former honourable minister of health, on the 24th of February 1989. The policy is made to suit the local needs of Nigerians and it is a challenge to all health care providers. The policy addresses its scope more towards the preventive, restorative primary health care approach. It states categorically that "the

government of the federation shall provide a level of health care for all citizens by the year 2000 which will enable them achieve a socially and economically productive life."

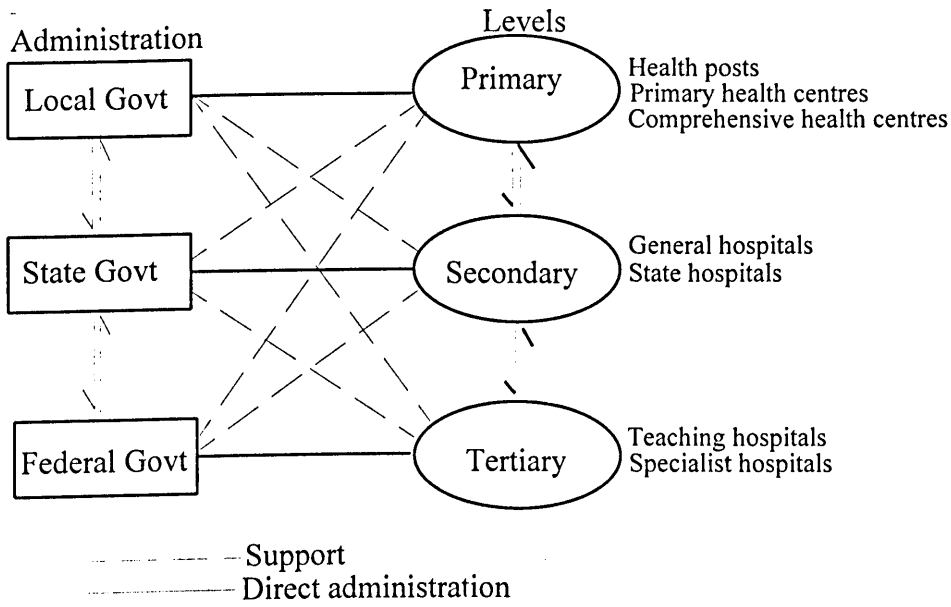


Figure 2.3. Levels of health care in Nigeria and the tiers of the Government that run them.

At the primary level of health care in Nigeria, there are many health posts, primary health centres and comprehensive health centres. The primary health care in Nigeria is the first contact of care for the people and it is aimed at accessibility and acceptability by the people. All elements of primary health care are taken into account in the plan of primary health institutions in Nigeria. Health care providers at this level include doctors, nurses, community health officers, community health supervisors, community health assistants and aides, etc. In each Local Government Area (LGA), there is a primary health care co-ordinator - a medically-trained person, who has additional training in primary health care. He/she sees to the running of all primary health care settings in the local government area and reports to the primary health care co-ordinator in the state. The state co-ordinator is responsible to the zonal co-ordinator. For ease of management of primary health care programmes, the country has been divided into four zones with a zonal headquarters and a co-ordinator. Table 2.3. shows the four zones and the states under them.

Secondary health care in Nigeria is being run by the state government through the state ministry of health. Secondary health institutions include general hospitals and other state hospitals. They are involved in all the levels of prevention; primary, secondary and tertiary. These include immunisations, counselling activities, early detection and treatment, and rehabilitative care. These institutions support the primary health care institutions.

Table 2.3. Primary health care Zones in Nigeria

Zones	States
A	Akwa Ibom, Anambra/Enugu, Bernue/Kogi, Cross River, Imo/Abia, Rivers
B	Edo/Delta, Lagos, Ogun, Ondo, Oyo/Osun
C	Kaduna, Katsina, Kwara, Niger, Sokoto/Kebbi, FCT - Abuja
D	Bauchi, Borno/Yobe, Adamawa/Taraba, Kano, Plateau

The tertiary health care system covers teaching hospitals and other specialist hospitals in Nigeria. They are the centres of excellence and therefore carry out specialised treatment for specific conditions like cardiac surgery, cancer management, etc. These institutions are administered by the federal government and are directly under the federal ministry of health. Table 2.4 shows types of hospitals and health units by states in Nigeria as at 31st December 1989.

Apart from the government, federal, state and local; health establishments in Nigeria are owned and run by other organisations. These organisations include: the community, industries, mission, joint, corporation, and private individuals (see Table 2.5). Working in the Nigerian health care settings are health personnel. A compilation of health personnel in Nigeria from 1986 to 1991 is shown in Table 2.6 (Federal ministry of health, statistics division 1992)

Table 2.4. Types of hospitals and health units in Nigeria as at 31st December 1989.

States	Gen. Hosp.	Paed	Mat. Hosp.	Mat. Home	MCH	IDH	Neuro psych.	Otho-paedic	TB	Eye	Med. Hlth centres	Lepo sarium	Prison Hosp.	Teach Hosp.
Akwa Ibom	62 (2766)	-	-	6 (35)	10 (8)	1 (25)	1 (20)	-	-	-	101 (824)	1 (150)	-	-
Anambra/ Enugu	71 (4021)	-	5(261)	312 (1794)	43 (1202)	1(-)	2(240)	1(210)	-	1(13)	71 (538)	2(222)	1(23)	1(669)
Bauchi	11 (1835)	-	-	3(36)	67 (355)	-	-	-	-	-	22 (132)	1(55)	-	-
Edo/Delta	82 (4656)	-	-	87 (716)	182 (1338)	-	1(208)	-	-	-	58 (348)	1(131)	-	1(440)
Benue/Kogi	29 (2423)	-	3(91)	10 (100)	31 (186)	-	-	-	-	-	20 (342)	2(142)	-	-
Borno/ Yobe	23 (1286)	-	-	-	29(32)	1(146)	-	-	-	1(100)	75 (450)	2(90)	-	1(530)
Cross River	28 (4235)	-	2(68)	37 (195)	60 (287)	1(204)	1(250)	-	-	-	130 (392)	7(318)	-	1(341)
Taraba/ Adamawa	13 (2291)	-	-	14(56)	15 (128)	-	-	-	-	-	39 (234)	-	-	-
Imo/Abia	90 (7251)	-	-	423 (1999)	150 (150)	-	1(80)	-	-	-	88 (640)	1(160)	-	-
Kaduna	23 (3530)	-	3(144)	57 (228)	91 (364)	2(38)	1(100)	-	-	1(55)	14(84)	3(80)	-	1 (1109)
Kano/ Jigawa	46 (2205)	-	-	7(-)	128 (18)	1(248)	1(405)	1(153)	1(86)	1(200)	13 (230)	1(206)	-	1(547)
Katsina	7 (2880)	-	1(-)	10(35)	4(8)	17(25)	1(20)	-	-	1(-)	28 (824)	-	-	-
Kwara	38 (2739)	-	1(217)	147 (570)	56 (216)	2(20)	-	-	1(30)	-	29 (253)	3(72)	-	1(416)
Lagos	55 (1192)	1(72)	1 (496)	146 (1069)	35 (179)	1(182)	1(522)	1(370)	1(80)	-	8(318)	-	1(20)	1(632)

Types of hospitals and health units in Nigeria contd.

States	Gen. Hosp.	Paed	Mat. Hosp.	Mat. Home	MCH	IDH	Neuro psych.	Otho-paedic	TB	Eye	Med. Hlth centres	Lepo-sarium	Prison Hosp.	Teach Hosp.
Niger	8 (1212)	-	-	3(12)	5(20)	-	-	-	-	-	43 (140)	1(29)	-	-
Ogun	99 (2427)	-	1 (43)	63 (354)	17 (858)	9 (164)	4 (813)	-	5(-)	5(-)	25 (297)	3 (155)	-	1(123)
Oyo/ Oshun	35 (2157)	-	-	-	210 (2451)	10 (105)	-	-	1(26)	-	6(75)	-	-	2 (1047)
Plateau	16 (1857)	-	1(176)	7(28)	39 (96)	-	-	-	-	-	10(60)	2(45)	-	1(493)
Ondo	97 (1917)	-	2(168)	260 (1560)	260 (2600)	-	1(24)	-	-	-	38 (920)	1(40)	-	-
Rivers	54 (2235)	-	-	13 (72)	31 (1551)	-	1(55)	-	1(80)	-	33(85)	11(14)	1(25)	1(282)
Sokoto/ Kebbi	9 (962)	-	-	-	65 (128)	8(40)	-	-	1(40)	-	36 (480)	1(64)	-	1(501)
All States	896 (56077)	1(72)	20 (1664)	1585 (8889)	1566 (9809)	47 (1197)	16 (2737)	3 (733)	12 (342)	10 (368)	887 (7606)	43 (1873)	4(78)	14 (7130)
FC-Abuja	1(127)	-	-	-	1(8)	-	-	-	-	-	1(130)	-	-	-
TOTAL	896 (56204)	1(72)	20 (1664)	1585 (8889)	1567 (9817)	47 (1197)	16 (2737)	3 (733)	12 (342)	10 (368)	888 (7796)	43 (1873)	4(78)	14 (7130)

Types of hospitals and health units in Nigeria contd.

States	Leprosy clinic	Dental Clinic	Other Clinics	Army Hosp	Navy Hosp	Air-Force Hosp	Police Hosp	Army Med. Station	Navy Med. Station	A-F Med Station	Police Med. Station	Army Ambula Clinic	Navy Ambula Clinic	A-F Ambula Clinic	Police Ambula Clinic
Akwa Ibom	51(-)	2	35(20)	-	-	-	-	-	-	-	-	1	-	-	-
Anambra/ Enugu	1(-)	3	78(77)	1 (250)	-	-	-	1(30)	-	1(30)	-	3	-	-	-
Bauchi	251(-)	-	311(-)	-	-	-	-	1(20)	-	-	-	3	-	-	-
Edo/Delta	193(-)	-	250(-)	1 (250)	-	-	-	3(90)	1(20)	1(30)	-	4	1(6)	-	-
Benue/Kogi	570 (10)	2	284 (90)	-	-	1(60)	-	2(60)	-	-	-	3	-	-	-
Borno/ Yobe	267(-)	-	134(-)	-	-	-	-	5(150)	-	1(30)	-	3	-	-	-
Cross River	222(-)	3	224(-)	-	-	-	-	4(120)	1(16)	1(130)	-	3	3(6)	-	-
Taraba/ Adamawa	237(-)	9	284(-)	-	-	-	-	4(120)	-	1(30)	-	3	-	-	-
Imo/Abia	29(-)	4	80(-)	-	-	-	-	2(60)	-	-	-	3	-	-	-
Kaduna	333(-)	-	176(-)	1 (500)	-	1(60)	-	5(150)	-	2(-)	-	4	-	2	-
Kano/ Jigawa	270(-)	9	362(-)	1(42)	-	1(35)	-	-	-	1(30)	-	1	-	-	1(12)
Katsina	-	6	240 (52)	-	-	-	-	1(20)	-	-	-	2	-	-	-
Kwara	139(-)	2	231(-)	-	-	1(60)	-	4(120)	-	1(30)	-	2	-	-	-
Lagos	-	5	245 (147)	2(600)	1(104)	1(60)	1(60)	5(180)	5(61)	1(30)	-	4	13(36)	1	-
Niger	254(-)	-	187(-)	-	-	-	-	2(60)	-	-	-	5	-	-	-
Ogun	-	4	287(-)	-	-	-	-	2(60)	-	-	-	2	-	-	1
Oyo/ Oshun	27(-)	7	220(-)	1(250)	-	-	-	1(30)	-	1(-)	-	3	-	-	-
Plateau	312(-)	1	205(-)	1(25)	-	1(60)	-	3(90)	-	-	-	4	-	-	-

Types of hospitals and health units in Nigeria contd.

States	Leprosy clinic	Dental Clinic	Other Clinics	Army Hosp	Navy Hosp	Air-Force Hosp	Police Hosp	Army Med. Station	Navy Med. Station	A-F Med Station	Police Med. Station	Army Ambula Clinic	Navy Ambula Clinic	A-F Ambula Clinic	Police Ambula Clinic
Ondo	46(-)	12	269 (120)	-	-	-	-	2(60)	-	-	-	2	-	-	-
Rivers	24(-)	1	74(-)	1(250)	-	-	-	2(60)	-	1(30)	-	2	3(12)	-	-
Sokoto/Kebbi	397(-)	5	319(-)	1(250)	-	1(30)	-	3(90)	-	1(30)	-	3	-	-	-
All States	3623 (10)	75	4495 (506)	4(78)	10 (2642)	1(104)	7(365)	1(60)	52 (1570)	7(97)	13 (400)	-60	20 (60)	3	3(12)
FC-Abuja	33(-)	1	45(6)	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	3656 (10)	76	4540 (512)	4(78)	10 (2642)	1(104)	7(365)	1(60)	52 (1570)	7(97)	13 (400)	-60	20 (60)	3	3(12)

Key:

62(2766) = 62 Hospitals with 2,766 Beds

N.A. = Not Available

Sources:

(a) State Ministry of Health

(b) Armed Forces Medical Services

(c) Teaching Hospitals

(d)Voluntary Agencies

Table 2.5: Health establishments by States and ownership in Nigeria as at 31st December, 1989

States	Federal Gov't	State Gov't	Local Gov't	Com-munity	Mission	Joint	Cor-poration	Indus-trial	Private	Total
Akwa-Ibom	2(-)	222(2439)	-	-	8(1049)	1(360)	1(-)	-	38(-)	272(3848)
Anambra/ Enugu	10(1429)	103(2452)	140(494)	25(306)	56(1528)	2(155)	9(102)	14(33)	240(2081)	599(8580)
Bauchi	4(20)	76(2358)	539(-)	-	38(55)	-	-	-	13(-)	670(2433)
Edo/Delta	13(1044)	641(4406)	-	-	32(724)	-	2(-)	3(29)	155(2060)	846(8263)
Benue/ Kogi	6(120)	65(1724)	655(-)	20(-)	140(1181)	-	1(-)	-	70(472)	957(3504)
Borno/ Yobe	10(909)	251(1893)	268(-)	-	-	-	1(-)	-	12(12)	542(2814)
Cross River	13(613)	303(1921)	290(436)	41(160)	42(2510)	3(558)	17(84)	3(12)	17(168)	729(6460)
Taraba/ Adamawa	8(150)	294(2653)	303(-)	-	2(-)	-	-	-	12(56)	619(2859)
Imo/ Abia	5(60)	36(2466)	198(642)	24(504)	54(1446)	3(515)	-	9(-)	542(4707)	871 (19340)
Kaduna	16(1819)	79(3493)	524(364)	-	57(483)	-	1(-)	2(55)	11(228)	720(6442)
Kano/Jigawa	7(1251)	68(2683)	738(180)	-	14(175)	-	-	-	20(158)	847(4441)
Katsina	3(20)	9(2205)	279(967)	-	4(672)	-	-	-	23(-)	318(3864)
Kwara	9(626)	185(2316)	316(300)	20(231)	54(356)	1(190)	2(80)	1(-)	70(734)	658(4743)
Lagos	44(2657)	32(1769)	288(727)	-	-	-	4(-)	-	168(1435)	536(6419)
Niger	7(60)	310(1381)	187(12)	-	-	-	-	-	3(20)	507(1473)
Ogun	6(1160)	95(1266)	379(858)	5(24)	12(545)	-	-	1(6)	184(1435)	528(5284)
Ondo	4(60)	83(1283)	612(3545)	-	14(720)	-	-	-	277(1801)	990(7499)
Oyo/ Oshun	8(1327)	59(1001)	369(1583)	-	19(855)	-	-	-	69(1375)	524(6141)
Plateau	9(893)	30(2077)	436(141)	-	64(-)	-	-	-	6(41)	603(3155)
Rivers	10(634)	206(2546)	-	-	-	-	1(-)	2(19)	36(156)	255(3355)
Sokoto	10(901)	130(1396)	781(328)	-	-	-	-	-	4(-)	845(2625)
All States	204 (15753)	3277 (45728)	7068 (10577)	135(1225)	610 (12299)	10(1688)	39(266)	35(154)	2058 (16771)	13436 (104462)
F.C.T. Abuja	1(127)	-	81(144)	-	-	-	-	-	-	82(271)
Total	205 (15880)	3277 (45728)	7149 (10721)	135(1225)	610 (12299)	10(1688)	39(266)	35(154)	2058 (16771)	13518 (104732)

Source: Federal Ministry of Health, Statistics Division- Nigeria (1992)

Table 2.6. Health workers in Nigeria. 1986-1991

Parameter	1986	1987	1988	1989	1990	1991
Registered Medical Practitioners. MD.	16,003	16,145	17,121	17,954	19,126	20,208
Nigerians	12,794	13,332	14,364	15,075	16,214	17,243
Non-Nigerians	3,209	2,813	2,757	2,879	2,912	2,965
Registered Dentists	1,001	999	1,040	1,088	1,150	1,197
Nigerians	774	787	842	899	959	1017
Non-Nigerians	227	212	198	189	191	180
Regd. Veterinary Surgeons	1,305	1,363	1,529	1,658	1,935	2,063
Regd. Nurses (RNs/SRNs)	50,946	56,120	60,462	64,503	67,764	71,712
Regd. Midwives (RMs/SRMs)	42,423	45,852	49,297	52,379	55,159	58,036
Grade II Midwives (sub-professionals))	6,078	6,078	6,078	6,078	6,078	6,078
Regd. Community Midwives	2,667	2,667	2,667	2,667	2,667	2,667
Regd. Psychiatric Nurses	2,061	2,268	2,458	2,610	2,855	3,031
Regd. Pub. Health Nurses (Health Sisters)	715	1,066	1,257	1,418	1,516	1,657
Regd. Nurse Tutors	1,222	1,295	1,304	1,360	1,395	1,426
Regd. Midwifery Tutors	466	490	495	516	530	540
Regd. Public Health Nurse Tutors	112	120	121	130	130	136
Regd. Psychiatric Nurse Tutors	71	71	N.A	N.A	N.A	N.A
Regd. Nurse Administrators	561	632	688	818	759	784
Regd. Nurse Anaesthetists	368	N.A	N.A	N.A	N.A	N.A
Newly admitted Student nurses	2,050	1,599	4,336	2,546	3,499	2,263
Newly admitted student midwives	2,238	1,567	2,597	1,696	2,116	1,747
Newly admitted student community midwives	278	278	278	278	278	278
Environmental health officers	4,386	4,824	5,322	5,637	6,009	6,366
Public health Supt. tutors (from UCH)	170	189	221	237	267	N.A
Regd. pharmacists	4,080	4,466	4,960	5,318	5,619	6,060
Regd. medical laboratory technologists	2,882	3,038	2,735	3,052	3,206	3,499
Fellows	466	488	518	550	579	622
Associates	1,881	2,005	2,217	2,502	2,627	2,877
Provisions	535	545	-	-	-	-
Student medical laboratory technologists	1,690	1,863	2,476	2,079	2,534	2,635
Ordinary status (3rd & 4th year class)	245	330	486	420	455	392
Student status (1st & 2nd year class)	1,445	1,533	1,990	1,659	2,079	2,243
Medical records officers	211	221	230	255	314	320
Associates and fellows	151	161	170	205	271	280
Affiliates	60	60	60	50	43	40
Radiographers	500	520	545	570	585	600
Audiologists / Speech pathologists	20	23	N.A	N.A	N.A	N.A

Health workers in Nigeria (1986-1991) contd.

Parameter	1986	1987	1988	1989	1990	1991
Dieticians	120	125	130	137	142	N.A
Physiotherapists	564	577	642	685	701	N.A
Dental technologists	318	327	401	401	410	N.A
Dental therapists	293	321	359	367	384	N.A
Community health officers	1,201	1,459	1,694	2,068	2,401	N.A
Community health supervisors	1,120	1,568	2,089	2,512	3,599	3,974
Snr. Community Health Extension workers	9,972	11,424	12,545	14,288	15,883	18,287
Jnr. Community Health Extension workers	9,618	10,318	11,096	12,308	13,322	14,223
Certified laboratory assistants	1,409	1,815	1,662	1,928	2,259	2,306

Source: Federal Ministry of Health, Statistics Division- Nigeria (1992)

2.8. Nursing profession in Nigeria

The nursing profession in Nigeria has been passing through different phases of change in all its arms of education, service, and administration. The body that controls the profession of nursing in Nigeria is the Nursing and Midwifery Council of Nigeria.

The education of nurses in Nigeria has moved from apprenticeship, to its present formal instruction. There are four nursing degree awarding institutions in Nigeria. These are the University of Ibadan which started its nursing degree programme in 1945, Obafemi Awolowo University (OAU), which commenced its nursing degree in 1973, the University of Nigeria -Nsukka whose nursing programme started in 1983 and the University of Calabar started in 1994. Of these nursing departments, three are offering a three year post-basic degree in nursing (University of Ibadan, University of Nigeria and University of Calabar), while OAU offers a five year generic nursing degree programme and a four year post-basic degree programme. The Nigerian Universities Commission (NUC) has recently standardised nursing degree programmes in Nigeria in order to meet up with the challenges of the National Policy of Education in Nigeria, 6-3-3-4 System of Education (6 years of primary education; 3 years of junior secondary school; 3 years of senior secondary school; 4 for tertiary education) (NUC 1990). NUC has mandated that all nursing departments should go generic. Plans are being made by the various

departments to modify the degree programmes to cater for the two nursing degrees (generic and post-basic).

The basic nursing diploma programme is going collegiate and the Nursing and Midwifery Council of Nigeria is yet to come up with final arrangements on this issue. At the moment, nursing diploma programmes are taking place in schools of nursing which are affiliated to hospitals.

Nursing research in Nigeria as in other developing countries (Mangay-Maglacas, 1992), is in its infancy. Nursing literature (journals, papers, books) are few and not widely distributed in Nigeria. Few nurses have the opportunity to attend international conferences and they have less resources (financial and otherwise) to meet up with trends in this fast changing nursing world. There is an increasing awareness of continuing education in nursing in Nigeria. Nurses organise and attend conferences, seminars and in-service programmes.

Nursing administration is becoming very scientific and is therefore guided by concepts and principles. This is not far from the situation in Nigeria. Nurse administrators have broad-based educational training. They have post-basic nursing management diplomas or degrees from tertiary institutions.

In Nigeria, there is a nursing directorate. Some states have directors of nursing as the head, while others have Assistant Directors. At the federal level, the head of the nursing department is an Assistant Director, who sees to all nursing affairs in Nigeria. He plans, directs and co-ordinates all nursing activities and proposes the budget of the nursing division of the federal ministry of health.

Nursing care in Nigeria with its primary objective of 'quality health care', is based on the premise that humans are bio-psychosocial beings. Many nursing departments have this as their philosophy of care (UNEC nursing curriculum, 1990). The assignment pattern

utilised by most hospitals is still the functional nursing system (Archibong 1990) with a few hospitals trying out the team approach to nursing. No patient allocation system exists.

2.8.1. Professionalisation of Nigerian Nursing

One of the major themes throughout the history of nursing in many parts of the world, including Nigeria, has been the drive for professional status. Professionalisation is not unique to nursing but it characterises all occupations. The nursing literature abounds with articles justifying the claim for nursing as a profession in its own right (Lewis 1973, Rosenow 1983, Chapman 1977, Butterfield 1985, Jacox 1971, Hoping 1976). In Nigeria, the Industrial Arbitration Panel (IAP) award of 1981 had pronounced nursing autonomy and professionalism in the following: "Nursing is a profession *sui generis*..."

With the development of large hospitals (e.g. Teaching hospitals) and their accompanying management structures, the daily work of many nurses particularly in hospitals, has become very much like that of a factory worker. As the drive for efficiency and productivity has superseded patient needs, the old ideal of the nurse caring for the total needs of the patient in a holistic way has to a certain extent become a myth. In these institutions, nursing has become more like a production line in a factory, where instead of one nurse caring for the total needs of the patient, each nurse is assigned to do tasks such as medication, injection, bed bathing, etc. There is little time spent on family contact, patient education, supportive care for patient and family.

The introduction of the nursing process, mostly at the theoretical phase, has not alleviated the situation. In any hospital where the nursing process is in use, it has served mainly to increase the clerical load of nurses rather than develop any sense of holistic patient care. There have been changes in the work situation accompanied by the development of a high degree of stratification in nursing work. At one level there are numerous specialities such as intensive care, paediatric, community health nursing, etc. At another level, the wide variety of nursing tasks, from complex to menial, and the

presence of numerous less qualified workers have produced a distinct hierarchical form of organisation in the nursing workplace, which may be referred to as vertical stratification. At the lower level, student nurses and nursing assistants (ward orderlies, porters, ward clerks, etc.) perform simpler tasks. At senior levels, registered nurses carry out more complex, often medically derived, tasks. At the top echelon of the pyramid, the most senior nurses administer nursing services and have little direct contact with patients.

In the above described hierarchical nursing setting, most nurses occupy a subordinate position within their own hierarchy, with nursing as a whole subordinate within a hierarchy of health care occupations dominated by medicine (Gardner and McCoppin 1986). The nursing hierarchy is structured on a strict order of rank which is imposed from above and is largely inflexible. Rigid control and discipline are exercised by hospital and nursing bureaucracies, and nurses have minimal decision making power over the content or pace of their work. Nurses are often afraid to oppose these authoritarian structures for fear of victimisation. This hierarchical organisation tends to result in an intense awareness by nurses of their position in relation to others, either as senior or subordinate, and serves to inhibit their ability to act collectively.

2.9. Area of study - Akwa Ibom State of Nigeria

This study was carried out in Akwa Ibom State of Nigeria as the nucleus site from where primary nursing practice would spread to other parts of Nigeria. In this section, a brief description of Akwa Ibom State will be presented; its geography, climate, culture, people, service systems and health facilities available. A description of St. Luke's Specialist hospital, the hospital at which the project took place, will be undertaken.

Akwa Ibom State of Nigeria was created on the 23rd of September 1987 with the promulgation of decree 24 of 1987. Carved from the former Cross River State, Akwa Ibom State is made up of 24 Local Government Areas with Uyo as the State capital. The Local Government Areas and their headquarters are: shown in Table 2.7. and Figure 2.4.

Table 2.7. Akwa Ibom State Local Government Areas and their headquarters.

Local Government Areas	Headquarters
Abak	Abak
Eket	Eket
Ekpe Atai	Odot
Essien Udim	Afaha Ikot Ebak
Etim Ekpo	Utu Etim Ekpo
Etinan	Etinan
Ikono	Ibiaku Ntok Okpo
Ikot Abasi	Ikot Abasi
Ikot Ekpene	Ikot Ekpene
Ini	Odoro Ikpe
Itu	Itu
Mbo	Enwang
Mkpat Enin	Mkpat Enin
Nsit Ibom	Afaha Offiong
Nsit Ubium	Ikot Edibon
Okobo	Okopedi
Onna	Abat
Oron	Oron
Oruk Anam	Ikot Ibritam
Ukanafun	Ikot Akpa Nkuk
Uquo Ibeno	Uquo
Urue Offong/ Oruko	Urue Offong
Uruan	Idu
Uyo	Uyo

2.9.1. Geography: Akwa Ibom State occupies the south-east corner of Nigeria's territorial expanse, lying between latitudes 4 ^{o}33 and 5 ^{o}33 North and Longitudes 7 ^{o}25 and 8 ^{o}25 east. It is bounded on the north by Imo and Cross River States and on the south by the Atlantic Ocean. To the east the State shares its boundary with Cross River along Okpokong River and to the west by Rivers and Imo States.

2.9.2. Climate and Vegetation: Akwa Ibom State falls within the tropical zone. Its dominant vegetation is the green foliage of trees and shrubs and the oil palm tree belt which holds the highest density of the cash crop in the world. The State has basically two seasons - the rainy and dry seasons. The rainy season begins from May to October while the dry season starts from November to April.

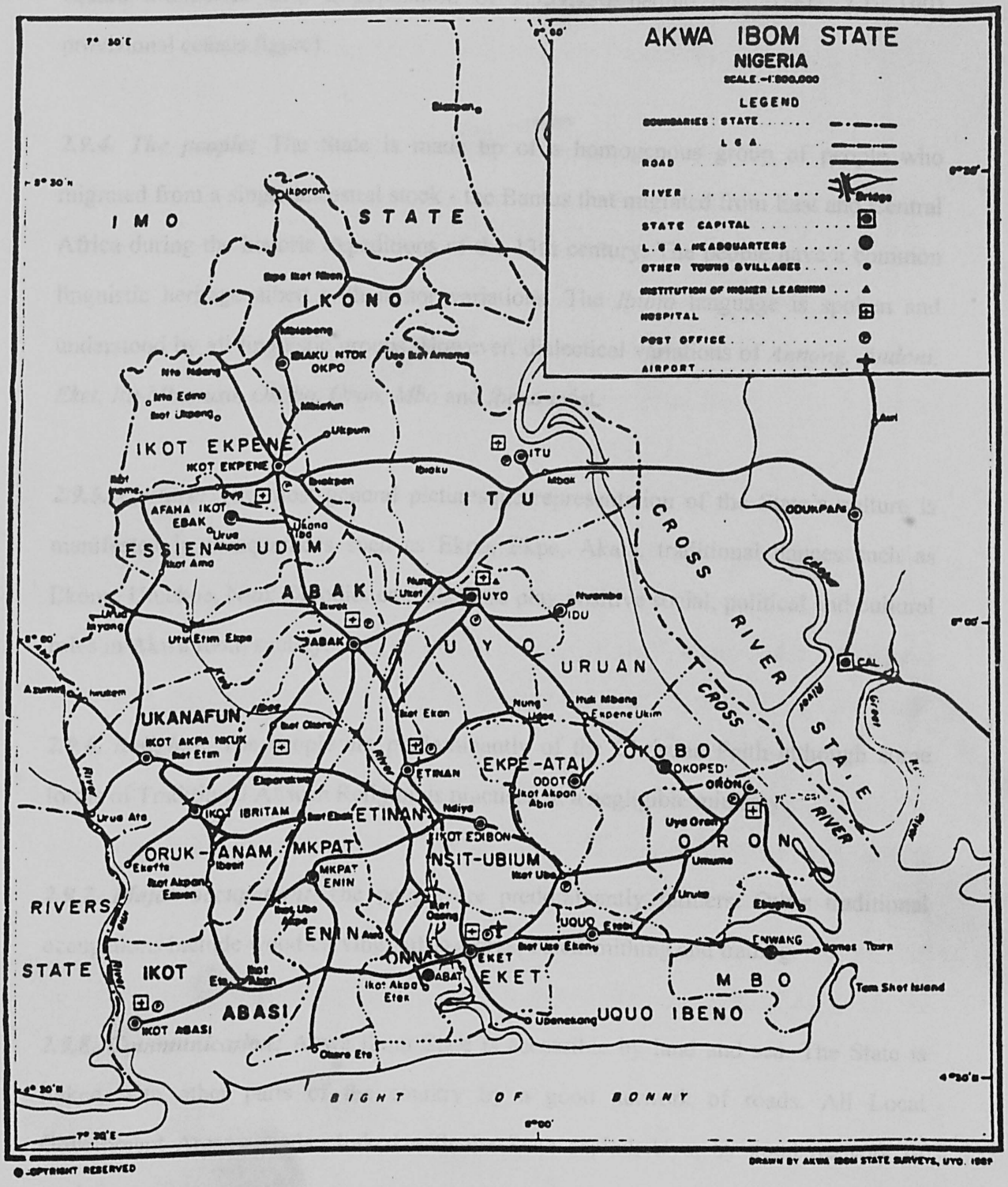


Figure 2.4. Map of Akwa Ibom State of Nigeria.

2.9.3. Population: Akwa Ibom State occupies a territory covering approximately 8,412 square kilometres with a population of 2,359,736 people (see Table 2.1; 1991 provisional census figure).

2.9.4. The people: The State is made up of a homogenous group of people who migrated from a single ancestral stock - the Bantus that migrated from East and Central Africa during the historic expeditions of the 13th century. The people have a common linguistic heritage albeit with minor variations. The *Ibibio* language is spoken and understood by all linguistic groups. However, dialectical variations of *Annang, Andoni, Eket, Itu Mbonuso, Okobo, Oron, Mbo* and *Ibeno* exist.

2.9.5. Culture: The most general picturesque representation of the State's culture is manifested in masquerades such as Ekpo, Ekpe, Akata, traditional dances such as Ekong, Utuekpe, Ntok Odiodio, etc. All these play positive social, political and cultural roles in Akwa Ibom society.

2.9.6. Religion: The people are predominantly of the Christian Faith although some forms of Traditional African Religion is practised in a negligible minority.

2.9.7. Major occupation: The people are predominantly farmers. Other traditional occupations include wood-carving, raffia works, blacksmithing and trading.

2.9.8. Communication: Akwa Ibom State is accessible by land and sea. The State is linked with other parts of the country by a good network of roads. All Local Government Areas are also linked with the State capital, Uyo, by good network of roads.

2.9.9. Health: Akwa Ibom State has 62 general hospitals with a total of 3,222 beds, 101 health centres, 6 maternity homes, 12 dispensaries, 24 Maternal and Child Health clinics, 5 Comprehensive Health Centres, a leprosy hospital and a psychiatric hospital.

The State has a Family Life Centre at Mbribit Itam for the treatment of Vesico Vaginal Fistula (VVF) patients. There are 4 Schools of Nursing, 4 Schools of Midwifery, a School of Psychiatric Nursing and a School of Health Technology.

Apart from providing relevant structures and inputs, the State Government has in collaboration with some international organisations like the World Health Organisation (WHO), United Nations Children's Fund (UNICEF) and United States Agency for International Development (USAID) carried out extensive health programmes such as Expanded Programme on Immunisation (EPI), Oral Rehydration Therapy (ORT) and Water and Sanitation (WATSAN) to all nooks and cranny of the State.

In order to create awareness in health matters among rural dwellers, the Better Life Health Committee had embarked on an enlightenment campaign tagged "Better Alive." The health campaign which was launched on March 25, 1992 featured talks on cancer, nutrition, hypertension, EPI/ORT, maternal mortality control, hypertension control and prevention and family planning. Another programme titled "Health at the Door Step" which was executed by the Better Life Programme was a home-based strategy aimed at involving the family and community in the care of poor and the under-privileged. The programme is intended to bring succour to old and weak women who may not be able to reach the nearest health centre for treatment (Akwa Ibom State of Nigeria: A new era April '92). The above analysis shows how concerned the Akwa Ibom State Government is with the health of the family. It also brings to light how important the family is in the health care of its members.

2.10. St. Luke's Specialist Hospital Anua - Uyo, Akwa Ibom State

This is the nucleus hospital for this primary nursing project in Nigeria. It is located in Uyo, the Akwa Ibom State capital. It is on record that this hospital has developed from dispensary to a Group Reference Hospital and presently to a specialist hospital. The hospital was founded in 1937 by an Irish woman, the late Mary Martins who had settled at Nsukara Offot (a small village near Uyo) in 1912. Initially the hospital provided only

Maternal and Child Health (MCH) services but over the years, it has expanded to cater for the needs of everybody. The Hospital has a bed capacity of 400, employing 30 medical practitioners, 386 nursing staff: 343 - RNs and 43 ward orderlies and 200 other health practitioners.

It is a centre of excellence for Obstetrics and Gynaecology training in Nigeria. It is recognised by the Royal College of Obstetricians and Gynaecologists of the United Kingdom for the training of postgraduate doctors in Obstetrics and Gynaecology. It is also recognised for the training of postgraduate doctors for general practice. It has a school of Nursing and a school of Midwifery affiliated to it. The training of medical laboratory personnel also goes on in St Luke's Specialist Hospital.

St Luke's Specialist Hospital has an international reputation for the repair and management of Vesico Vaginal Fistula (VVF) and its Safe Motherhood programme under Drs. Anne Ward and Walley respectively. It is made up of Nursing, Medical, Administration, Accounts, Catering, Maintenance, Pharmacy, Laboratory, X-ray, Mortuary, Communications, and Ambulance departments. Since the hospital is a specialist hospital and centre of excellence for obstetrics and gynaecology, it is located in the heart of the capital of Akwa Ibom State of Nigeria and because of its many specialities, it caters for the whole indigenous population of the state. It also serves as a major referral centre for all other hospitals in the state. There are 15 nursing units in the hospital. These units and their corresponding number of nursing personnel are shown in Table 2.8.

Table 2.8. Nursing Units and their corresponding no. of nursing personnel.

Units	Nursing Personnel								
	A.D	CNO	PNO	SNO	NO I	NO II	NAT	WO	TOTAL
Nursing Admin.	1	2	1	-	2	-	-	2	8
Paediatric ward	-	1	1	5	11	8	-	3	29
Male ward III	-	1	1	3	9	5	-	2	21
Male ward I	-	2	1	1	10	11	-	3	28
Male ward II	-	1	1	2	11	8	-	3	26
Female surgical ward	-	-	1	4	12	8	-	2	27
Female Medical ward	-	1	1	1	7	8	-	2	20
OPD	1	2	4	5	12	4	-	9	37
Theatre	-	1	1	6	12	8	1	3	32
Labour ward	-	2	1	3	12	19	-	3	40
Maternity ward II	-	1	1	2	7	9	-	2	22
Ante natal ward	-	1	2	1	8	10	-	2	24
Post natal ward	-	1	1	2	6	13	-	2	25
Nursery	-	2	1	1	7	10	-	2	23
Ante natal clinic	-	2	2	1	6	10	-	3	24
Grand total	2	20	20	37	132	131	1	43	386

Key

AD	Assistant Director of Nursing Services
CNO	Chief Nursing Officer
PNO	Principal Nursing Officer
SNO	Senior Nursing Officer
NO I	Nursing Officer I
NO II	Nursing Officer II
NAT	Nurse Anaesthetist
WO	Ward Orderly

2.11. Summary and suitability of Nigeria for the practice of primary nursing

Rogers (1983) generalises from diffusion of innovation research that those who adopt innovation early have more favourable attitudes toward change and higher levels of achievement motivation. It can therefore be assumed from the above generalisation that since implementation of primary nursing into the Nigerian Nursing System is taking place 23 years after it was first introduced into a hospital in Minnesota in 1969, that

there is likely to be some unfavourable attitudes, intolerance and lower levels of achievement. Viewed differently, one can assume that since this is the first attempt to introduce the practice of primary nursing into the Nigerian Nursing System, it could be regarded as an early adoption of the innovation in this part of the world. Therefore indicating that favourable attitudes to the change might ensue.

It is important to summarise at this point that the suitability of the Nigerian Nursing System may have influence on the change. As mentioned in chapter one, the following conditions may make the Nigerian Nursing System very conducive for the introduction of primary nursing: an all-RN Structure, no permanent night shift (internal rotation system), and the family system.

There are also weaknesses which may deter the successful introduction of this change. These include: rigid nursing hierarchy and small number of nursing staff (146,067) in relation to the population (88,514,501). Nursing personnel in Nigeria when compared with statistics in the developed world e.g. in Britain - Health and Personnel Social Services Statistics for England (1992) shows that there were 408,484 nursing and midwifery staff in England in 1990 to a population of about 59,000,000. One wonders if primary nursing practice in Nigeria is going to survive. But it is good to take solace in Binnie's (1987) advice that in order to determine the staffing of the primary nursing unit, the skills of the nurses must be seen to be important rather than numbers. Ersser and Tutton (1992) also suggest that primary nursing may not necessarily require more staff but that it needs a particular skill mix which perhaps involve a greater proportion of qualified staff relative to unqualified staff in the ward establishment. The implication of this issue is that primary nurses in Nigeria may take on more patients in their caseloads.

PART TWO: LITERATURE REVIEW

CHAPTER THREE

THE CONCEPT OF PRIMARY NURSING

3.0. Introduction

It has been ascertained from the previous chapter the suitability of Nigeria for the practice of primary nursing as a mode of delivering family-centred nursing care, it is therefore important to address the concept of primary nursing in detail. This chapter will present an overview of the concept of primary nursing, discuss historical and conceptual issues in primary nursing, roles and responsibilities of primary nursing practitioners, nurse-patient and nurse-family relationships in primary nursing practice. It will also discuss the skills required for the effective practice of primary nursing, nursing process and primary nursing practice and some evaluative studies on primary nursing will be presented.

3.1. An overview of the concept of primary nursing

Primary nursing has been described as the most important change in the recent era of nursing practice (Archibong 1993). Primary nursing ensures continuity in care, accountability, responsibility, authority and autonomy. It puts the primary nurse in the centre of nursing care and alters the role of the ward sister who was traditionally expected to 'know it all'. The ward sister in primary nursing is the ward co-ordinator and is responsible for co-ordinated, facilitative and supportive aspects of care. Responsibility and accountability for care of individual patient, from admission till the patient no longer needs nursing care, rest with the primary nurse.

Primary nursing increases the bonding between the patient/family and the nurse in the sense that the contact of a designated nurse with a smaller group of patients is enhanced. It is claimed that primary nursing also improves the quality of nursing care, enhances the morale of nurses and subsequently fosters power and professionalism in nursing. Though primary nursing has some desirable effects, it also presents some problems and

dissatisfactions which must be addressed and necessary attempts should be made to resolve these for successful primary nursing practice. Adequate skill mix and matching of patient with nurses is necessary to help sustain primary nursing and decrease the conflict likely to result if this is ignored. Primary nursing is a key promising stage in the evolution of nursing care organisation. It tries to mimic the organisational pattern of the *past* - case method, reflect the *present* philosophical era of nursing - era of humanistic existentialism (Bevis 1982) and it is hoped that it will brighten and continue to keep nursing care in the *future* patient and family-centred.

Primary nursing is a philosophy and a mode of organising nursing care which is aimed at strengthening the nursing profession and increasing the interaction of nurses with patients and patients' families (Archibong 1993). In primary nursing, a particular nurse has frequent contact with the patient and family to optimise continuity, individuality and uniqueness of care. The designated nurse in this interaction begins to see the consequences and monitors the care given personally and by others to the patient over the course of hours, days or weeks. This same nurse thus makes sound judgement concerning the present and future needs of the patient, uses the nursing process to assess, plan, implement and evaluate the care given to the patient. In the bid to help the patient in solving problems, the nurse works with other colleagues who offer objective suggestions, validation and other support. This sequence of events is repeated for many patients individually and is documented accurately. These logical steps by the same nurse to care for one or a group of patients is the whole idea concerning primary nursing. This is summarised in Manthey's (1992b) writing:

> Primary nursing has the effect of humanising care for patients because they're no longer in an impersonal system, but instead in a relationship with a particular nurse who understands their needs and their desires and their strengths. Primary nursing provides co-ordinated care, which has the effect of reducing health care costs. One nurse is making sure that things are happening the way they're supposed to happen, when they're supposed to happen. She's got a total picture of that patient's care, so days don't pass waiting for something to happen that's lost in the high level of activity in the

hospital. It improves hospital utilisation and thus reduces health care costs and improves patient care (p 1)

3.2. Emergence and spread of primary nursing practice

The model of primary nursing was established at the Loeb centre for nursing and rehabilitation at Montefiore Hospital in the Bronx section of New York in the early 1960s, based on the ideas of Lydia Hall (Bowar-Ferres 1975). This model was referred to as the Loeb model at the time and was implemented in 1963. Each registered nurse at the Loeb centre had a case load of eight patients, for whom the nurse was directly responsible. A great deal of care was given personally by the registered nurse, and the messenger-attendant carried out all non-patient care activities e.g. setting up equipment, making beds, testing urine (Zander 1980).

The name *primary nursing* was used in place of this model in 1969 (Zander 1980) and first tried out in a medical unit at the University of Minnesota hospital by Marie Manthey (Manthey 1992a, 1992b; Wright 1990; Mayer and Bailey 1982; Manley 1989). The development of primary nursing has spread world wide (Wright 1990), shown in many implementation and evaluation studies. For example:

Joiner, Johnson and Cockrean (1981) in Bluffs, Iowa.

O'Leary and Hill (1981) in Bayfront, Florida.

Fairbanks (1981) in Denver, Colorado.

Marram (1976) in Massachusetts.

Felton (1975), Eichhorn and Frevert (1979) in Washington.

Shukla (1981), Shukla and Turner (1984) in Virginia.

Perälä and Hentinen (1989) in Finland.

Ventura, Fox, Corley, and Mercuro (1982) in New York.

Culpepper, Sinclair and Betz (1986) in Tennesse.

Brooker, Duffield, and Rooke (1979), Watson (1978) in Australia.

Otoya (1979) in Japan.

Lee (1979), Sparrow (1986), Titchen and Binnie (1992), in the United Kingdom.

Aschjem, Carlsen and Markussen (1979) in Norway.

Van Eindhoven (1979) in the Netherlands.

Medaglia (1978) in Canada.

3.3. Definitions, principles and components of primary nursing

Many definitions have been given to the concept of primary nursing (Manthey 1992a, 1992b, Anderson and Choi 1980, Marram *et al.* 1979, Wright 1990). Some of them describe it as a philosophy , others as an organisational mode, while some view primary nursing as both a philosophy and an organisational mode of delivering nursing care. Some of these definitions are:

> (1) Primary nursing is a system for delivering nursing service that consists of four design elements: (a) Allocation and acceptance of individual responsibility for decision making to one individual, (b) assignments of daily care by case method, (c) direct person to person communication, and (d) one individual personally responsible for the quality of care administered to patients on a unit twenty four hours a day and seven days a week (Manthey 1992a).

> (2) Wright (1990) in modifying Nightingale's (1869) earlier definition of nursing, states: "primary nursing puts the nurse in the best position for nursing to act. It is a call for nurses to come out of their shells, to assert themselves and to seek answers to questions. Primary nursing means change ... a voyage into nursing's little explored territories, a journey into a new reality" (p 11).

> (3) Marram *et al.* (1979) also present primary nursing as a philosophy and mode of organising the delivery of nursing care in hospital which is distinctly different from other modalities; the delivery of comprehensive,

continuous, co-ordinated and individualised patient care through the primary nurse who has autonomy, accountability and authority to act as chief nurse.

(4) Primary nursing is viewed as "a professional commitment made by a registered nurse to direct nursing care to specifically assigned patients and families during their contact with the health care unit or agency" (Zander 1980: p 1).

(5) Primary nursing is "a system organised to maximise continuous and comprehensive delivery of nursing care to patients. Emphasis is on one nurse having professional / organisational autonomy in assuming responsibility and retaining accountability for planning when possible and personally administering total care to designated patients throughout their hospitalisation" (Anderson and Choi 1980, p 26).

These definitions imply that primary nursing enhances commitment to nursing care. It upholds the basic principles of case nursing which was practised in the pre-Nightingalian and early Nightingalian eras of nursing. It gives the practitioners a sense of self direction, responsibility, authority and accountability. From these definitions the principles that guide the practice of primary nursing (Archibong 1993) are:

(1) One person is operationally responsible for the co-ordination of care administered on a unit.
(2) Decentralised decision making with responsibility, authority and accountability at the level of action is important in care.
(3) A twenty four hour plan of care is done by one nurse for a group of patients from admission till patients no longer require nursing care.
(4) Nursing assignments based on matching patients needs with nursing skills.
(5) Nursing care planner as the care giver (p 15)

Components of primary nursing

Primary nursing comprises ten components - 5 A's and 5 C's which are shown in Figure 3.1.

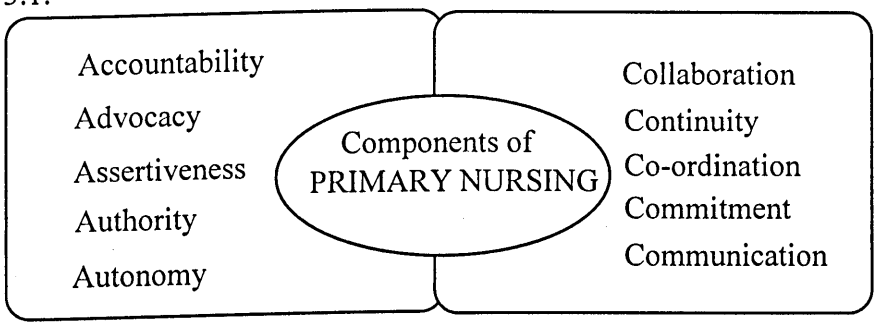


Fig. 3.1. The components of primary nursing

Accountability: This involves standing behind ones' decisions and actions. Accountability is more established in primary nursing since one designated nurse is responsible for the total care of a patient or a group of patients. Evans (1993) views accountability as the core concept for primary nursing. The primary nurse is accountable for a patient 24 hours in a day, seven days of the week, from admission to discharge, till the patient no longer needs nursing care (Manthey 1992a, Hegyvary 1982, Marram *et al.* 1979). This twenty-four hour accountability does not mean that the primary nurse will be giving care to her/his patients around the clock but embodies a 24 hour plan of care which enables the primary nurse's instructions to continue even in her absence. The primary nurse makes and is accountable for all decisions regarding his/her 'named' patients.

Advocacy: This means speaking for somebody or pleading in support of something, entails one person representing the interest of another (Zander 1980). In primary nursing, all interventions are carried out on behalf of these patients by the primary nurse or his/her representative. Although advocacy in nursing is a natural extension of nursing's role which should form part of daily nursing activities, Zander (1980) explains that the primary nurse is better prepared and more obligated to be an active advocate due to accountability which he/she has for the outcomes of nursing care.

Assertiveness: While primary nursing is aimed at increasing nurses' autonomy and self worth, it demands that nurses speak up and stand up for their rights without infringing on other peoples' rights.

Authority: It involves having the 'power to act', and the primary nurse must have such power if he/she must be accountable. Authority in primary nursing is summarised in the following Marram *et al.'s* (1979) writing:

> The primary nurse has the authority in that responsibility for care involves the totality of that care, that is, the comprehensive nursing care plan and its implementation on a twenty-four hour basis for as long as care is needed. The primary nurse is responsible to the patient for the quality of care, for meeting care agreements, and continuity of care, whether or not the primary nurse is on duty. The primary care nurse assumes this responsibility as consistent with her role. There is no pyramiding of hierarchical decision makers. Decisions are participatory, involving patients and care givers most directly concerned with care (pp 22-23).

Autonomy: One can only act freely (autonomy) if there is the power to act (authority) in the first place. In primary nursing, autonomy rests on the care being given according to a nursing care plan worked out between the primary nurse and the patient. The complete control of the nursing care being given to named patients at all times remains with the primary nurse. Crucial to primary nursing practice is the need for primary nurses to have attained a level of competence which will permit them to use authority and autonomy to the advantage of the patient.

Collaboration: The primary nurse collaborates with other health practitioners, (such as the physician, dietician, physiotherapist, speech therapist, radiographer, medical recorder, occupational therapist), in a collegial and not in a subordinative fashion. This collaboration also extends to the family and significant others. Zander (1980) advises that the primary nurse should be consistently representing the whole nursing staff to the

patient and family throughout the length of their contact with the health care unit or agency.

Continuity: Primary nursing promotes continuity of care. A designated nurse is continuously assessing the needs and problems of clients, planning to resolve the problems, implementing the plan and evaluating to see how well the actions carried out have resolved the patient's problems. This continuity in care results in effective and efficient total patient care.

Communication: Effective communication is required in the interaction between all members of the primary nursing team and between all health team members. This is supported by O'Leary and Hill (1981) in their statement: "communication is a very important part of making this concept (primary nursing) work" (p 69).

Commitment: Nurses in the primary nursing setting are more likely than nurses in the task or team nursing setting to be involved and committed to the care they give to their patients (Archibong 1993). A primary nurse has both a formal and an emotional investment in seeing that the patient has the best care on every shift (Zander 1980). Manthey (1992a) acknowledges that acceptance of primary nurse's role gives the nurse a sense of commitment.

Co-ordination: Primary nursing as a co-ordinated nursing practice brings all aspects of the patient's care into a common focus and allows for smooth intervention in nursing care. The primary nurse is not only responsible for the co-ordination of intervention that he/she carries out but also the co-ordination of intervention by other disciplines (Marram *et al.* 1979).

3.4. Role structure in primary nursing practice: Staff and their roles

Primary nursing brings about changing roles, responsibilities and communication patterns for all members of the health care team (Bartels, Good and Lampe 1977). There

are two sets of roles involved: peripheral and core roles. The success of primary nursing depends on the roles played by both the core and peripheral staff (Mead 1990). Staff involved in primary nursing practice are shown in Figure 3.2 and their roles are shown in the Tables 3.1, 3.2 and 3.3.

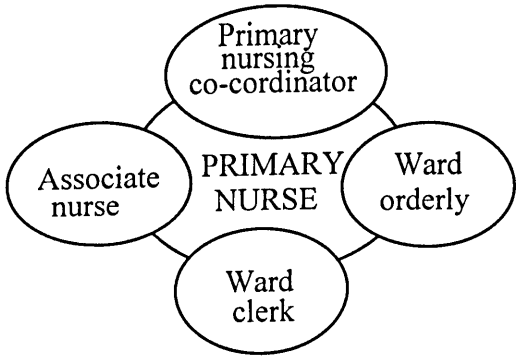


Figure 3.2. Staff in Primary Nursing Practice

Table 3.1. Roles of the primary nurse

(1) Initiation, revision and evaluation of a nursing care plan for primary patients.
(2) Assessment of patient need for learning and the use of appropriate anticipatory guidance and teaching techniques.
(3) Implementing the plan of care.
(4) Collaboration with other health team members on matters concerning the patient and family.
(5) Provision of direct patient care which is comprehensive, individualised and holistic to both primary and associate patients.
(6) Taking on associate nurse role for other patients whose primary nurses are not on duty.
(7) Planning for effective communication with other members of the health team who are involved in patient care.
(8) Joining in doctor's rounds and arranging clinical conferences with nursing colleagues and other health professionals.

(9) Planning for continuity of patient care when not on duty by writing clear instructions to be followed by others who act to give care to his/her primary patients in his/her absence.
(10) Consulting with primary nursing co-ordinator and other nursing experts when problems arise concerning care of his/her patients.
(11) Planning for patients discharge by assessing the needs of each patient and contacting, both verbally and by written referral, appropriate community resources.

Table 3.2. Roles of the primary nursing co-ordinator

(1) Takes the responsibility of organising and managing the unit and acts to foster the philosophy of primary nursing.
(2) Assigns primary nurses to primary patients.
(3) Plans unit staffing.
(4) Acts in co-ordinating patients activities and as a consultant to the primary nurse.
(5) Assists staff in decision making and thus facilitating professional growth.
(6) Interprets primary nursing to other disciplines involved in patient care.
(7) Responsible for the orientation of all new staff members.
(8) Assesses individual skills and capabilities of each nurse to help in matching to patients.
(9) Schedules duty such that a primary nurse will have sufficient time to plan care with associates.
(10) Identifies, plans and reinforces learning experiences of all staff.
(11) Acts as a resource person and in skill training of staff in primary nursing practice.
(12) Controls quality in the unit.
(13) Acts as an associate nurse when necessary.
(14) Makes the ward environment conducive to learning.

Table 3.3. The roles of the associate nurse

(1) Administration of total, comprehensive nursing care to their associate patients.
(2) Assuming responsibility for nursing decisions when the primary nurse is not around.
(3) Utilising the care plan designed by the primary nurse to provide consistent nursing care.
(4) Contributing to the total plan of care for the patient seeking information by:
(a) Making pertinent nursing observations.
(b) Attending medical and nursing rounds and conferences.
(c) Interacting with the patient and his/her family.
(5) Consulting with the primary nurse and the co-ordinator when the need arises.
(6) Acting as primary nurse for a stipulated time when necessary.

The ward orderly caters for non-nursing activities of the nurse. He/she performs domestic duties and other distractive duties that consume the time of RN. The ward clerk is responsible for all clerical duties in the ward. He/she prepares patients' folders for admission, carries out medical record functions on behalf of the patient and checks all forms and replaces those not available in the ward.

3.5. Nurse - patient and family relationship in primary nursing practice

The key value of primary nursing is individualised nursing care (Bowers 1989, Marram *et al.* 1979). In primary nursing, the relationship between nurses and patients is deepened because of the limited number of patients a particular nurse is concerned with and the increased amount of time the nurse spends with the nominated group of patients. The primary nurse is the central figure in this relationship. A mutually beneficial and satisfying bond develops between the primary nurse, the central figure in primary nursing practice, and the patients/families (Bethea 1985). It is the primary nurse's interest in caring for the patient and family that encourages a mutual trust (Elsas 1981).

The family trusts that one nurse is co-ordinating all care concerning its member (patient).

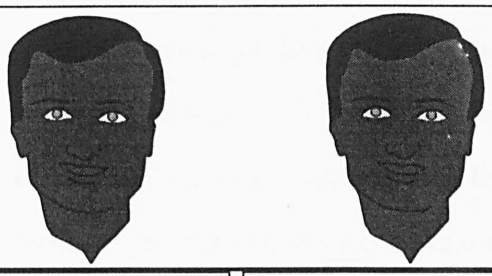
Since the family system is faced with equilibrium tendency; where a change in one part of the family system is accompanied by a compensatory change in other parts, family consideration in the primary nursing relationship is very important (Zander 1980). When the patient is under care, the whole family is also under care and so requires the same consideration given to the patient. One of the goals of primary nursing should be an individualised and personalised relationship with the family. To achieve this relationship, the primary nurse must always use empathy to move toward open communication, with primary nurses helping the family to understand the care and treatment given to their patient.

Adequate nurse-patient and family relationship in primary nursing begins on admission. The primary nurse or whoever admits the patient should welcome the patient and all family members warmly, then introduces self as follows:

> *I am nurse N, I am the primary nurse who will be taking care of all nursing needs of your family member while in hospital. When I am not on duty, an associate nurse will take care of him/her using the plan of care I have drawn up. If there are questions you wish to ask, I will be very glad to help you* (Archibong 1993, p 40)

Involvement of the whole family in all admission proceedings; history taking and physical aspects of the assessment, should be made a routine as this can offer valuable contributions to the diagnostic phase of the nursing care. All ward routines and rules should be explained to the patient and the family, an information card should be made available to the patient and family on admission. A guide to care in the ward should be blueprinted and given to each patient and the family on admission (see Table 3.4 for sample of guide adapted from Archibong 1993). Also of importance in the primary nursing unit is the bulletin board that has the names and photographs of primary and associate nurses displayed against the names of patients in their modules or teams.

Figure 3.3 shows a sample of primary nursing bulletin board. This board should be placed at a point where the family members can see and have an idea of the nurses who are responsible for their patients.



PNM I	**PNM II**	**PNM II**
PN: Lee	**PN:** Joyce	**PN:** Paul
AN: Tom Lois Jewel Sara	**AN**: John Grace Eileen Mitchell	**AN**: Pauline Patricia Denise Joan
WO: David	**WO**: Ann	**WO**: Tina
Patients	**Patients**	**Patients**
George Sam Emma Rob Bob Jill	Peter Maria Alice Alison Alan Betty	Scott Lynn Dave Elvis Adrian Joan

Consultant: Mr Bates
Physiotherapist: Ms Robbinson
Medical recorder: Agnes

Figure 3.3. A sample of primary nursing bulletin board for ward Z.

Table 3.4. A Guide to care in primary nursing ward

How Nursing Care is Organised on the Ward
* We are using a new approach to nursing called *Primary nursing.*
* In this ward, one group of nurses will see to your needs and problems from admission to discharge.
* One nurse in the group will have the overall responsibility of planning your care. This nurse is called the *primary nurse.* The primary nurse will discuss your

care, talk to you about how you feel and other aspects of care and even plan your discharge with you.

* Working side by side with your primary nurse are the *associate nurses,* who will be responsible for your care in the absence of your primary nurse. These nurses will carry out the plan of care designed by the primary nurse.

* The charge nurse will be the co-ordinator of the unit. This nurse will be called the *primary nursing co-ordinator.* He/she will be involved in your care as the resource person who oversees what the others are doing. When there is any problem with decisions concerning your nursing care, he/she will help in offering useful advice. In some instances, the co-ordinator will be required to give direct nursing care to you in the role of associate nurse.

* The *ward orderlies* will carry out domestic work and other non-nursing duties.

* The *ward clerk* will deal directly with your files and other records and will do clerical duties concerning your admission and discharge.

What You Can Expect From Your Primary Nurse.

* Your primary nurse will discuss your care with you throughout your stay.

* He/she will keep you informed of decisions concerning your care.

* He/she will explain all investigations and procedures in advance and give you the opportunity to ask questions.

* He/she will explain the roles of other professionals who will take care of you.

* He/she will work together with you and your family throughout care.

* He/she will give direct nursing care to you whenever on duty.

What You Can Expect From the Associate Nurses.

* The associate nurse(s) will carry out all primary nurse's functions in the absence of your primary nurse.

What We Expect From You.

* To talk to your primary nurse about all you need.

* To let nurses know about your problems and worries.

* To tell your nurses about how you feel about any part of your care.

What Primary Nursing Will Do For You.

* It will help the nurses to give you and your family the best care possible.

* It will improve the relationship between the nurses and you and your family.

* It will improve the quality of care you receive from us.

* It will enable you to be treated as an individual, without having to be treated in the same way as any other person.

What Will Happen in Future.

* Your primary nurse will discuss your discharge with you.

* He/she will tell the public health nurse in the zone to which you belong about you.

* He/she will see you in the out-patient department when you come to see your doctor for follow up care after discharge.

* If you are readmitted into this ward, we will try to have the same primary nurse to look after you.

3.6. Skills required for the effective practice of primary nursing

Primary nursing practice demands that nurses make decisions intelligently and objectively in a systematic manner, speak up assertively for their patients without being manipulative nor aggressive. Nurses in primary nursing practice should communicate effectively and develop sound colleagueship that will make their struggle for survival in the complex health team a reality. Good leadership skills through awareness of group process is of great importance to the primary nursing practitioner. Important skills which will enhance nurses' effectiveness in their peripheral as well as core roles in the primary nursing setting include: decision making, communication, assertiveness and the awareness and use of the group process.

Decision making: Primary nursing requires its practitioners to have self direction and be able to make discretionary decisions. Primary nursing also implies self-determination, freedom to design a total plan of nursing care and to work on an independent level with other professionals. To be able to function as an autonomous

practitioner which is required in primary nursing practice, the nurse needs decision making skills and should be held accountable for whatever decisions are taken by him/her.

Although nursing practice requires that many decisions be taken each day (Ford, Trygstad-Durland and Nelms 1979), nurses in the hierarchical health care structure are seen relying on other health care colleagues especially the medical professionals to make decisions. Nurses' passivity in decision making may be accounted for by the typical scenario of subservience which has dominated nursing since its inception (Archibong 1993).

A major criterion of a profession is self direction by the professionals and not allowing outside influence to control its affairs. This can best be achieved through the practice of primary nursing. The adoption of primary nursing as a method of organising nursing care as well as a contemporary philosophy of nursing calls for nurses to make sound decisions or judgements regarding the care they render to their patients. Decisions can be made individually or in groups. When faced with a problem and there is a need to make decision as to how this problem will be solved, a variety of behaviours can be used. Any of these may be used; one may rely on experience, knowledge or consultation to make the decision (Nagelkerk and Henry 1990).

Communication skills: The nursing staff are at the centre of the web of communication which is necessary between members of health care setting - a complex occupational environment (Bowers 1989). Primary nursing encourages direct communication and collegial relationships between the head nurse, primary nurse, associate nurse, patient, family, physician and other health professionals. All nursing activities are effective through communication. Primary nursing practice requires collegial communication to be successful. It calls for nurses to consult each other and tap into colleagues' experience and expertise. This will bring about trust and non-threatening relationships among all those involved in care. Beyer and Marshall (1981) write on the interpersonal dimension

of collegiality as comprising eight components which is shown diagrammatically in Figure 3.4 that follows.

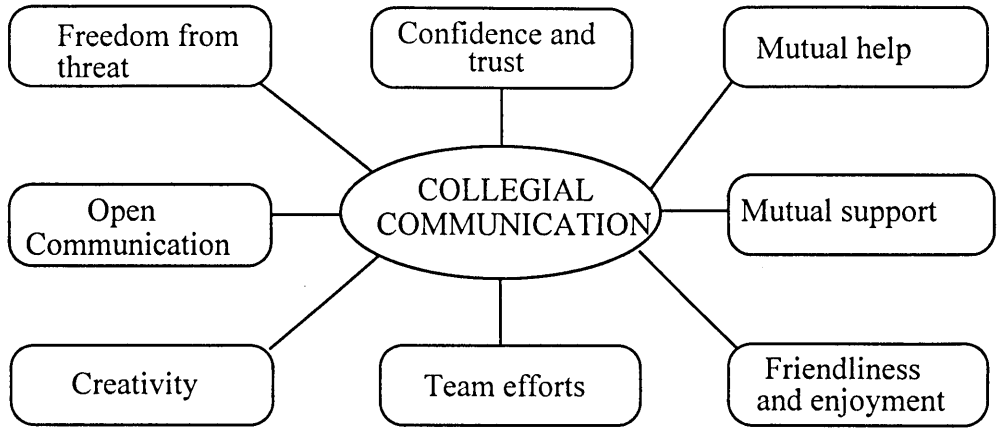


Figure 3.4. Components of Collegial Communication

***Assertiveness*:** Primary nursing can help to solve the professional problem of nurses' passivity in interpersonal relations and lack of self awareness through a high level of assertiveness alongside improved communication and collegial relationship. Assertiveness entails reaching some kind of compromise when there is conflict between the rights of two people in such a way that no one looses out completely and their relationship is kept open, honest and at an equal level. It is a positive concept in human interaction which encourages an honest, explicit communication that is not aggressive or passive. It is an interactive behaviour that is midway between passivity and aggressiveness (Figure 3.5).

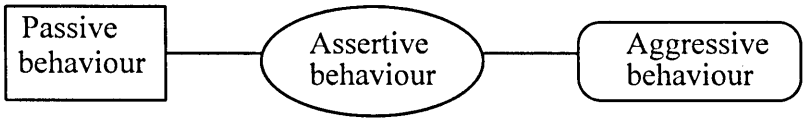


Fig.3.4. Assertive behaviour: midway between passivity and aggressiveness.

***Awareness and use of group process*:** Nurses work in and with groups; families, patients, community, other health team members, school children, factory workers,

women's groups, disabled persons, and the total population. They spend much of their working or social lives leading or participating in one group or another (Nicol and Walker 1991). If nurses in the primary nursing setting are to develop, maintain and improve their relationships with their colleagues and patients/families, they must make greater efforts to enhance their knowledge of the group process. An awareness and understanding of group behaviour, as distinct from individual behaviour, is very important to all staff in primary nursing unit, because it helps them to identify positive group behaviours and to highlight problems that the group may be experiencing. The identification of such behaviours, and the ability to lead the primary nursing team successfully, is of benefit to the primary nursing co-ordinator, who is the head of the primary nursing unit; to the primary nurse, who is meant to take on a new role of directing the care of his/her designated patients; to associate nurses, who are the future primary nurses and as a result of these to the patient/family, the consumer of care.

3.7. Primary nursing and the nursing process

These are two important areas of patient-centred nursing care and both fit into the contemporary era of humanistic nursing. The nursing process is the vehicle for accountability and comprehensive care planning. The concept of nursing process follows a pattern of observation and logical thinking that forms the basis of the plan of care needed in the primary nursing setting. All steps in the nursing process relate to co-ordinated, continuous, comprehensive care which is characteristic of primary nursing practice. The nursing process is the vehicle for accountability and comprehensive care planning. When executed on a primary nursing unit, the nursing process ensures that each patient has complete assessment, plan of care, actual care and evaluation of that care conducted by a professional nurse who knows the most about the patient. Each phase of the nursing process enforces certain features of primary nursing as shown in Figure 3.6.

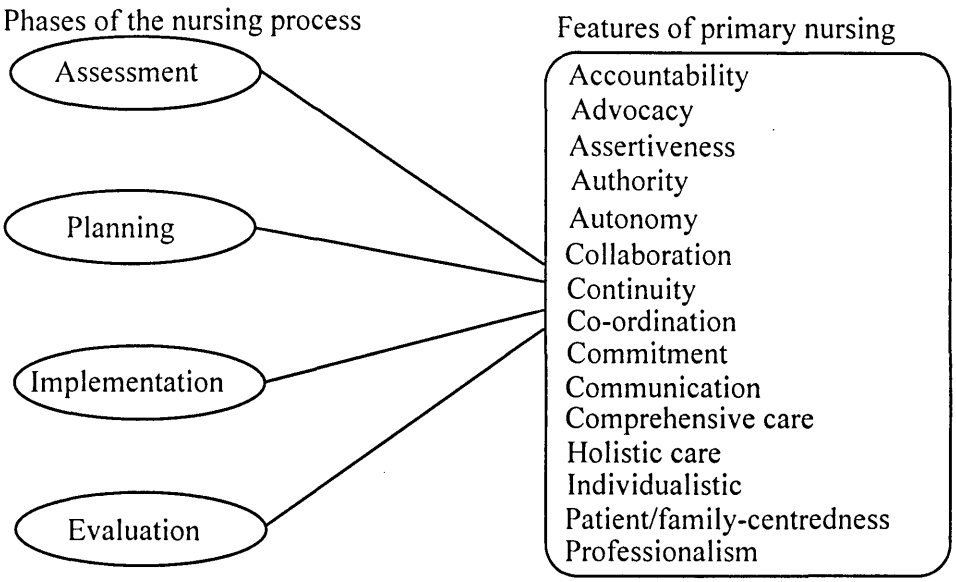


Figure 3.6. The relation of the phases of the nursing process to features of primary nursing.

3.8. Evaluative studies in primary nursing

Primary nursing involves an investment in energy, time, money and emotions (Hegyvary 1982). This investment may be in terms of practice, research, publications, etc. Manthey (1980a), the originator of primary nursing, in the preface of her book states clearly that her work "is not meant to be the last word on the subject nor is it the first." Indeed, since its invention, primary nursing has attracted voluminous description and vigorous endorsement (Deiman, Noble, and Russell 1984, Manthey 1992b).

So far many aspects of primary nursing have been explored: theoretical definitions, its cost, its effect on nurses and the nursing profession, its practicality, perceptions by patients, nurses, other health care practitioners, its evaluation, etc. Young, Giovannetti, Lewison and Thomas (1981 cited in Giovannetti 1986) conducted a comprehensive review of literature on primary nursing and documented over 150 articles and reports on primary nursing which could be categorised into - descriptive literature, descriptive-evaluative, and research-based work (MacDonald 1988). Also MacGuire (1989a) reported over 200 articles relating to primary nursing in American journals (from 1984) and British journals (from 1981) and commented that only relatively few papers were

research based. Giovannetti (1986) in a comprehensive survey of empirical works published from 1970 to 1984 reviewed only 29 research based works which have met her criteria for research investigations. Giovannetti criticised the studies for the following reasons:

* Failure to define primary nursing operationally.
* Failure to assess the competency of nursing groups before the comparisons of wards took place.
* Failure to give the new mode of practice enough time to become properly established.
* Failure to employ experimental designs with random selection and assignment.
* Failure to state the nature of the outcomes that might be expected to establish logically or philosophically why such outcomes should be attributed to the change.
* Failure to demonstrate that differences in the stated modes of care mean real differences in practice.
* Failure to provide an in-depth description of the statistical tests employed and the level of significance.
* Failure to adequately assess research instruments for reliability and validity.

In recent times more research literature on primary nursing has emerged which may have taken Giovannetti's criticisms into consideration. In this section, the writer will attempt to review some research literature on primary nursing from 1984 to date using Giovannetti's (1986) paradigms. This review will consider studies on primary nursing under the following subheads:

- Perceptual outcomes.
- Quality of care.
-Cost of care.

3.8.1. Perceptual outcomes

These will cover studies on nurses', patients', relatives' and other health care practitioners' perceptions and satisfaction with primary nursing practice. In most of the studies, perceptions and satisfaction levels frequently were used interchangeably and therefore have been combined under the general heading of perceptual outcomes. There are many primary nursing studies which cover the perceptual outcomes especially patient satisfaction. Patient satisfaction measures can be viewed as one of the most frequently reported outcome measures when new health care delivery systems are tested (Munro, Jacobsen, and Brooten 1994) and have been cited as more appropriate for capturing the results of nursing interventions than the traditional outcomes such as mortality and morbidity (Hinshaw 1992).

Reed (1988) carried out a comparative study in one team and one primary nursing unit to assess nurse-related behaviour, philosophy of care and job satisfaction. This study utilised QUALPACS, Phaneuf's Retrospective Nursing Audit, a questionnaire adapted by Anderson (1973 cited in Reed 1988), and Job Description Index developed at Cornell University to test the hypotheses that:

(a) Patients on the experimental (primary nursing) unit would score higher on quality patient care than those on the control (team nursing) unit.

(b) Nurses working on the experimental unit would hold a different philosophy of care from those nurses working on the control unit.

The experimental unit was situated in Oxford, and was compared with a general medical ward in Wolverhampton. The results from the QUALPACS study showed that the overall score and the score on all sections[2], with the exception of psychosocial - individual, were significantly higher on the primary nursing unit. The overall score on the Phaneuf's Retrospective Nursing Audit and the score on every section of this audit tool was higher in the primary nursing unit. Analysis of data on philosophy of patient

[2] *QUALPACS sections include: Psychosocial - individual, psychosocial - group, physical, general, communication and professional implication.*

care showed significant differences between the two groups of nurses. The nurses on the primary nursing ward held a similar philosophy towards individualised patient care, while those on the team nursing ward held more diverse views towards priorities and individualised patient care. Nurses on primary nursing ward showed a higher level of job satisfaction. Team nurses found the work 'more endless' and found that it did not allow for creativity. Both groups were dissatisfied with frequency of promotion and rates of pay.

While this study tended to lend support to primary nursing, Reed (1988) offers some cautionary notes to the readers. First, the non-comparability of study units and lack of control of extraneous variables. Second, unequal size of nurses in the two sample groups. The problem of studying and comparing data collected from two separate district health authorities which may influence results from the point of view of differences in ethos, culture and climate of the organisation, is acknowledged by the author. Thirdly, the problem of measuring job satisfaction when valid and reliable techniques for measuring job satisfaction related to nurses are yet to be developed. Nevertheless, the investigator felt that the aim and intention of the study were achieved in the sense that the measurement instruments utilised did in fact elicit the information required to test the hypotheses. She urged other researchers to conduct future studies which may provide additional information by measuring patients' perceptions of care, competency of each individual nurse, qualities of the team leader and motivation of the staff included in the sample using a combination of qualitative and quantitative methods.

A comparative study was carried out by Bond *et al.* (1990a, 1990b) to inform North Derbyshire Health Authority, England, of the implications of primary nursing following its introduction in a newly opened community hospital. A primary nursing ward was compared with similar wards in two community hospitals. Qualitative and quantitative data were collected from and about patients, staff and work. Matching of patients was ensured in terms of similarity in medical care, remedial therapy, social workers and

nursing - although the experimental ward provided more nursing hours per patient. This, the researchers explain, was because the ward operated a shift system to minimise the afternoon overlap, thus allowing for a qualified nurse from each primary nursing group to be on duty, and also because it operated a policy of buying replacement staff when nursing staff numbers fell. Patients in both wards were matched in terms of similarity in age, sex and diagnosis, although more patients in the primary nursing ward were admitted for respite care.

Data were collected by direct observation of nursing staff, interdisciplinary team meetings and shift handover reports. Activity analysis was performed and patient records were examined, and formal and informal interviews were carried out with staff and patients. The results of the largely descriptive report showed that:

- Patients re-admitted to the primary nursing ward were more often assigned to the same primary nurse than patients who were readmitted to non-primary nursing wards were assigned to the same team.
- There was greater attention to social circumstances on the primary nursing ward.
- More choice was given to patients concerning activities of daily living on the primary nursing ward and patients were more likely to contribute to their own notes and care plans. Greater emphasis was placed on attempting to accommodate patients' home routines.
- A higher level of team work was demonstrated on the primary nursing ward: nursing auxiliaries contributed to shift handover reports and attention was paid to equalising the workload of the groups.
- Primary nurses showed a higher level of responsibility for and control over patient care than did team nursing leaders.
- The length of stay in hospital was shorter in the primary nursing ward, and patients were more positive about their stays in hospital. There was no difference in the Neugarten Life Satisfaction Index as reported by patients.

involved; two each from two hospitals - one of the two wards in each hospital adopting primary nursing. The remaining two wards had a hierarchical nursing structure in place. The study had two components:

(a) A non-participant observer watched particular nurses during the morning and recorded verbatim all nurse to nurse interactions. In addition, two nurse report sessions (handovers) were observed each day, for a five-day period per ward. Qualitative analysis of data revealed genuine differences in the power relations between the two sorts of wards. In non-primary nursing wards, power tended to reside with the person 'in charge', in the primary nursing wards, power seemed to be vested with individuals who became the centre of communication for a particular patient.

(b) A self-completion questionnaire which was distributed to nurses on the participating wards. It used a 'Likert Scale' (1932) to measure participants' ratings of collegial communication . Analysis of the responses suggested that nurses on the primary nursing wards found their communication to be more collaborative.

The author's claim of the study providing answers to the research questions may be debatable considering that no evidence existed on the comparability of the patients in terms of age and diagnosis. Criteria for the inclusion of wards in the study were not spelt out, there was a disparity in the homogeneity in the nursing staff and different systems of primary nursing were used; one with a less lateral management system and the other with a more lateral management system. Non-operationalising of the concept of power makes intelligible interpretation of the results difficult.

All registered nurses on two psychiatric units of the 190-bed Royal Ottawa Community psychiatric hospital at Ontario in Canada were asked to complete a nurse satisfaction questionnaire before, and three years after implementation of primary nursing in Blenkarn, D'Amico and Virtue's (1988) pre - and post - test study. The 48-item questionnaire used in the study was developed by Slavitt, Stamps, Piedmont and Hease

(1978). On one unit the questionnaire was also completed one year after the change to primary nursing. Overall satisfaction increased on both units after introduction of primary nursing but this was only statistically significant on one unit. On one unit there were improvements in all areas of nursing satisfaction after a year and three years, but significant differences were found after three years in professional status, administration, nurse-physician relationships and autonomy. On the other unit, significant improvements were found in nurse-physician relationships and autonomy. The two units were not matched in certain characteristics: the unit which had the greater improvement in staff satisfaction had a head nurse and nurses who were very positive about the concepts of primary nursing. The head nurse on the other unit was more sceptical, but felt more compelled to adopt the change to primary nursing. The more positive ward had a written plan for the implementation of primary nursing and adopted an eight hour shift pattern. The other unit operated a twelve hour shift which resulted in long periods of time when nurses were away from their patients.

Blenkarn *et al.'s* study showed no evidence of comparable study units, nor did it pay any attention to the reliability and validity of instruments to ascertain how consistent it is with other studies that have used the same instruments. However, the authors offer a thorough outline of plausible explanations for significant and non-significant findings and acknowledged their inability to make general conclusions from the study because of the small sample size and design but summarised that nurses' job satisfaction, on both units studied appeared to be positively influenced by the introduction of primary nursing.

Perälä and Hentinen (1989) designed an action research study to determine the effects of a change in the organisation of nursing delivery before and after the implementation of primary nursing on a medical, a surgical and an ENT ward. Before the change all the wards were utilising a combination of team and task allocation nursing organisation pattern. The purpose of the study was to assign every patient in the medical ward and certain patients in the ENT and surgical wards, a primary nurse who was accountable for

that patient's nursing care from admission to discharge. During the implementation, a primary nurse was appointed for half of the patients in the medical ward, while in the ENT and surgical wards, a primary nurse was appointed for nearly all of the predefined classes of patients, but the patients were not informed about it and did not know who was their primary nurse. Data on the opinions of nursing staff were collected on the 3 wards before and five months after the change, using a self-completed questionnaire with structured and non-structured questions.

Content analysis of responses was carried out and a chi-square test was used to test statistical significance. The opinions of physician, unit secretaries and student nurses were also sought using a non-structured interview. Improvements were recorded by nurses in respect of care given to patients after the introduction of primary nursing, although these did not reach a statistically significant level. The physicians and ward secretaries stated that they received more information about patients after the implementation of primary nursing and that this information was more relevant to them. Secretaries reported that families of patients were better informed. Student nurses reported that they were better acquainted with the patients. Eighty percent of registered nurses and 50% of practical nurses described their attitudes to primary nursing as favourable throughout, or had changed from being critical to non-critical. Only one practical nurse considered that the implementation of primary nursing had strengthened her critical outlook.

The following disadvantages of primary nursing emerged:

1. Nurses reported more paper work and inconveniences in unit management.
2. Head nurses, physicians, ward secretaries and students reported difficulties in communication between staff.
3. Physicians complained that nurses might be unwilling to attend patients if they were not assigned to them.

The investigation by Perälä *et al.* lacked comparability in units regarding patient and staff characteristics. The length of the implementation time may have had some effects on the opinions of the nurses regarding primary nursing as a whole. The absence of reliable and valid data and the relatively few instances of statistically significant differences detract from the investigator's conclusion which states:

> the attitudes and behaviour patterns of the registered nurses and practical nurses became more favourable towards primary nursing in the course of the experiment, with a reduction in the number of disadvantages reported, which indicates that the experiment has been quite successful and is worth continuing (p 242).

McPhail, Pikula, Brown and Harper (1990) in their study compared two halves of a 35-bedded unit, in which one subunit practised team nursing and the other primary nursing for five months. The organisation of nursing care was then reversed. Nursing staff were assigned randomly to one of the two units. Job satisfaction and nurse absenteeism were measured, and nurses were asked to express a preference for team or primary nursing. Doctors and paramedics were asked to complete a questionnaire comparing the quality of care on the two subunits. Patients were asked to complete a patient satisfaction questionnaire. Also patient characteristics were obtained. Of the 55% of nurses who completed the questionnaire, there was no significant difference between primary and team nursing, and no difference in the absenteeism rates between the primary and team nursing groups. A majority of nurses expressed a preference for team nursing. There was no difference in the perceived quality of nursing care under primary or team nursing by other health professionals or patients. An audit of nursing records indicated compliance with team and primary nursing according to the criteria set by the research team. As the trial continued, charting showed an improvement in both systems, particularly in the areas of patient discharge planning and patient education. It was concluded by the researchers that there was no advantage in introducing primary nursing. The audit of nursing records used as a means of evaluating quality of nursing care renders the findings questionable as the results may reflect proficiency in recording or documentation not necessarily the improvement in quality of care.

In a two year longitudinal study with a quasi-experimental ABA cross-over design[3] and a staff survey by Wilson and Dawson (1989), an attempt to evaluate primary and team nursing on two 45-bed geriatric units in a 400-bed building was made. The dependent variables in the study were patient well-being, nursing practice, staff morale and costs. The study was conducted in the Department of Extended Care at Sunnybrook Medical Centre, University of Toronto Hospital, Toronto - Canada. The instruments used for the study were specifically developed for the elderly and they included:

(1)Tranquillity - Agitation Scale (Morris and Sherwood 1975).

(2) Vitality Rating Scale (Reid and Zeigher 1980).

(3) Personal Control Rating Scale (Zeigher and Reid 1979).

(4) A slightly modified Geriatric Residents' Goals Scale (GRGS) (Cornbleth 1978).

Measures of general nursing practice consisted of selected nursing activities and the continuity - consistency variable. Staff morale measures included a self-report of job satisfaction, absenteeism records and staff turnover. Indices used to examine costs of nursing hours were total cost of RN hours, total cost of registered nursing assistant and nursing orderly hours and total cost of relief nursing staff hours. Additionally, a questionnaire was developed to obtain quantitative and qualitative information on staff attitudes and opinions. The results of the study showed that the patient measures did not consistently differentiate one system of nursing care over another but where differences were found, they were related to primary nursing. The findings on variables reflecting nursing practice were supportive of primary nursing when compared with team nursing. No trends regarding job satisfaction emerged on either primary or team unit. The

[3] *It is a type of repeated-measures design where half the subjects, Group A, will receive Treatment I followed by Treatment II, and the other half, Group B, Treatment II followed by Treatment I (see Figure 3.7).*

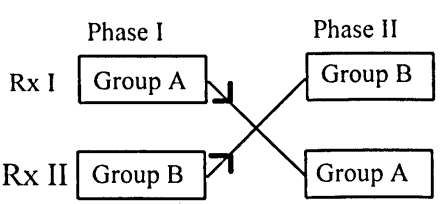


Fig. 3.7. Repeated measures design with cross-over.

records of absenteeism and staff turnover showed no difference between the two systems. The cost of nursing hours and medical-surgical supplies did not differ between primary and team nursing units - a finding which the authors attribute to confounding variables such as a fluctuating labour market and the introduction of a different employee benefit package.

The characteristics of the nursing staff in the two units were not comparable except for nurse staffing patterns in terms of professional:non-professional ratios. Furthermore, the patient populations differed on the two units and this may have affected the results of the patients' measures across the units. However, the use of the cross-over quasi-experimental design may have reduced the possibility of an artificial Hawthorne effect which usually presents some problems in quasi-experimental studies like this. Finally, the report of careful reliability tests and data analysis give strong support for the conclusion by the authors that the endorsement of primary nursing by staff and the positive patient responses affirm primary nursing as worthy of ongoing development and refinement.

Thomas (1992) in her study, used 9 care of the elderly wards - three representing each mode of organisation - functional, team and primary nursing. Twelve qualified nurses and 12 nursing auxiliaries from each organisational modality were selected for the study. A Work Environment Scale was the tool for data collection. The findings showed that qualified nurses in primary nursing wards perceived significantly greater autonomy, supervisor support and physical comfort than their team and functional nursing ward counterparts. They also perceived less work pressure than team nurses. Primary qualified nurses perceived greater involvement and innovation, but less control exerted by management over their work than functional qualified nurses. Comparing nursing auxiliaries across methods of organising nursing, those in primary nursing wards perceived significantly greater autonomy, supervisor support, physical comfort, clarity and innovation than their team and functional nursing counterparts. Primary nursing

auxiliaries also perceived significantly greater peer cohesion and involvement but less work pressure than nursing auxiliaries under the other organisational modes.

The combination of qualitative and quantitative methods in this study is of additional advantage. This combination has offered analysis in numerical terms as well as description for the underlying meanings in the data. This is in support of Hinds' (1989) contention that the combination of two methods increases the researcher's ability to rule out rival explanations for phenomena. This has further been established by Field and Morse (1985) in their assertion that the strongest research findings are found in studies that use both research methods.

Malkin (1993) in a survey compared the levels of intrinsic job satisfaction of primary and non-primary nurses. Within the survey, the relationship between intrinsic job satisfaction and staff retention was addressed. The sample for the study was drawn from a total population of nurses working in five general hospitals in Oxfordshire Health Authority who had qualified as RNs and were working in the general field. Wards which met the criteria for primary nursing, designed by Davies (1989 cited in Malkin 1993) were included in the study. Thirty-two primary nurses were identified. A sample of non-primary nurses was selected by 'pairing' nurses on certain variables; inclusion of hospitals in the Health Authority, the wards' medical speciality and length of time in service. Data were gained by questionnaire using a Likert Scale. Open questions were also asked to gain qualitative data.

Non-parametric statistical tests were used to analyse quantitative data, while content analysis was used to analyse qualitative data. No significant difference was demonstrated between primary and non-primary nurses level of 'intrinsic job satisfaction' or 'intentions to stay in nursing', nor was there any significant difference between nurses' level of 'extrinsic job satisfaction' or 'perception of nursing as 'women's work.' Both groups of nurses had a significant correlation for their 'perception of nursing as 'women's work' and 'intentions to stay in nursing' but no significant correlation was

seen to exist between perceptions of 'extrinsic job satisfaction' and intentions to stay in nursing'. Qualitative data showed that primary and non-primary nurses gained job satisfaction in different areas of work. Primary nurses gave intrinsic reasons of autonomy and freedom of work, one-to-one relationships with the patient and feedback from patients and increased confidence as a nurse. Non-primary nurses gave extrinsic reasons for job satisfaction which included enjoying the medical speciality of patients on the ward, a happy relaxed environment, being able to use practical nursing skills gained as a student and having enough time to care for patients (This is the interpretation given by the author of this study).

The author concludes that the result of this study may demonstrate that as a group, primary nurses may be more career-oriented than non-primary nurses and that they may possibly intend to pursue nursing as a chosen career because of improved 'intrinsic job satisfaction.' Malkin reported an interesting observation that significantly more primary nurses held degrees than non-primary nurses. This may have accounted for the primary nurses being more career-oriented. While hypothetical questions were utilised to ascertain the extent to which staff were retained, the author acknowledged that these questions could yield responses of limited value. Although the study criteria for inclusion of wards practising primary nursing in the study were based on Davies' (1989) tool, the use of the author's professional judgement alone to ascertain if these criteria were met, may have biased the ward selection procedure. The crude method used to code the qualitative data may have influenced the results. These flaws may have obscured measurable differences between the two types of units.

3.8.2. Quality of Care

Many studies have been conducted to assess selected aspects of the quality of nursing with the implementation of primary nursing. Since the study of the quality of care in primary nursing practice has been the major focus of many researches (Giovannetti 1986); and Munro *et al.* (1994) views outcome measurement as a central concept in assessing quality of care, it goes without saying that there are many studies which

reflect quality in combination with other aspects. Such studies will be elaborated under other sections. Only studies which are primarily concerned with the quality of nursing care are reported under this section. These will address studies on quality of nursing care, nursing productivity, and quality of care plans.

Culpepper, Richie, Sinclair, Stephens and Betz's (1986) study was designed to examine the differences in quality assurance scores prior to and after implementation of primary nursing in a 565 bedded University Teaching Hospital in Vanderbilt - Nashville, Tennessee. Analysis of routinely collected quality data from Medicus Nursing Productivity and Quality (NPAQ) quality assessment tool was carried out for 22 nursing units to test the study hypothesis that "there will be a significant improvement in Patient - Centred Quality (PCQ) scores following the implementation of primary nursing." Analysis of the scores revealed that five of the eight PCQ scores demonstrated significant improvement following the introduction of primary nursing. The findings of the study supported the hypothesis and the authors concluded that primary nursing has had a strong influence on the improvement of the quality of nursing care.

This study was noteworthy in a number of ways. First, the research was based on a related, carefully selected review of nursing literature and a conceptual framework of the nursing delivery system. Second, internal consistency and homogeneity of instruments were carefully assessed. Third, clear evidence of control of extraneous variables was seen; the authors subjected five extraneous variables to pre - and post - measurements and no significant differences were demonstrated, thus eliminating these as potentially confounding variables. Finally, reasons for non-significant findings were given. However the researchers acknowledged the small size of the sample. Another weakness in this study that is likely to distort research results is lack of reduction of a possible practice effect which may occur in a study of this nature (repeated measurements which may result in subjects' familiarity with instruments). The researchers called for replications of the study to yield findings which may expose the generalisability of results.

Quasi-experimental research by MacGuire (1991), MacGuire *et al.* (1990), MacGuire (1989 a, b, c, & d) and MacGuire (1988) evaluates the impact of introducing primary nursing on an acute care of the elderly ward. The study involved three matched acute elderly wards from one unit. Primary nursing was adopted by one ward (the experimental ward), the other two wards continued with their usual nursing care (control wards). All three were similar in terms of geographical layout, staff levels, skill mix, patient throughput and client group. This allowed for comparisons between the three wards and with the experimental ward's past performance following the implementation of primary nursing.

Activity sampling was carried out simultaneously on all three wards over a period of seven days. Analysis of data suggested that the pattern of work on the 3 wards was similar - dominated by direct patient care. On the primary nursing ward, a smaller proportion of overall staff time was spent on direct patient care, perhaps resulting from less 'doing' for patients and more time being spent supporting and assisting patient rehabilitation. More time appeared to be spent on communicating with patients, relatives and others about patient care on the primary nursing ward. Qualified staff appeared to spend more time on clerical duties on the control wards. The ward sister's activities, although still dominated by direct patient care on the primary nursing ward, indicated more time spent supporting, co-ordinating and monitoring patient care. These findings perhaps indicate role changes in relation to primary nursing. Quality of care measurements using Senior Monitor were carried out prior to the introduction of primary nursing and again six months and a year following its implementation.

Comparisons of the overall results indicated that although the primary nursing ward achieved marked improvement in the quality of care measurements both the control wards also improved their scores - which could be a Hawthorne effect. At the end of the study the difference between the overall quality of care scores across the three wards was not found to be statistically significant. It appeared that the process of

implementing quality assurance measures alone may have resulted in the improvement in quality of care. In an interview with the nurses on the experimental ward after the first six months of primary nursing, findings indicated improved knowledge of patients and relatives. Increased knowledge of and responsibility for specific patients coupled with improved continuity of care resulted in greater job satisfaction than prior to the adoption of primary nursing.

In Manley's (1989, 1990) study to introduce primary nursing into an Intensive Care Unit (ICU), a 12-bedded ICU was split into two 6-bedded units; one as an experimental unit and the other as the control unit. Results of this study to evaluate the quality of care using QUALPACS and staff satisfaction using Mumford's (1983, 1986) job satisfaction questionnaire, showed no statistical difference between the experimental group and the control group before randomisation. In the post-implementation evaluation period, the experimental group demonstrated a higher quality of care. The subsections concerned with physical care, professional implications and communications showed the largest differences, the smallest differences being in the subsection of psychosocial: individual. There were no statistical differences between the two groups when job satisfaction levels were compared. Manley concluded that quality of patient care was improved in the group practising primary nursing, but no differences in job satisfaction were found.

In this study, Manley did not allocate the nursing units randomly to experimental and the control group, but the assignment of patients and staff to the two geographical areas of the Intensive Care Unit (ICU) was done randomly. The researcher offers explanation for the hand picking of nursing units and expresses that contamination of experimental group would have been more likely to occur if the groups were sited on reverse sides of the unit. Careful attention was paid to internal consistency and homogeneity of the instruments used. The author provided evidence of reliability and correction factors for the QUALPACS. No evidence of reliability nor validity is recorded for the job satisfaction instrument. Finally, post-implementation data was limited to a one month period. It is doubtful if this period is long enough for the independent variable to have

caused the measured effect on the dependent variables. However, the result can be viewed as the beginning impact of primary nursing in the ICU.

A study (Pearson, Durant and Punton 1989, Pearson 1989 and a critique by Mead 1990), was undertaken to evaluate a nursing unit where nursing was the primary therapy. Patient outcomes were compared for patients who had been admitted to the nursing unit (the treatment group) with a matched group which pursued its normal hospital career (the control group). Patients included in the study were over 60 years, and had been admitted with fractured neck of femur, cerebral vascular accident or had undergone an amputation of a lower limb. Random assignment of patients to either experimental (n = 84) or control group (n = 73) was done. The study considered the following variables:

- quality of nursing care, determined by a retrospective audit of nursing notes;
- life satisfaction of patients using Neugarten's life satisfaction survey, administered on discharge and at six weeks and six months post-discharge;
- patient satisfaction with nursing care, using a patient satisfaction check list;
- patient dependency at discharge, and at six weeks and six months post-discharge;
- length of stay;
- cost of bed;
- mortality for the two groups of patients.

The findings from the study revealed significantly higher scores from the retrospective nursing audit for the patients in the treatment group and variable scores for patients in the control group. It was concluded that the nursing care experienced by the treatment group was consistently higher than that experienced by the control group. Scores from the Neugarten's life satisfaction scale were not statistically significant for the two groups, and the scores fell between the first interview at discharge and the second interview six weeks after discharge. Patients in the treatment group were more independent on discharge than those in the other group. No difference in dependency between the two groups were reported at six weeks or six months post-discharge.

Patients in the control group spent three times longer in acute hospital than those in the treatment group. The treatment group spent slightly longer time under NHS care and this may account for the difference in dependency scores on discharge. The cost per bed was 11.6% less in the treatment group than it was for the control group. The patients in the control group were three times more likely to die in hospital than those in the treatment group.

The authors expressed surprise over the significant result of the patient satisfaction data in favour of primary nursing despite all weaknesses associated with the patient service checklist and assert that the result gives evidence that the tool was not wholly unreliable. The investigators' views were further supported by the results of the qualitative data tending toward primary nursing. The plausible explanation of the reasons for each significant and non-significant finding makes the understanding and possible application of the research simpler. The multiple-methods of assessment used in this study make the findings more valid as there is a possibility that the weaknesses of one method would have been compensated for by the advantages of the other method. It is worthy to note the consistency of the result of the data from the treatment group as compared to the greater variability found in results from the control group. This may have resulted from the underlying therapeutic nursing and philosophy of care used in the primary nursing unit whereas patients in control units were nursed in different wards and hospitals. Although primary nursing was one of the major differences between the treatment and control units, a strict comparison cannot be made between the two units because the treatment unit introduced other innovations. The retrospective audit of nursing notes used in data collection may have been an indication of improvement in documentation and not necessarily an improvement in nursing care in the treatment unit.

Employing action research with multiple-methods quasi-experimental and ethnographic forms of evaluation, Armitage, Champney-Smith and Andrews (1991), utilised a five-phased composite series research design to introduce primary nursing and evaluate the effects of the intervention on the quality of nursing care. Two long-term psychiatric

rehabilitation / continuing care wards were used. The standards of care, patient satisfaction and nursing staff perceptions of the quality of their working life and the ward atmosphere were evaluated before and after implementation of primary nursing on the research wards.

The methods used for the study included observation of patient care and clinical meetings, nursing staff questionnaires concerned with job satisfaction (Warr, Cook and Wall. 1983), attitudes to the nursing process (Everden 1983 cited in Armitage *et al.* 1991, Bowman, Thompson and Sutton 1983) and nurses' views on their role (Rump 1979) and their opinions on the atmosphere of their ward (Moos 1974). Residents were asked about satisfaction with their care and their ward. Two groups of assessors audited the standards of care before and after introduction of primary nursing using a 155-item checklist and a retrospective analysis of nursing records (Kemp 1986). Indirect indicators were also used such as the hospital system of assessment of rehabilitation and records of nursing staff sickness and absence.

The results of the assessors' evaluation on the two research wards suggest that the implementation of the change was followed by more individual and accountable care. The findings from the triangulation of the data suggest that the residents were more self-sufficient and independent with the climate being more conducive to rehabilitation and the environment was said to have improved. This study was systematic and based on careful review of organisational and nursing literature. The researchers reported comparability in the characteristics of the two research wards. Orientation of new staff into the unit was not given any consideration and this, the authors felt made implementation more difficult. The authors mentioned that the six months allowed for the implementation and for the momentous change to take place was grossly inadequate. The use of 2 groups of assessors may have enhanced objectivity and reduce rater bias. However, the retrospective analysis of nursing records used in this study may not have reflected an improvement in quality of care but efficiency in documentation.

3.8.4. Cost of Care

This section will present studies on primary nursing which address direct nursing care time, indirect nursing care time, cost of nursing care, cost effectiveness, efficiency of nursing system, length of stay or hospitalisation, staffing cost, nursing care productivity, patient complaints and complications. Some studies which address these issues may have already been presented under other sections as most studies involve a combination of variables.

In a comparative study, Clark and Zornow (1989), aimed at determining the efficiency of each of the organising systems. Data were collected from eight units; two teams, two primary and four total patient care units of a medium-sized, not-for-profit community hospital. Unit support systems were identical for each study unit and remained constant throughout the study. Unit organisation modalities were determined on the basis of unit assignment documents, unit-developed statements of philosophy and unit personnel perceptions.

All classifications of personnel (Registered Nurse, Licensed Practical Nurse (LPN), Nursing Auxiliary) on three shifts were included in the study. Nursing personnel in the study units were observed for thirty minute periods for sampling task behaviour by one nurse observer not known to the organisation or familiar with this specific organisation's programs or structure. Observations were made each hour over each 24 hour time period and on every day of the week for every study unit. Multiple analyses of variance were completed.

The results of this study for all units showed that the largest number of observations fell into the category of 'verbal activity', indicating that nurses talk with patients more frequently than they perform any other single activity. When comparing systems of care, it was discovered that the greatest number of nurses in the primary nursing and total patient care units talked with patients more frequently than those on the team nursing unit. In the analyses of variance comparing systems of care with classification of

personnel, a main effect was demonstrated in only two categories of nursing activities, that of 'maintaining environment' and 'other'. In these categories the least amount of time was spent under the team system, and the most amount of time was spent under the primary and the total patient care systems.

They concluded that, the mode of nursing care organisation, whether team - total patient care or primary nursing, was not demonstrated to have a major impact on the nursing activities within a hospital setting using task analysis through observation techniques. Clark and Zornow further state that differences by organising systems may not be definable on the basis of tasks but are more definable on examination of qualitative aspects and advise that time spent should be investigated in relation to outcomes such as quality care and patient and nurse satisfaction.

Careful attention was paid to the selection of support systems with identical features and these were kept constant all through the study. Although face validity of the category system was assumed, no reliability estimates were computed. The use of one observer might bring into question the issue of observer bias and objectivity in this study, however the observer was 'blind'. The investigators reported the possibility of the size of the hospital, the homogeneity of the patient population or other situational variables having adverse influence on the results. They called for further studies to validate and test the reliability of the category system in a variety of agencies and across the many nursing specialities.

McCausland, Persing and Kiley (1988) undertook a retrospective study to evaluate the changes in length of stay, number of admissions, nursing Full Time Equivalents (FTEs), and total nursing hours worked in an eighty bed psychiatric speciality hospital of a 947-bedded academic medical centre serving as a tertiary referral facility for the North East Ohio region and beyond. These variables were selected as indicators of nursing productivity and effectiveness. The sample consisted of total hospital and psychiatric hospital admissions, patient days, nursing FTEs and nursing hours worked 1980-1982

and 1986. Results of the study showed a decrease in the average length of stay from 32 days in 1982 (preprimary nursing period) to 22 days in 1986 (postprimary nursing period). The number of admissions increased in 1986 compared to 1980 for the total hospital (13.9%) as well as psychiatric hospital (19.3%). The total hospital nursing hours in 1986 increased as compared to the preprimary nursing period represented (11.4%). However, in the psychiatric hospital, the hours decreased by 16.1% in 1986. Even with the fewer nursing hours worked, nursing hours per patient day in psychiatric hospital increased from 7.96 hours to 7.98 RN hours per patient day. These study findings confirmed the hypothesis that significantly more patients can be cared for during shorter lengths of stay using fewer total nursing hours when a primary nursing model and an all-RN staff are used to deliver nursing care.

McClausand *et al.* (1988) failed to state how long primary nursing had been implemented before the collection of the post-implementation data. The results of this retrospective study need to be interpreted with caution as they may be reflecting effectiveness in record keeping and not the effect of the change on the variable under consideration. The authors reported that the average length of stay peaked in 1981 which coincided with the conversion of one of the adult units to an adolescent unit. The effect of this as stated by the researchers "made length of stay data incomparable" (p 299).

In a study to assess the impact of primary nursing on nursing costs within Diagnosis Related Groups (DRGs), Wolf, Lesic and Leak (1986) compare direct nursing care costs within specific DRGs between a primary and a team nursing unit in a 464-bed acute care community hospital - in Shadyside- Pittsburgh, Pennsylvania. Data were collected from two structurally identical 28-bedded medical-surgical nursing units; one operating primary nursing for approximately one year and the other used a team nursing approach. Using a computerised information system, data relating to length of stay, daily acuity and corresponding nursing care costs were collected on every patient seen on both units for a period of six months. The data revealed a surprising statistical difference in acuity

between the two units, with the overall acuity on the primary unit being 28% greater. Statistically significant differences were found with patients on the primary nursing unit, averaging a length of stay 24% longer. It was expected that patients requiring more nursing and staying for longer periods of time would also incur higher nursing care costs, however, average costs on the primary nursing unit were 22% higher despite the 28% increase in acuity and 24% increase in length of stay. This was not a statistically significant difference. The average daily cost per patient per DRG revealed a daily savings of $1.30 per patient on the primary nursing unit. The researchers concluded that the results of the study lend support to the cost effectiveness of primary nursing within the perspective payment system.

Wolf *et al.'s* study showed careful data analysis, and attention was given to the matching of units in terms of structure and patient characteristics, identified nursing subgroups of age and educational level, which were of particular value in this study in highlighting the potential influence of these variables on the comparability of the study units. A high inter-rater reliability was maintained throughout the data collection period. However non-operationalisation of the variable 'acuity' makes understanding and interpretation of the results difficult. The authors suggested the need for further study to demonstrate the relationship between the quality of care and nursing care costs.

Summary

Literature on primary nursing has been replete with qualitative and quantitative descriptions of its impact. Several studies have compared primary nursing with other modes of organising nursing care; team, functional and total patient care. Studies have been conducted in acute and long term settings. While variables studied have been diverse, issues of patient and staff perception, quality and cost of care have been discussed in this work. The predominant design has been a two group comparison with pre - and post - measures. Findings of these studies have given varied support for primary nursing and inconsistent results on the impact of primary nursing have been reported.

Many conceptual, methodological issues, instrumentation and research design issues could be identified in the foregoing studies on primary nursing. With few exceptions, the instruments lacked adequate reliability and validity assessment. In some instances where existing or standardised measures were used, many researchers appeared to assume that previously established validity estimates were transferable. There were problems related to the operationalisation of variables under study, which made intelligible interpretation of the research effort difficult. A large proportion of the research was incomplete with respect to characteristics of the population studied and data collection methods and procedures. Inappropriate reporting was evident in some studies. These weaknesses and constraints have been taken into consideration when designing and reporting the present study.

CHAPTER FOUR

THE FAMILY IN HEALTH CARE

4.0. Introduction

Primary nursing is family-centred and the care of the family as a unit is an integral component of professional nursing practice. Early in the team approach, families were excluded from team membership (Clements and Roberts 1983) because of the underestimation of their role. The family is now seen as a member of the health team (Fromer 1979) and family-centred care as part of nursing is increasingly receiving unprecedented attention (Wright and Leahey 1990). The family involvement in the care of the patient is crucial and this calls for the study of family dynamics. It is not just enough to study only the impact of an individual's illness on the family or the role of the total family in the illness of an individual, but also to study the role of the family in evaluating health programmes in general and nursing systems in particular, in caring for an individual.

This chapter is intended to give various definitions of family, describe the concept of family-centred nursing care, show how the family has been and can be involved in health care, explain the historical overview of family-centred nursing, discuss how the family fits into nursing standards, and explain the models of family-centred nursing care. It will also enumerate the functions of the family, and give some reasons for nursing's interest in studying the family.

4.1. Definitions of family

Friedman (1992) defines family as two or more persons who are joined together by bonds of sharing and emotional closeness and who identify themselves as being part of the family. Winch (1971) defines family as a group of two or more persons joined by ties of marriage, blood or adoption, who constitute a single household, who interact with each other in their respective familial roles and who create and maintain a common

culture. According to Burgess and Ragland (1983), the family is a group of two or more people who are emotionally involved with each other and who choose to identify themselves as a family.

The common features of these definitions are that it takes two or more people to make a family and that members of any family have a factor that joins them together. Variations in family definition exist based on personal attitudes and values, cultural norms, societal norms, religious definitions and information learned through our education. Also professional biases affect the definition as well as societal belief. These variations allow for the family to be defined as nuclear or extended, and to include the single parent family, childless couples, and married couples who live apart because of job demands.

When considering family responsibilities, the family has remained undefined (Graham 1984). It features a kind of catch-all category which embraces those forms of care which the state does not (or should not) provide. When discussing the position of the elderly and handicapped, policy makers generally invoke a wide concept of the family unit (DHSS 1981a). It is seen as a kinship network spanning three or more generations, and involving relatives who do not necessarily live in the same household. The concept of the family is viewed in a more precise perspective when children are the subject of policy. It is regarded typically by Graham (1984) as "a two-generation structure marked out by the lines of responsibility which run between parents and child(ren)" (p 17).

4.2. The concept of family-centred care

Family-centred care represents humanistic and holistic approaches to health care (Campbell and Summersgill 1993). Many significant social changes in the 1960s have given greater recognition to the importance of the individual and family. The role of the nurse as the advocate of the patient and family has become well-established. Marlow (1977) suggests that the prime goal of family advocacy is in the promotion of technical and psychological resources to assist in problem solving and that such an effort involves

a commitment on the part of the nurse to strengthen family life by helping to break through blocks that prevent family members from receiving appropriate care.

The concept of family-centred care has been examined by various authors (Marlow 1977, McCawley 1980, Foster *et al.* 1989, Brunner and Suddarth 1991, Shelton *et al.* 1987). Foster *et al.*(1989) offer two facets of family-centred care which are:

> (1) No one individual member can be effectively cared for if that care does not consider the other members who both affect and are affected by the member seeking nursing care.
>
> (2) Each family must be approached as a unique group of individuals with particular strengths and limitations.

Brunner and Suddarth (1991) define family-centred care as follows:

> Family-centred care provides an opportunity for the family to care for the hospitalised child (person) with nursing support and supervision... The goal of family-centred care is to maintain or strengthen the roles and ties of the family with the hospitalised child (person) in order to promote normality of the family unit (p.60).

Shelton *et al.* (1987) has designed a framework of family-centred care for children's nursing. This framework has been modified by the writer to cover all aspects of nursing and are presented below as the *elements of family-centred care* (see Table 4.1).

Table 4.1. Elements of family-centred care:

1. Recognition that the family is the constant in the patient's life while the service systems and personnel within those systems fluctuate.
2. Facilitation of family-professional collaboration at all levels of health care.
3. Sharing of unbiased and complete information with families about their patient's care on an ongoing basis in an appropriate and supportive manner.
4. Implementation of appropriate policies and programmes that are comprehensive and provide emotional and financial support to meet families' needs.

5. Recognition of family strengths, and individuality and respect of different methods of coping.

6. Understanding and incorporating the developmental and emotional needs of individuals and their families into health care delivery systems.

7. Encouragement and facilitation of family in their support for their patients

8. Assurance that the design of health care delivery systems is flexible, accessible and responsive to family needs.

The family is increasingly becoming a significant resource for individual members (Moroney 1976). The family plays an important role in the health care of its members. Nursing care will be more meaningful if it does not only view the individual patient but considers other members of the family to which the patient belongs in the care of the client. As nurses involve the family more in health care, they are altering and/or modifying their usual patterns of clinical practice. The outcome of this change in behaviour will lead to an increased diversity in clinical practice with families. Two major ways in which nurses may involve families are either to focus on the individual in the context of the family (see Figure 4.1) or to focus on the family with the individuals as context (Figure 4.2).

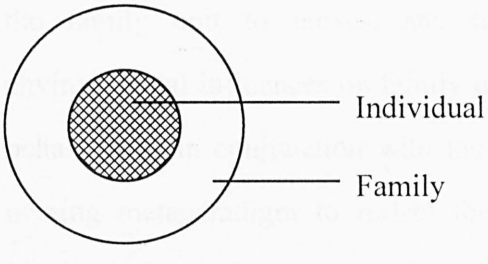


Figure 4.1. Focusing on individual in the context of the family.

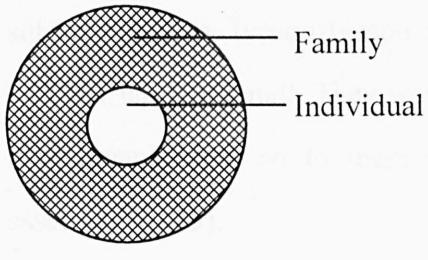


Figure 4.2. Focusing on family with the individual as context.

From its inception nursing has been concerned with individual family members (Whall and Fawcett 1991) and the family as a whole (Friedman 1992). The interest in the family as a unit of nursing care originated with Nightingale's concern for family members (Whall *et al.* 1991). The concept of family in nursing care has called for a modification of nursing metaparadigm to account for family phenomena. This nursing metaparadigm suggests concepts that reflect family-centred care such as, family environment, family health, nursing within the context of the family. To further emphasise the need for addressing the family in nursing care, the propositions of the nursing metaparadigm can be modified to suit the family concept as follows:

> (1) Nursing is concerned with the principles and laws that govern family process, family well-being and optimum function of families in various states of illness and wellness.
>
> (2) Nursing is concerned with the patterning of family behaviour in interaction with the environment in normal life events and critical life situations.
>
> (3) Nursing is concerned with the process by which positive changes in family health status may be effected.

This modification of the nursing position with the family underscores the centrality of the family unit to nurses, and focuses nursing on the family by considering environmental influences on family health and the effect of actions taken by nurses on behalf of or in conjunction with the family. Also implicit in the modification of the nursing metaparadigm to reflect the family is the emphasis on the comprehensive biophysical or holistic perspective of health and the concern of nursing for family well being rather than pathology. The role of nurses in family-centred care is further substantiated by Iveson-Iveson (1982) in her comment: "Nurses are part of families, whether large or small. They work in a profession that has as its aim the common good of (human) kind, so to them understanding the meaning and value of kinship is essential" (p 19).

Many nursing theorists insist on the family unit as the client of care in nursing (Kvarness 1959, Reinersteon 1963, Hess 1966, Mereness 1968, Janosik and Miller 1980, Knafl and Grace 1979, Jones 1980). Other recent literature on the family and its place in nursing abound. These are highly research based and offer theoretical reviews for nursing practice (Clements and Roberts 1983, Friedman 1992, Miller and Winstead-Fry 1982, Wright and Leahey 1984, Whall 1986, Fitzpatrick, Whall, Johnston and Floyd 1982, Gillis, Highley, Roberts and Martinson 1989, Whall and Facwett 1991). From the above discussion, it can be inferred that the consideration of the family as a unit of care is an important component in the nursing care of all patients; the young, the old, the rich, the poor, pregnant mothers, men, women, etc. This supports the need to use a nursing assignment pattern that will promote family-centred nursing.

4.3. Family involvement in health care: a global view

The family provides the most important social context within which health is maintained, illness occurs and is resolved (Bond and Bond 1986). Litman (1974) argues that the family serves as the primary unit in health and medical care. The family has a pervasive influence in matters of health. It is on this platform that Graham (1984) writes:

> the extensive and intensive care provided by the family forms the basis on which the professional services have evolved. Professional health care workers, like doctors and health visitors, do not provide an alternative to the family: rather they have a range of skills which they employ in order to improve the quality of care that families provide. Doctors diagnose and prescribe treatments for the patients who come to them: they do not nurse the sick. Similarly, health visitors listen and advise: it is left to mothers to put their advice into practice. The consequence of this obvious but fundamental division of labour is that professional health workers tend to see, and to deal with, only the tip of the iceberg (p 7).

The event of hospitalisation affects both the patient and family and these effects might be minimised by incorporating family members into patients' hospitalisation experience (Kupferschmid, Briones, Dawson and Drongowski 1991, Frost 1970). Cobb (1976)

opines that facilitating family support can have a significant impact on the patients' ability to cope, their desire to recover and on their physiologic state. Inclusion of the family in the health matters concerning patients, as viewed by Naisbett (1984), may help to rehumanise an environment that has become increasingly technologically focused. Regular visits from family and friends are very important because they help to preserve some continuity with the patient's home life (Eldar and Eldar 1984).

Many nurses have been reported to have intuitively recognised the essential role some families play in the recovery of their ill or injured family member (Kupferschmid *et al.* 1991). The family as a social support system has the role of providing the needed assistance to its members during times of stress such as in hospitalisation. Locke (1982) further substantiates this by suggesting that social support systems may actually have a mediating effect upon a patient's immune function, which can be depressed due to nutritional imbalances, stress or surgery. Toffler (1970) views the family as the "sanity-preserving constant in human existence." Families demonstrate caring, commitment, loyalty and responsibility through the relationship they establish with one another and the communication they engage in. These qualities of families are possible through the interdependence which occurs among members. However there is also evidence that families are problematic and can be very stressful in some societies.

According to Sofoluwe and Bennett (1985), over 80% of Nigerians do not avail themselves of essential services. In a study on utilisation of Orthodox Health Services (OHS) by women in a rural Nigerian village, Archibong (1989) found that 40% of women did not use OHS. Apart from factors such as education, income, severity of illness, family size, etc. which were identified as the likely determinants of utilisation of OHS in Archibong's study, an important factor which may affect the use of OHS in Third World countries from Eldar and Eldar's (1984) perspective is that " hospitals are viewed with fear as being last resorts for the dying ..." (p 40) and a willingness to be treated in familiar surroundings which are similar to family environments. Consequently the care of non-users of OHS in Archibong's study was undertaken (1) at home (family's

assistance) through self medication (17%); (2) at prayer houses through prayers (15%); and (3) by traditional healers using traditional medicine (8%). Cassidy (1995) describes how nurses in South Africa are forging links with traditional and spiritual healers since a greater proportion of the population utilise these services when faced with mental health problems. Although Cassidy has not offered any reason for this, it might reflect the need of individuals to receive health care in environments that are similar to family settings; that which may allow the family the freedom in contributing to the care of its sick members.

In many developing countries, (e.g. Nigeria, Philippines, Cameroon, etc.), even where families yield to the treatment of their patients in hospitals, they are always seen surrounding them or visiting regularly. This may be an indication of the reluctance of families to hand over care of their sick ones to any one else even though they bear all kinds of inconvenience to be in the hospital with their patients. The family cannot fully delegate its responsibility for the care of its members to a specialised agency like the hospital and it is continuously involved in specialised activities concerning patient care, such as medication (Pratt 1973). Pratt insists that the family and the health care system have their own distinctive interests and goals, which indicate the importance of each in patient care.

Even in the Western World where there has been a far greater acceptance of professional care in sickness than there is in developing countries, evidence of the family in health care of their families still exists. There has been an initiation of various programmes to involve the patient in the health care experience (Speedling and Rosenberg 1986) and subsequently the whole family. These programmes have grown from a patient-centred philosophy (Gibson and Pulliam 1987), while others have grown out of guest relations programmes (Riffer 1984), or as partners in care (Bowen 1986; MacStravic 1988). These programmes which involve patients (and family) in the health care experience are designed to improve health outcomes and aid health care organisations in a number of ways (Martin, Hunt, Hughes-Stone and Conrad 1990).

According to Adegoroye (1984), people are more committed to programmes which they are involved in setting up and are allowed to participate in implementing. Family involvement, in such processes as defining whether a member is sick or not, as well as providing preliminary validation to the sick role and precipitating the initial steps in selecting out and utilising the necessary available care (including participation in its ministration) for instance, all constitute important family transactions (Pratt 1973). To further buttress the need to involve the family in the health care of patients, Litman (1974) stresses that the interrelation between health and family is a highly dynamic one in which each may have a dramatic effect on the other. Involvement of the family in health care is a crucial consideration that should be made by health care practitioners. Nurses must note that the course of patient's condition and the health and happiness of the family as a whole is dependent on the nature of the family's response and involvement in patient care.

Although health institutions which developed as a result of industrialisation have the role of offering specialised care to the sick, this should not mean overlooking the role of the family in care, but should aim at sustaining and even extending the family's health-protective activities, e.g. family self-medication activities (Pratt 1973). Families tend to evaluate health maintenance as their responsibility and given the opportunity, they would like to care for their members without deference to the health institutions. This is evident in Knapp and Knapp's (1972) study where an average of 57.4 total illness days per household were reported during a 210 day period. This meant that on the average families were dealing with illness on one of every four days. Pratt (1973) reports that the amount of illness attended at home outnumbers many times the illness attended in hospitals. This view is reaffirmed in HEW's (1971a) estimation that 18.7 million persons in the civilian population of the United States had one hospital episode or more during a twelve month period, representing a rate of 96 persons hospitalised per 1,000 population, yet acute illness or injuries involving reduced activity or medical attention were experienced at a rate of 2,086 per 1,000 persons year (HEW 1972b). This

represents about twenty acute illnesses or injuries experienced outside a hospital for every hospitalisation. These episodes represent a large amount of time requiring care at home.

A large amount of illness and disability are cared for exclusively by the family without professional assistance (Pratt 1973). Kessel and Shepherd (1965) conducted an English study of general practice and estimated that there is a hard core of 3% of persons who consistently do not obtain professional care for seven years or more. The study which estimated that 75 out every 100 adults in United States of America, England and Wales will experience illness or injury during a month, figured that 25 of these will consult a physician during that month (White *et al.* 1961). These statistics go to show that about two thirds of those experiencing an illness take care of it without professional consultation. Although some of these sick individuals may cope on their own, the family still plays a dominant role in caring for ill members at home. The stance of the family in caring for ill members is obvious in a study by Alpert *et al.*(1967), in which case medical help was sought in only 12% of the 834, symptoms identified by families; with the ratio of medically non-attended symptoms to medically attended symptoms being seven to one. UK figures for 1991 derived from general household survey (1990) provides evidence for the family involvement in the informal care of its members. The figures show that 1.6 million adults spend 20 hours a week caring for their mentally ill dependants in their own homes or other households. The direct involvement of health professionals in the care of patients, by comparison, is very small. Graham (1984) reports that in Britain, most children even among groups like disabled children, are cared for by the families: over 99%. Also most of the elderly, over 95% live in the community, including the frail ones who are recognised to be in need of constant nursing, have their front line care provided by the family.

Shanas *et al.*(1968) also found in a study of elderly people that two percent of the sample were found to be bedfast and living at home and this totalled an estimated 350,000 such persons in the United States. This represents more elderly persons than are

in all long-stay hospitals and nursing home. Shanas *et al.* (1968) also found in a study of an English community that the care of 75% of the elderly needing care was contained wholly within the household.

4.4. Standards of nursing practice and the family

To show how the nursing profession has been interested in the family, several standards have been set to guide nursing practice toward the family. A review of some these standards, which guide the different areas of nursing, reveal considerable interest in the family.

(a) In Nigeria

The Nigerian Nursing Standards have been based on standards set by other countries e.g. ANA. Recently the Nigerian Nursing and Midwifery Practice Standards (1991) have been drawn up which also insist on the family alongside the patient in care in the statement: "... provision of holistic nursing care to the patient and his/her family" (p 3).

(b) In Britain

In paediatric nursing practice, the Court Report (DHSS 1976) has placed a much greater emphasis on family involvement in the care of children:

> The importance of the family must be reflected in the organisation and delivery of health care services for children (Para. 5.5).

A desire to improve family health care support in the community has been reported on several occasions (Ministry of Health 1971, DHSS 1981, Department of health 1989). The DHSS (1981) description of a district nurse notes that:

> The district nurse is an RGN who has received post-basic training in order to enable her to give skilled nursing care to all persons living in the community. She is the leader of the district nursing team. It is the district nurse who is professionally accountable for assessing and re-assessing the needs of the patient and family and monitoring the quality of care.

In general nursing practice, different health authorities and hospitals have individual standards to guide nursing care. For example, in recognition of the importance of standards of professional practice and the need to guarantee quality of service, the nursing service and school of nursing for Oxfordshire have formulated a set of basic beliefs in respect of the patient care. These include among others:

> ... all patients are unique individuals with physical, spiritual, social and emotional needs. They are the centre of our entire nursing focus and have the right to considerate, honest and respectful care. We are aware also that the patient may be part of a family unit which, when possible and appropriate, should be included in the planning, implementation and education process (Snowball and Green 1986: p XV).

(c) In America

The earliest standards of the Community Health Nursing Practice (ANA 1986) declare that "nursing practice is a direct service ... to the individual, the family and the community during health and illness" (p 1). The standards also maintain that "active involvement of the individual, family and community is necessary in the attainment of positive health" (p 1).

In the standards of Maternal-Child Health Nursing Practice (ANA 1983), the idea of family solidarity appears in several standards. One standard, for instance, states that maternal and child health nursing practice initiates changes to enhance family unity. The standards of Medical-Surgical Nursing Practice (ANA 1974 cited by Whall *et al.* 1991) claims that the nurse is to "ensure patient and family participation in health promotion and that "goals of care are formulated by the patient and his/her family" (p 1), and that the nursing care plan "is communicated to the patient and family" (p 3).

The standards of Paediatric-Oncology Nursing Practice (ANA 1978) declare that "nursing care given to the paediatric oncology patient ... incorporates the need of the individual child and family" (p 1). More specifically, the standards require systematic

collection of data about the individual child and the family, as well as nursing actions that reflect consideration and appreciation of the family unit. Also the standards of Psychiatric-Mental Nursing Practice (ANA 1982) require the nurse to utilise advanced clinical expertise in family psychotherapy.

4.5. Models of family-centred nursing care

Many models have been developed which focus on the family as the centre of care in nursing practice. Most of these models are extension of nursing theory to focus on the family (Gonot 1986; Neuman 1982, 1983, 1989b; Rogers 1983, 1990; Roy 1976, 1983; Orem 1983, 1985). Some of these models that have nurse-family interactive components will be presented briefly as follows:

King's Family Model

King's (1981) model of the family can be subdivided into two parts:

(1) Interacting systems conceptual framework.

(2) A middle-range theory of goal attainment.

The *interacting systems conceptual framework* considers personal, interpersonal and social systems as well as concepts that describe the central features of the three systems. The *middle-range theory of goal attainment* proposes that when nurses and patients/families engage in mutual goal setting, there is a high probability of goal attainment. King (1981) notes that most persons begin life as a part of a family and learn ways to meet basic needs in families and that the family constitutes one of the groups in which the performance of certain roles is possible. She further notes that the family demonstrates the features of a social system, which include, structure, status, role and social interaction.

Later on, King (1983) expands her ideas about the family and views family as "a social system that is seen as a group of interacting individuals" (p 179). She contends that as "a social system, the family influences individuals as they grow, develop, and move from

dependence in childhood to independence in adulthood" (p 180). When viewing the family as a small group or interpersonal system, King (1983) asserts that "the theory of goal attainment may be used by nurses to assess and diagnose real and potential problems of individuals and families ... (and to assist) family members to set goals, select means to achieve goals and to plan for resolution of problems or ways to cope with events" (p 180).

King's theory of goal attainment encompasses several concepts that are relevant to families, including perception, interaction, communication, transaction, space, time, growth and development and stress (Whall *et al.* 1991). King (1983) reiterates that achievement of goals related to family health is a measure of the effectiveness of nursing. *Perception* as viewed by King "is a key concept in dealing with families and their health" (p 181). The task of nursing is to assess and to verify the family's perception of a member's health state through *interactions* with the family. This is the essence of family-centred nursing care. King (1983) explains this when she writes that:

> Within nurse-family interactions, each is perceiving the other and making some mental judgements about the other. The nurse, through direct observation of behaviour and through *communication*, gathers information, interprets the information and shares information with family members to identify real or potential problems and concerns. Family members reciprocate by sharing information with the nurse. In the course of their interactions, they arrive at mutual goals ... values, wants and needs of each person are communicated and transactions are made. When transactions are made, goals are achieved. (p 181)

The interactions between nurses and family members are influenced by family movement through social space, physical space and personal space requirements of each family member (King 1983). Other factors which influence interactions between the family and the nurse, according to King, include each family member's concept of time, growth and development profiles of family members and the stress in the family environments. King's conceptual model is shown in Figure 4.3.

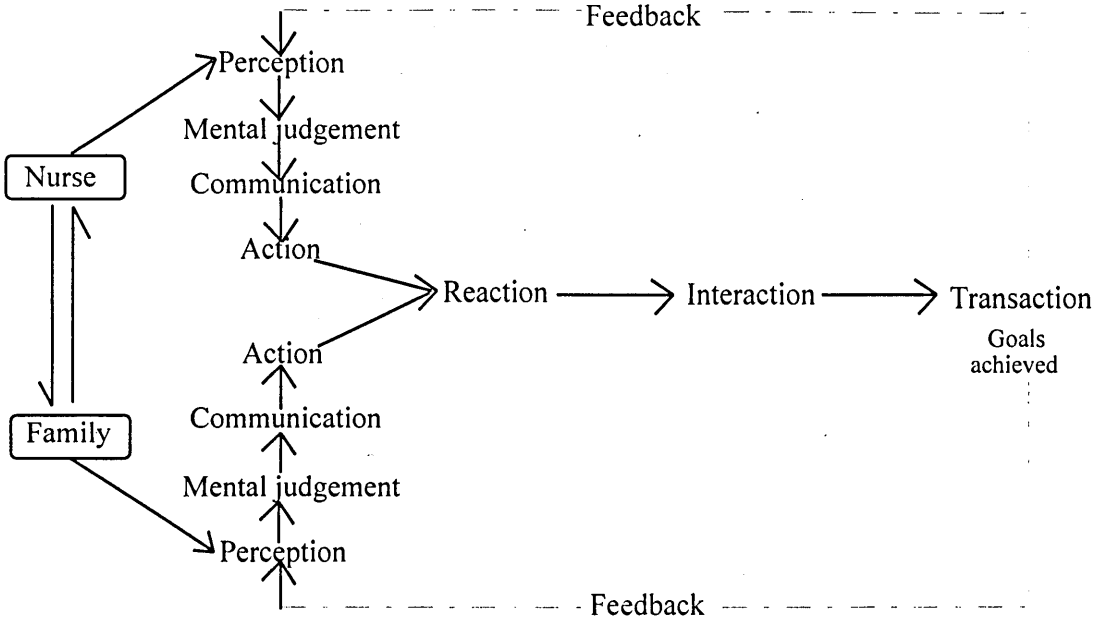


Figure 4.3. A representation of King's perspective of the family.

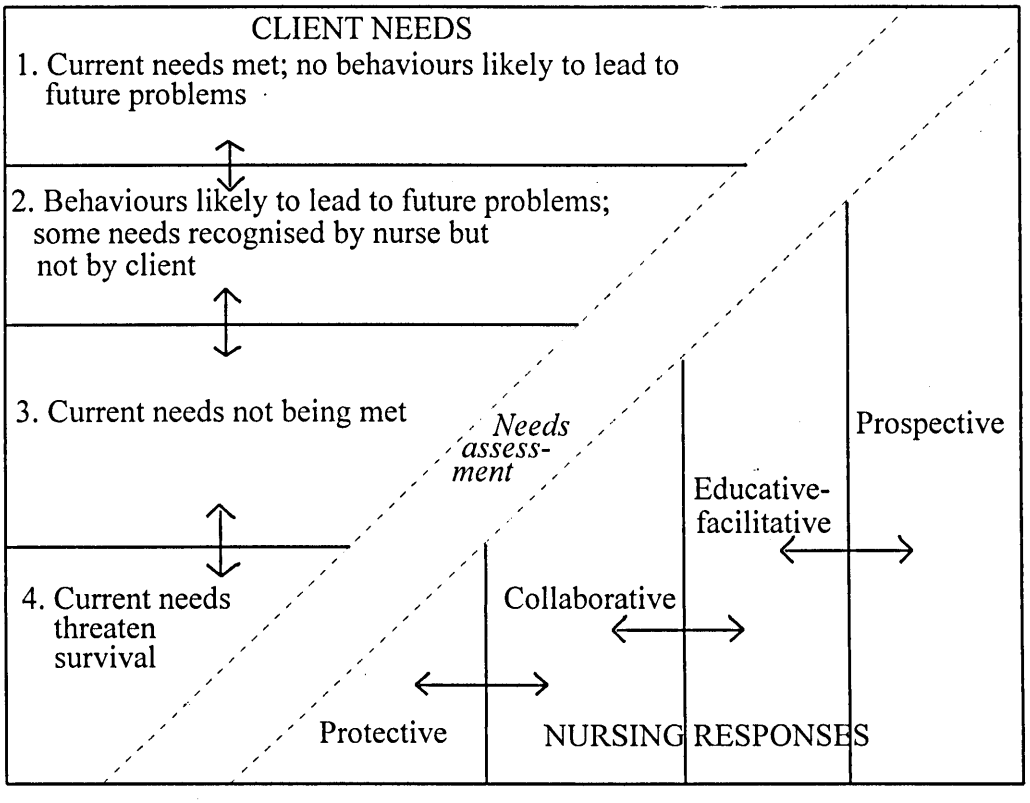
Roberts' Family Model

Roberts' (1983) model is a framework for viewing the nurse-client or nurse-family relationship. It is an interaction model for family assessment . Roberts addresses the proper role of the health care professional as assuming a paternalistic stance in relation to patients, believing that health professionals have the knowledge to diagnose and treat the ailments of those patients. Roberts contends that whereas professional nurses have a great deal of information about human physiology, pathophysiology, social organisation and behaviour of people in families and groups, the clients on the other hand bring with them specific information - the particular quirks of their own bodies, the specific feelings they are experiencing, their own family environments. She explains that this information from the two parties involved in care - the professional and the client - are needed for effective problem solving. Roberts enumerates four issues that are important in the nurse-client relationship. These include: issues of authority, power, locus of control and contracting for care.

Roberts' (1981) model suggests that nurses and clients should be considered as experts, but on different aspects of care. That the nurse should:

take charge of the care for client only in life-threatening situations when the client cannot or will not act for himself/herself. Otherwise, the nurse would function basically as a resource person for the client, at times supplying information, at times directing intervention, and at times giving actual physical care, but always with awareness that there is a partnership at work in the relationship with the client participating as much as possible at all times (p 195).

This relationship also applies to the family. Roberts' model describes four levels of client's needs and four corresponding nursing responses as shown in Figure 4.4.



Source: Roberts, F. B. (1981) A model for Parent Education. *Image*.

Fig. 4.4. A model of the nurse-client interaction

Client needs: From Figure 4.4, there are four levels of client needs. Level 1 refers to the current clients' needs that is being met with no behaviour likely to lead to future problems. This implies that the client is functioning in a healthy manner and not in need of immediate care. Level 2 is concerned with behaviours that are likely to lead to future problems which have not been recognised by the client. People at this level are doing

well at present but are engaging in practices that are likely to lead to problems in future. Level 3 pertains to those needs that are apt to bring the client to the nurse for care and these needs are recognised by both the client and the nurse. Level 4 involves unmet needs that threaten survival. People at this level are unable to provide the protection they need for survival.

Nursing responses: These are the responses which the nurse make to the different levels of client needs. For clients with needs in level IV category, the nurse offers protective responses; responses that will provide the clients with the protection they need for survival. Collaborative response is offered to clients with needs under level III and IV. This signifies that both clients and nurses resolve presenting problems in unison. The two parties in care share the responsibility for identifying needs and for finding ways of resolving them. An educative-facilitative response of the nurse is the most appropriate for clients who are engaging in practices that are likely to lead to problems in the future or who have unmet needs that they are not immediately ready to recognise. This type of nursing response is appropriate for clients in levels II, III, and IV. The nursing response for clients in level I is prospective. Using this response type, the nurse anticipates client's needs and gives guidance.

According to Roberts (1983), the goal of nursing is to move the client up the levels of needs to as near level I in as many areas of needs as possible and to move the nurse laterally toward the prospective role and away from doing for the client.

4.6. Functions of the family

The functions of the family as outlined by Friedman (1992) are presented thus:

(1) Affective function - for stabilisation of personalities; meeting of psychological needs of members.

(2) Socialisation and social placement function - for the primary socialisation of children and strategies used for the maintenance of order and stability and conferring of status on family members.

(3) Reproduction function - for maintenance of family continuity.

(4) Economic function - for provision of sufficient economic resources.

(5) Health care function - for the provision of physical necessities; food, shelter, clothing and health care.

Other functions include: transference of values related to health and other behaviours (Forrest 1981, Oseasohn 1981, Warmer 1981). The family functions in the coping process of its members, especially in conditions involving chronic illness or disability (Blank, Clark, Longman and Atwood 1989, Bunting 1989, Lewandowski and Jones 1988, Robbinson 1988, Philips and Rempusheski 1986, Woods, Yates and Primono 1989).

From these functions, one can rightly imply that family roles are universal - biological, physical, psychological and social. Of all these, the health care function of the family is seen as the one mostly exhibited. This is supported by Sussman (1959) who reported that help during illness, comprised the major form of assistance provided by members of kin-related families and occurred in some 92% of illnesses reported. According to Patrick and Scambler (1986), the family is a strong force in health care. It is the location for much primary health and illness care and maintenance (Backett 1990). Therefore health decisions and assistance in the evaluation of effectiveness of health should be considered important functions of the family.

In simple societies all aspects of life are related to the family and it is the most important unit of social organisation. While in more complex societies the family has less influence. This may be attributed to Farmer's (1970) explanation that the greater the degree of complexity of a society, the greater the variety of external agencies with which the family interacts. Farmer further remarks that when the complexity of the society increases due to industrialisation and urbanisation, the family interaction with other facets of the society - such as the economic system, political, judicial, military, educational and other service systems - increases, resulting in the reduction in the size

of the family and subsequently in the influence the family has on the decisions of individual family members. This likely effect of level of industrialisation and urbanisation on family structure may account for the predominant nuclear family structure which is found in the western world with a high level- for example, in the United Kingdom as cited by Friedman (1992) and the extended family system which is found in developing societies with a low level - such as Africa (Obikeze 1987).

4.7. Why nursing is interested in the family

(1) Family is a social system where any dysfunction of one member affects the others and the total family unit. The family is closely knit and is an interdependent network where the problems of an individual 'seep in' and affect the other family members and the whole system. When a nurse assesses only the individual and not the total family, he/she is bound to miss the total picture of the individual and a partial diagnosis will be made at the end of the assessment.

(2) There is a strong interrelationship between the family and the health status of its members. The family's role is very crucial at each stage of the health of its members.

(3) Family-centred health care will help in curtailing risks that life style and environmental hazards create. When the level of wellness of the whole family is raised, there is subsequently a significant increase in the wellness level of each of its members.

(4) Family-centred care is very important in case finding. The presence of health problems in one member may lead to the discovery of disease or risk factors in other family members. In family-centred care, the nurse works through family members to the whole family.

(5) A clearer understanding of the individuals and their functioning will be achieved by viewing them in their family context.

4.8. Summary

Nursing's challenge is to determine how the family can be supported during the stressful event of hospitalisation. The nurse is required to strengthen the family and get it to act as a positive link to the patient. If the nurse fails to appropriately interact with the family members, this could have deleterious consequences such as heightened anxiety and fear in the family, misunderstanding, mistrust, hostility and failure to obtain important information about the patient. Also the family may remain or become dysfunctional and might not regain the natural ability to help care for and support the hospitalised member. The end result of this will be that the family will become a liability requiring more nursing time, showing signs of being needy, and overall, not having a positive influence on the patient (Kupfeschmid *et al.* 1991).

The literature reviewed on the role of the family in health care has made it very clear that if professional nursing is to make any impact on the health care of patients it should make the family the focus of such care. This is particularly the case in those societies where the family is an important basis of the organisation of the whole society, e.g. Nigeria. A nursing assignment pattern which promotes a nurse-family interaction that would improve the quality of nursing care patients receive and increase the levels of family satisfaction with nursing care is mandatory if the ill-effects of the non-involvement of the family are to be avoided. It is important, therefore, for nurses to ask themselves: if the family provides caring, buffers stress and supports their members, how can they (nurses) organise nursing care such that the family can be helped to maintain these roles?

PART THREE: THE EMPIRICAL RESEARCH

CHAPTER FIVE

RESEARCH CONTEXT, DESIGN AND METHODS

5.0. Introduction

This chapter explains the planning and the design of this study to promote family-centred care through primary nursing practice in Nigeria. It will address the theoretical framework on which the study is based, the premises or basic assumptions of the study, objectives, hypotheses and the operational definition of terms in the study. It also discusses the type of research, population of study, sample and sampling technique, instruments for data collection, procedures for data collection, gaining access to the research site. It also describes pilot testing, practicality, reliability and validity of instruments, and plan for data analysis.

5.1. Theoretical framework and assumptions

The theoretical assumptions underlying the study are:

(1) That primary nursing is a partnership between nurses and the family system.

(2) That the achievement of goals directed to family health is the measure of the effectiveness of nursing.

(3) That the patient-family unit is the central focus of all nursing activities.

This study is based on the conceptual framework proposed by King (1981, 1983). King proposes an interaction model for nurse-client and family relationship and a middle-range theory of goal attainment (this model has been discussed in detail in chapter four under family models). The task of nursing is to assess and to verify family's perception of a member's health state through interactions with the family. King (1983) views the family as a group of interacting individuals.

In conjunction with King's framework of the family, the model used in this study as shown diagrammatically in Figure 5.1. is that a family-centred nursing organisation pattern, through adequate nurse-patient and nurse-family interaction should bring about a change in the quality of nursing care given to patients and therefore result in a change in the level of satisfaction for the patient and the family.

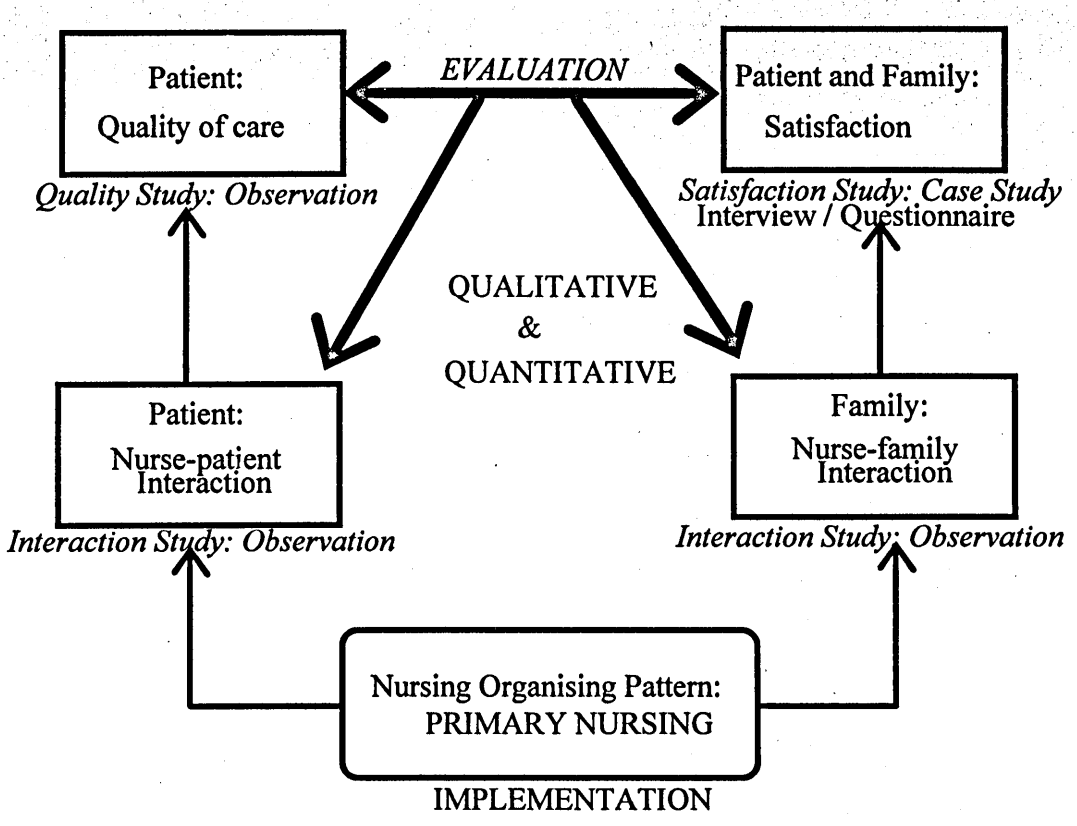


Fig. 5.1. A model of primary nursing implementation and evaluation.

The model outlines and clarifies the main variables involved in the study and illustrates the expected relationship between them, namely that:

1. The method used to organise the delivery of nursing care, in this case primary nursing, can influence the nature of interaction that exists between nurses and patients and their families.
2. This interactive process is assumed to influence the quality of nursing care received by patients.

3. The interactive process and quality of nursing care are bound to affect the level of patient and family satisfaction with nurses, nursing care, information and other aspects of care.
4. The impact of primary nursing on interactive processes, quality of nursing care and satisfaction level, can be evaluated quantitatively and qualitatively.

5.2. Objectives of the study

The objectives of this study on the promotion of family-centred care through primary nursing practice are as follows:

(1) To introduce primary nursing into a model ward of a hospital in Nigeria.

(2) To assess the quality of care rendered in the model ward before and after implementation of primary nursing.

(3) To assess the patient's satisfaction with nursing care at these two periods.

(4) To assess the family's satisfaction with nursing care at these two times.

(5) To evaluate evidence of individuality and task-/patient-centredness from family interview at these two periods.

(6) To measure the quality of nurse-patient and nurse-family interactions at these two times.

(7) To measure the quantity of nurse-patient and nurse-family interactions at these two periods.

5.3. Hypotheses of the study

These will be stated in both the null and experimental forms. Null hypothesis = Ho. Experimental hypothesis = He.

Hypothesis 1

Ho: There will not be any significant difference in the quality of nursing care received by patients before and after introduction of primary nursing into the model ward.

He: There will be an improvement in the quality of nursing care received by patients in the two instances.

Hypothesis 2

Ho: There will not be any significant difference in the patient and family level of satisfaction with care received in the different instances.

He: Patient and family level of satisfaction with nursing care will increase in the different assessment phases of the research.

Hypothesis 3

***Ho*:** The (a) quality and (b) quantity of the nurse-patient and nurse-family interactions will not differ significantly at the two instances.

***He*:** The introduction of primary nursing into the model ward would significantly increase (a) the frequency and duration of nurse-patient and nurse-family interactions, (b) the number of interactions in which patients and families were actively involved, and (c) the number of those interactions in which supportive nursing activities occurred.

5.4. Operational definition of terms

For the purpose of this study, these terms will be operationally defined thus:

Family system: The patient, patients' relatives and other significant others e.g. friends.

Primary nurses: Registered nurses with at least five years post-qualification experience, unanimously selected by other nursing staff to perform the role in the model ward.

Associate nurses: Registered nurses not selected to act as primary nurses and student nurses.

Primary nursing co-ordinator: The nurse in charge of the model ward.

Allocation of patients to primary nurses: All patients admitted under a particular medical team will belong to the primary nurse attached to that team.

Family-centred care: The involvement of patients/families in assessing, planning, implementing and evaluating care of care given to patients.

Measures of family-centred care: This will include the following measures: quality of care, patient and family satisfaction with care, and interactive processes.

Patient and family satisfaction: Perceptions of the subjects concerning their nursing care and nurses, information received from nurses, individuality of care and task or patient-centredness of care.

Interactive processes: Quantity and quality of nurse-patient and nurse-family contacts.

Quantity of interactions: Number or episodes of interaction between nurses and patient/family and the duration of interaction.

Quality of interactions: Level of involvement of patient and family, and nursing activities involved in interaction.

Episode of interaction: Each interaction begins as soon as the initiator starts and ends when there is any interruption in the interaction. For example (1) When the nurse leaves to attend to another patient; (2) when nurse breaks the contact to discuss with another nurse; (3) when patient or family member breaks the contact to discuss with another patient or nurse.

Duration of interaction: Length of interaction in this study is categorised as follows:

Short:	Under three minutes
Medium:	Three to six minutes.
Long:	Above six minutes.

Care periods: Morning and evening.

Morning care period: from 7.00 AM to 2.30 PM

Evening care period: from 2.30 PM to 9.00 PM

Levels of satisfaction with nursing care and nurses as measured by the modified *Riser Satisfaction tool: definition of scores (Writer's categorisation).*

Technical professional and Educational relationship sections (7 Items each):

7-16	Not satisfied
17-26	Satisfied

27-36 Very satisfied

Trust relationship section (11 items):

7-23 Not satisfied

24-40 Satisfied

41-57 Very satisfied

Total nursing care (25 items):

7-47 Not satisfied

48-88 Satisfied

89-129 Very satisfied

Study variables:

Independent variable: Primary Nursing

Dependent variables: Quality of nursing care.

Nurse-patient interaction

Nurse-family interaction

Patient satisfaction with nursing care and nurses

Family satisfaction with nursing care and nurses

Model ward: Male ward I at St Luke's Specialist Hospital Anua - Uyo in Nigeria with an all-RN staffing structure. The ward accommodates both male and female patients.

Primary nursing: A new mode of organising nursing care in model ward at St Luke's Specialist Hospital - Anua with four 'modules.' The charge nurse is the primary nursing co-ordinator with four primary nurses taking total responsibility for patients in their 'modules' from the date of admission till they are discharged with the assistance of twenty associate nurses and three ward orderlies.

Primary nursing modules: Four sections of the model ward, each of which is headed by a primary nurse. These are:

Module I: Infections like cellulitis.

Module II: Assault and minor injuries secondary to Road Traffic Accident (RTA)

Module III: Medical, burns and post-operative cases.

Module IV: Fracture resulting from any other cause.

Client system in change: Participants in care in the model ward including, nurses, patients, families and other health care practitioners.

Patient dependency levels:

Independent: Patient physically capable of caring for self but requires minimal nursing supervision and may require treatments and / or monitoring (e.g. vital signs) by nursing staff.

Moderately dependent: Patient requires average amount of nursing care including some nursing supervision and encouragement. The patient may require some assistance with personal care needs as well as monitoring and treatments.

Highly dependent: Patient requires a greater than average or maximum nursing supervision and encouragement and complete assistance to meet personal care needs. Usually requires medical support and use of special equipment.

5.5. Type of research

This was an action research project and involved both action and quasi-experimental approaches. Since it considered a specific incidence of change, it necessitated descriptive and comparative analyses. The project centred around practitioners' perceived need to change from traditional nursing practice to family-centred care operated through primary nursing. The change strategy involved addressing the problems and issues identified by the practitioners and the researcher before the change and as the change proceeded.

An action research strategy was found suitable for this study based on Cohen and Manion's (1989) advice that action research is appropriate when "specified knowledge is required for a specific situation, or when a new approach is to be grafted on to an existing system." (p 226). Specified knowledge was required in the promotion of family-centred nursing care in a model ward in Nigeria. This strategy was adopted because the researcher was obliged to introduce primary nursing and evaluate the initial impact associated with the change. Action research, according to Johns and Kingston

(1990), "is the opportunity to combine the development work with formal evaluation" (p 2). Action research was considered the most appropriate approach for two main reasons:

- This methodology allows the client group to take active part in deciding on the problem to be researched.
- The researcher's involvement in the action process is immediate. The work requires the researcher's active involvement in helping the ward staff to identify their needs and problems and to generate strategies for the solution of these, to result in structural change of the ward's nursing practice where the research is carried out (Clark 1972).

The project featured a combination of action and research. The clients were given an opportunity to carry out their practice; to be the actors, while the researcher was the facilitator and the researcher. It was a collaborative study whereby all nurses in the model ward were involved in the study. The study involved a practice shift from traditional nursing to family-centred nursing care. It focused on unravelling the complex organisational, personal and professional changes required to allow for a successful nursing practice shift in Nigeria. The practitioners were made to 'own' the change from the beginning of the project. A bottom-up change strategy was utilised to make nurses empower themselves. The social basis of this study is *involvement* while the professional basis is *improvement*. The study stressed ACTION, both of the system under consideration and the people involved in the system.

Concern about the limited use of research findings in nursing has been expressed for some years (Smith 1986), and Hunt (1981) identifies several possible reasons for this: nurses do not know about findings; they do not understand them; they do not believe them; they do not know how to use them; or they are not allowed to use them. The need for collaboration between researchers and practitioners has been recognised and Hockey (1974) advocates more attention to be paid to action research in nursing. Action research, according to Smith (1986) "is a process containing both investigation and use of findings " (p 61), containing any of a number of elements which increase the

possibility of the findings being used. It is defined by Titchen and Binnie (1994) as a "strategy which brings about social change through action, developing and improving practice..." (p 2).

Action research was popularised by Kurt Lewin (McNiff 1990), who saw this type of participatory procedure as much more effective in solving problems of human relationships than an imposed, structured process, into which people were expected to fit. Action research involves relating practices, understandings and situations to one another with the aim of improving them and transforming the present to produce a different future. In action research, a cycle of events called the 'moments of action research' (see Figure 5.2) occurs. This consists of planning (preparation), acting (implementation), observing and reflecting (evaluation). The process of action research has four main elements linked in a recurring cycle within a careful, systematic and rigorous plan of action.

1. To develop a plan of action aimed at improving what is already happening.
2. To act to implement the plan.
3. To observe the effects of action in the context in which it occurs.
4. To reflect on these effects as a basis for further planning and subsequent action through successive cycles (Kemmis 1982).

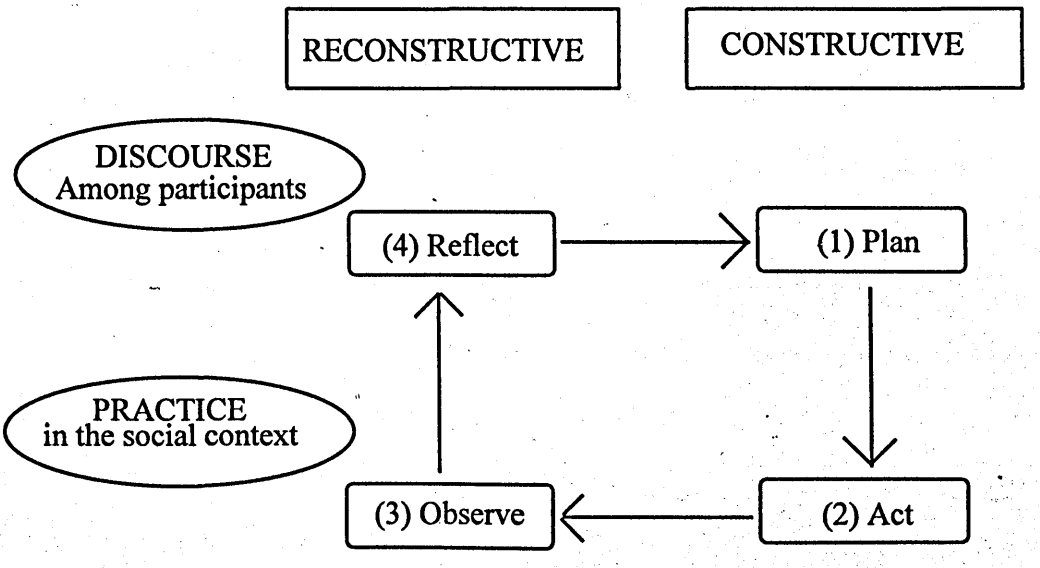


Fig. 5.2. The moments of action research

Clearly Figure 5.2. indicates that action research requires relating retrospective understanding to prospective action to form a self-reflective spiral. This relationship is enacted in each of the four moments of the action research process, each of which 'looks back' to the previous moment for its justification and 'looks forward' to the next moment for its realisation. Carr and Kemmis (1986) explain that the plan is prospective to action guided towards observation and retrospectively constructed towards future reflection that will evaluate the problems and effects of the action. The self-reflective spiral links reconstruction of the past with construction of a concrete and immediate future through action. And it links the discourse of those involved in the action with their practice in the social context (Carr and Kemmis 1986).

Action research is designed to bridge the gap between research and practice (Sanford 1970) and is essentially participatory. It is collaborative when groups of practitioners jointly participate in studying their own individual practice and when they study the social interactions between them that jointly constitute aspects of the situations in which they work. Action research involves an on-going and a continuous process. The participants continue to review, evaluate and improve practice. Brown and McIntyre (1981) emphasise the on-going nature of action research. This is also reflected in Cohen and Manion's (1989) definition of action research as:

> essentially an on-the-spot procedure designed to deal with a concrete problem located in an immediate situation. This means that the step-by-step process is constantly monitored over varying periods of time and by a variety of mechanisms so that the ensuing feedback may be translated into modifications, adjustments, directional changes, redefinitions, as necessary, so as to bring about lasting benefit to the ongoing process itself (p 223).

Action research is a systematic enquiry made public (Stenhouse 1980). Bell (1993) advises on the need to plan action research in the same way as any other type of research. Borrowing from education, where action research is a very popular research strategy (McNiff 1988, Carr and Kemmis 1986, Kemmis *et al.* 1988), in nursing it requires nurses to be acutely aware of a sense of process, and to refine their perceptions

to account for that process. It raises to a conscious level much of what is already done by nurses on an intuitive level and enables them to identify and come to grips with their practice in a humane way which is at once supportive and critical (Titchen and Binnie 1993b). The essentially practical, problem-solving nature of action research makes this approach attractive to practitioner-researchers who have identified a problem during the course of their work, see the merit of investigating it and, if possible, of improving practice (Bell 1993).

In the present study the 'outsider' model of action research (Titchen and Binnie 1993c) using an 'insider' as the research partner, was employed. The researcher had no authority in the situation; one who only had diagnostic function and fed back observations to the participants without necessarily initiating or carrying out any change. The purpose of the research partner was to integrate the organisation's authority into the research. This was also aimed at making the participants of change to identify with or own the change as much as possible.

The main roles of the research partner were:

(1) To foster improvement in nursing care within the defined clinical area and to develop high standards of patient care through peer-group innovation and support.

(2) To create changes in nursing practice which would facilitate the implementation of primary nursing.

(3) To give continued support and encouragement to primary nurses and others involved in the practice of primary nursing.

(4) To liaise between the researcher and the participants in the change and to manage the change in the absence of the researcher.

(5) To assist in pilot study, training of research assistants and all other aspects of the project.

5.6. Population of the study

The model ward used for the study is a medical-surgical ward for adult male and female patients with medical, surgical and orthopaedic conditions. It is called male ward I because it was originally designed for male patients. Admission of female patients in emergency situations when the female wards are all full, also takes place. Generally, there is a higher proportion of male patients in the ward at all times, about 88% of admissions are males. The patients in the model ward are under the care of many consultants.

All nursing staff in this ward were permanent staff consisting of two chief nursing officers (H grade), one principal nursing officer (G grade), one senior nursing officer (F grade), ten nursing officer I (E grade), eleven nursing officer II (D grade) and three ward orderlies (nursing auxiliaries). Student nurses, sometimes worked on the ward as part of their training. Fig. 5.3. is the layout of the ward. The ward is divided into four sections as follows:

(1) Infections like cellulitis, gangrene etc.

(2) Assault and minor injuries secondary to road traffic accident.

(3) Medical, burns and any other post-operative case.

(4) Fracture resulting from any cause.

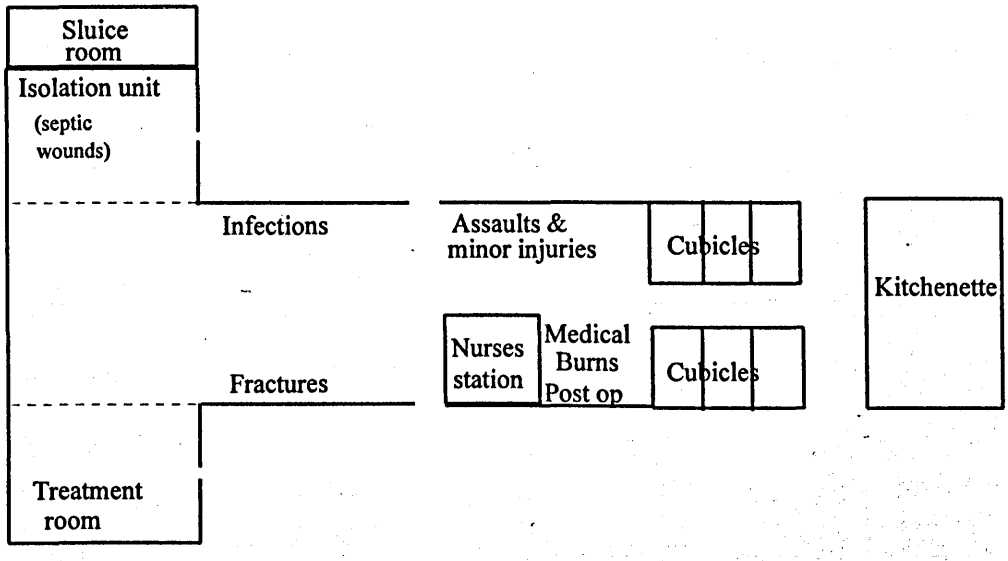


Fig. 5.3. Layout of the Model Ward

The ward constitutes one long section with twenty eight beds, six single bedded cubicles mainly for female patients, and one 3-bedded bay for patients with severely infected wounds. The ward is structurally divided into two halves by the nurses' station.

5.6.1. The organisation of the delivery of nursing care in the pre-change period

In the pre-change period, the organisation of the delivery of nursing care was basically task-oriented. The work of the nursing staff was organised according to tasks and a ward routine which was written daily by the charge nurse on morning shift and the most senior nurse on other shifts in the 'duty allocation exercise book.' Nurses in the ward adhered strictly to timing of routine duties such as bed bath, dressing, medication, etc. The charge nurse and all the morning staff received a report from the night nurses at 7.00AM, the afternoon staff received the report at 2.00PM and the night staff at 8.00PM.

The report was given from the ward report book on only selected patients; patients with changes in their condition, those who required changes in their management, patients who were critically ill, those on intravenous fluids, new admissions, pre - operative cases and immediate post - operative cases. Verbal handovers were done at patients' bedsides. Very vague reports were given on patients who the nurses claimed were not ill enough. Such reports included 'condition fair', 'had a fair day', etc. No mention was made of the physical or emotional condition of such patients since the nurses thought there were no changes in their condition or they were improving. No guidance was ever given on how or by whom a particular patient should be approached.

After the report, nurses were required to look into the duty book and thereafter disperse to do their individual tasks. The chief nursing officer (CNO) in charge of the ward was mainly overseeing the overall running (administration) of the ward, and all decisions about all patients in the ward had to be taken solely by the CNO. When she was off duty, which rarely occurred on week days, the person next to her in rank would take decisions and inform her thereafter. It did appear that certain staff had rights to do

certain jobs - more administrative duties and less direct patient care were given to the nurses in higher ranks while fewer administrative duties and more direct patient care were performed by junior nurses and students. The nursing structure was very hierarchical; most decisions and actions in the ward were tied to rank.

5.6.2. Ward meetings

The ward staff usually had monthly meetings to discuss issues of patient care, staff welfare and other matters as they arose. This was a strength as the early phase of primary nursing practice requires regular staff meetings to assess progress and to share experiences among staff.

5.6.3. Collaborative duties

Liaison with the medical staff and other health care workers was mainly done by the charge nurse or the most senior nurse on duty. During the Consultant's ward rounds, the medical team would be accompanied by the CNO in charge or the most senior nurse on duty, the nurse who is allocated ward rounds in the duty book (that is, the nurse whose name is down in the duty book to do ward rounds) and student nurses. In some instances any other nurse who was less busy at the time was seen joining in the ward rounds. Students were mandated to join in all ward rounds since this afforded them some learning experience. When the Registrar or any other junior medical personnel did their resident ward rounds, the medical team might or might not be accompanied by the charge nurse, but the nurse who was allocated to do ward rounds would always accompany the doctors. In a situation where the ward was very busy, the doctors would see the patients and the nurses would read up their report in the patient's note afterwards.

5.6.4. Relatives involvement in care

Visitors were restricted to visit their patients from 4.00PM to 6.00PM daily and at meal times, which are 7.00AM-8.00AM for breakfast, 1.00PM-2.00PM for lunch and 6.00PM-7.00PM for dinner. Any visit outside these times was subject to approval by the ward charge or the senior nurse on duty. Visiting at odd times without due permission

from charge nurse was discouraged and any visitor who did not adhere to this rule was asked to leave the ward. The hospital has no central feeding system, therefore meals were brought from home for the patients and this gave the relatives opportunity to visit their patients more regularly. Some relatives were always found hanging around the ward veranda despite persistent attempts by the staff to discourage this. Some family members would even insist on staying all through the day in the hospital to keep an eye on their relatives (an indication of a strong family bond resulting from the extended family system discussed earlier in chapters one, two and four). Another reason for the relatives hanging around the hospital premises was the 'out of stock syndrome' which required relatives to purchase drugs from outside chemists for the patients when such drugs were not available in the hospital.

5.6.5. Nursing process

The nursing process was adhered to at the theoretical level in the model ward; it was not practised. Nursing assessment forms and nursing care plan formats were found hidden away in the ward cupboard and were not in use. The nurses in this ward in particular and in the whole hospital were very keen on putting the principles of the nursing process into practice, they openly expressed the wish to utilise the nursing process.

5.7. Sample and sampling technique

5.7.1. Selection of the model ward

Because of the time and financial constraints which the study faced, it was not feasible to introduce primary nursing into all hospitals in Nigeria nor was it practicable to use all the wards in St Luke's Specialist Hospital - Anua, Uyo. Only one ward in the hospital was selected as the nucleus site for the introduction of primary nursing. This was supported by Ferrin's (1981) suggestion that introduction into a single site is an appropriate method of introducing primary nursing. A model or pilot ward was selected based on some of the criteria set by McGreevy and Coates (1980) which are characteristics that would enhance the initiation and sustenance of primary nursing. These criteria are:

(1) A high staffing ratio (2) Strong head nurse leadership (3) Low staff turnover (4) High unit activity (such as care plans, patient care conferences and in-services) (5) Voluntary staff commitment to primary nursing.

These criteria were allocated marks (see appendix I). All wards in the hospital were scored on these criteria on the 16th of April 1993. The ward with the highest score was the model ward for the study. Male ward 1 scored highest (16/20 - 80%) and therefore was chosen as the model ward. The result of this scoring is shown in Table 5.1.

Table 5.1. The result of the ward scoring for the selection of the Model Ward

		WARDS										
Characteristics	Max. Score	MW I	MW II	MW III	MM	Paed	Lab Wd	AN	PN	FS	Mat	Nur
Staffing ratio	3	3	1	2	1	1	2	3	1	1	2	3
Head nurse Leadership - position power	3	3	2	1	1	2	1	1	1	3	3	1
Leader involvement in ward	2	2	1	2	1	1	1	2	1	1	1	2
Staff turnover in 12 Months	3	2	1	1	2	1	2	1	1	1	1	2
No. of patients with care plans	3	1	1	1	1	1	1	1	1	1	1	1
Change programmes in 1 year	3	2	1	1	2	1	2	1	2	2	1	1
Staff preference for primary nursing	3	3	1	2	1	1	2	1	1	2	2	2
TOTAL	20	16	9	10	9	8	11	10	8	11	11	12

KEY

MM	Male Medical Ward		
FS	Female Surgical Ward	MW I	Male Ward I
MW II	Male Ward II	MW III	Male Ward III
Paed	Paediatric Ward	Lab wd	Labour Ward
Mat	Maternity Ward I	AN	Ante Natal Ward
PN	Post Natal Ward	Nur	Nursery
Max. score	Maximum possible score		

Staffing ratio - this attribute measured the ratio of nurses to patients; scores of 1-3 were allotted. *Head nurse leadership* - this referred to the position power of the head nurse. How the charge nurse relinquishes some personal control over decision making; delegation of duties to others; discussion with other health care practitioners as a colleague not as a subordinate; leadership style; ability to trust and be trusted. Scores attributed range from 1 for weak to 3 for strong. *Leader involvement in ward* measured the level of participation of the leader in ward activities; may be active scoring 2 or passive with a score of 1. *Staff turn over in the last 12 months* - concerned the number of staff who had left the ward 12 months before scoring; score of 1-3 were allotted. The *number of patients with care plans* (an indication of unit activity) and *sustenance of change programmes in a year* and *staff preference for primary nursing practice* (indicating staff commitment to change programmes) were also measured.

5.7.2. sample size

A thirty seven bedded ward in a 400-bed hospital was used for the action study. Although all patients and relatives in the ward at the time were involved in the change, it was decided to use a sample size of 10 patients and 10 family members for the pre - and post - implementation evaluations respectively. The decision to use 10 patients was based on Wandelt and Ager's (1974) contention that 5% of the total patients on the ward or five patients (whichever is greater) is enough for QUALPACS assessment. The researcher felt that since the study involved other assessments it would be ideal to pick more patients. During the pre-implementation data collection exercise, a total of 17 patients were in the ward but 10 of them were assessed, therefore 58.8% of the patients were assessed. While 53 % (8) of patients were assessed out of a total of 15 patients in the ward at the time of post-implementation data collection. All nurses in the model ward (28 nurses out of 386 in St Luke's hospital - making 7.3% of the population of nurses) were involved in the study.

5.7.3. Selection of eligible patients

In pre-change and post-change data collection, not all patients were eligible to give responses to the questions, be observed or interviewed. The eligible patients were:

(1) Those patients who had been admitted two days prior to any assessment were qualified to answer the questionnaire, be interviewed or be observed (this means patients admitted into the model ward two days before pre-implementation data collection and two days prior to post-implementation data collection). The choice of patients who had been in hospital for at least two days was made based on Heffring *et al.'s* (1986) contention that "patients' experiences and expectations are not formed prior to admission but are developed and modified throughout the hospital experience by the input of other patients" (pp 81-82). Therefore it was assumed that two days in the ward would have given the subjects time to form some required experiences and expectations and they would be able to judge care more critically.

(2) Also important in the selection of eligible patients was that the patients were those expected to receive a number of nurse interactions and interventions (moderately dependent and highly dependent patients). A recommendation made by Wandelt and Ager (1974) .

These criteria helped in identifying the total eligible group. When this had been done, it was appropriate to select 10 patients from the group. The simple random selection procedure was carried out using a table of random numbers to select the study subjects from the total eligible patients. Each patient was assigned a number, from 01 and following in succession to the highest number needed to include in the eligible group. The researcher randomly chose the first number from the table pointing with a tip of a pen while closing her eyes. The first number encountered was followed down and the numbers encountered which matched the identifying number for the patients was noted until 10 patients had been selected. In the pre-implementation data collection, 13

patients were eligible while 8 patients were eligible in the post-implementation data collection. The ideal could not be attained in post-implementation data collection.

5.7.4. Selection of eligible family members

One family member or significant other of a qualified patient who visited at least once daily, bought drugs and was mainly responsible for the patient's welfare while in hospital was chosen for assessment. If more than one family member qualified, then the assessor would carry out a simple random sampling using the secret balloting system to select one family member for each patient.

5.8. Methods of data gathering

Taking into consideration (a) the objectives of the study, (b) the diversity of information sought, (c) the fact that each data gathering method has its own particular weaknesses and biases with one supplementing the other to generate more adequate data, and (d) the amount of knowledge available about the variables to be measured in this study, the researcher decided to use a combination of four methods to collect data. These methods and the levels at which they were used are illustrated in the table below.

Table 5.2. Levels of study and their corresponding data gathering methods.

Levels of Study	**Methods of data gathering**
Quality Study	*Observation* *Review of records*
Interaction Study	*Observation*
Satisfaction Study	*Case Study:* Self-report questionnaires Interview
Focus of nursing care	*Questionnaire* *Review of records*
Assessment of primary nursing practice	*Questionnaire*

The use of more than one research method in the proposed study was necessitated by Nieswiadomy's (1993) advice that if several types of data collection are used together, similar results would be produced and that greater confidence in the study findings would occur. Also in support of this strategy of using more than one research method, Lin (1976) encourages that to obtain precise generalisable data, the multi-method approach to data collection is the most desirable because the more methods used, the more confidence a researcher has in the findings.

Bryman (1988) explains that one reason for the employment of a variety of techniques is that it allows for inferences or 'leads' drawn from one data source to be incorporated or followed up by another. To further confirm the researcher's justification and to be convinced that she was not out of place, she took solace in other researchers who also used multi-methods of research (Obasi 1989, Abangma 1992). The methods used in this study are explained as follows.

5.8.1. Observation method

This method involves the use of vision to gather research data. Since nurses are already used to observation of clients in their day-to-day practice of nursing care, this method did not pose many problems to the assessors who were nurses. Well designed observation tools were used to obtain objective information about the quality of nursing care rendered in the model ward and the quantity and quality of the nurse-patient and nurse-family interactions.

The behaviours to be observed were decided upon before the actual observation took place, the cues for the observation were carefully studied, a decision on who the observers would be and the procedure to be adopted was taken at the onset. It was necessary to also establish what type of relationship would exist between the observer and the subjects at the beginning as advised by Nieswiadomy (1993).

A non-participant - overt observation type was employed. Structured observations were employed in the study. These observations are carried out when the researcher has prior knowledge about the phenomena of interest. The data collection tools were in the form of checklists (QUALPACS and Interaction guide). These are further explained under the section on the instruments for data collection. The expected behaviours of interest had been identified on the checklist. The observer only indicated the frequency of occurrence of these behaviours. Continuous observation of events or behaviours during specified times was carried out. Since the researcher had identified from personal experience and other nursing studies (Hale 1988, Carr-Hill, Dixon, Gibbs, Griffiths, Higgins, McCaughan and Wright 1992) that the peak periods for nursing activities and therefore high nurse-patient interaction occurred during morning and evening care periods (day shifts), observation of interactions was done during these shifts.

5.8.2. Review of records

It is not always necessary for a researcher to collect fresh data. In such a situation, the researcher falls back on existing records gathered for non-research purposes. In the present study, medical and nursing records were used; patient charts, nursing reports, nursing progress notes, nursing care plans, and patient case notes. These records were used in conjunction with other methods to collect data in this study.

5.8.3. Case study

One of the aims of this study was to identify and explain any differences in patient's and family's satisfaction with nurses and nursing care, information and explanation and individuality of care before and after the introduction of primary nursing into the model ward. The case study approach was adopted to assess this satisfaction. The case study approach has been defined by Foreman (1971) as:

> A method of organising data for the purpose of analysing the life of a social unit - a person, a family, a culture group or even an entire community (p 184).

Clamp (1984), in her justification for a case study approach in the fields of social science and nursing education, makes the point that quantitative approaches to the exploration of the complexities of human behaviour in equally complicated settings is not always possible, and that qualitative data enable a more appropriate and equally valid examination to be made. The case study design as explained by Barnard, Magyary, Booth and Eyres (1987),

> is an ideal methodological approach for conducting a detailed longitudinal investigation of an individual, or multiple individuals, embedded into a larger social unit, e.g. the family, neighbourhood, institutions or other defined groups. The case study approach yields the breadth and depth of information that best fits with the nature and scope of nursing practice (p 50).

In this study, the researcher used the case study approach for a sample within a larger population for the purpose of obtaining a clearer description of how satisfied family members and patients were with their nurses and nursing care before and after the introduction of primary nursing. The possible advantages of the case study as outlined in an international conference in Cambridge in 1975 organised by Nuffield Foundation are as follows:

- Case studies were strong in reality and generalisations could be made about elements described.
- The complexity of social situations was recognised.
- An archive of descriptive material was obtained which was sufficiently rich to permit subsequent re-interpretation.
- Contributions to an evolving situation were made.
- Findings were more publicly accessible in the sense that the language and form of presentation was less dependent upon specialised interpretation.

(Adelman, Jenkins and Kemmis 1975: pp 78-79)

According to Yin (1984), the case study approach enables the researcher to capture "the holistic and meaningful characteristics of real life event" at all levels of human activity. In the light of the above advantages, the decision to combine the qualitative and quantitative aspects of assessment in this study was made so as to view the family as a

whole. Bell (1993) argues that the case study is concerned principally with the interaction of factors and events and Nisbet and Watt (1980) point out: "sometimes it is only by taking practical instance that we can obtain a full picture of this interaction" (p 5). Bell (1993) asserts that the great strength of the case study method is that,

> it allows the researcher to concentrate on a specific instance or situation and to identify, or attempt to identify, the various interactive processes at work. These processes may remain hidden in a large scale survey but may be crucial to the success or failure of systems or organisations (p 8).

The areas involved in this case study are:

(1) Self-report on patient and family satisfaction with nurses and nursing care using questionnaires.

(2) Semi-structured interviews with the patients and family members on their satisfaction with explanation and information and individuality of care.

5.8.3.1. Questionnaires

Questionnaires have been the most frequently reported method of data collection in published nursing studies (Brown, Tanner and Padrick 1984, Jacobsen and Meininger 1985). The following *advantages* may have accounted for the increased use of questionnaires in nursing studies

(1) Questionnaires are a quick and generally inexpensive means of obtaining data from a large number of people.

(2) Questionnaires are one of the easiest research instruments to test for reliability and validity.

(3) The administration of questionnaires is less time consuming than interviews or observation method.

(4) Data can be obtained from respondents in wide-spread geographical areas.

(5) Respondents can remain anonymous.

(6) If anonymity is assured, respondents are more likely to provide honest answers.

There are a few *disadvantages* in the use of questionnaire as a method of data collection in research. These include:

(1) Mailing of questionnaires can be costly.

(2) Response rate may be low.

(3) Respondents may provide socially acceptable answers.

(4) Respondents may not understand the questions and there is no opportunity to clarify any ambiguous items.

(5) Requires respondents to be literate.

5.8.3.2. Interview

This is a method of data collection in which an interviewer obtains responses from a subject in a face-to-face encounter or through the telephone. Interviews are used frequently in descriptive and qualitative research studies. In certain stages of an experiment, an interview may be necessary to elicit the respondents' response. Feelings, opinions and beliefs, as well as factual data are measured through interview.

A semi-structured, focused interview was adopted in this study in which case a list of topics to be covered was drawn up. Following the topics carefully, questions were asked of the patients and their family members. The interview was conducted in the local language[4], tape-recorded and interpreted afterwards by the researcher. The interview schedule is shown in appendix II. *Advantages* of interview include:

(1) Responses can be obtained from a wide range of subjects.

(2) Response rate is higher.

(3) Most of the data obtained are usable.

(4) In-depth responses can be obtained.

(5) Non-verbal behaviour and verbal mannerisms can be observed.

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[4]*Ibibio language (has been described in p 40) was used in conducting the interview. English words were translated, verified and an agreement was reached among all members of the research team - the researcher, the research partner and the research assistants - during the research training sessions.*

The *disadvantages* are:

(1) Interviews are time consuming.

(2) Arrangements for interviews may be difficult to make.

(3) Subjects may provide socially acceptable responses.

(4) Subjects may be anxious because answers are being recorded.

(5) Subjects may be influenced by interviewers' characteristics.

(6) Interviewers may misinterpret non-verbal behaviour.

5.9. Instruments for data collection

The instruments used for data collection for this study were of two types:

(1) Existing instruments.

(2) Developed instruments.

Primary nursing is a subject that has been greatly written about. A great many articles, reports and books have been written on this topic (Giovannetti 1986). Young, Giovannetti and Lewison (1981) identified 155 articles and reports on primary nursing in their comprehensive review and critique of the literature, while MacGuire (1989a) identified 200 articles. Also Giovannetti (1986) states that since the work of Young *et al.* in 1981, "primary nursing has continued as a high profile topic in the nursing literature" (p 127). Therefore abundant tools have been used in the many available research literature on primary nursing.

While conducting a review of literature the researcher came across various instruments which are available to measure some of the research variables she wished to measure. Since the writer aimed at relating the present study to existing studies on the topic, she decided to use the most appropriate existing instruments to measure the variables in the study. This decision was based on Brink and Wood's (1983) advice that the use of an already tested instrument provides a link between the present study and the existing body of knowledge on the variables. The instruments used in the study are described as follows.

5.9.1. Quality Patient Care Scale (QUALPACS)

QUALPACS was used in this study to assess the quality of nursing care received by patients in the model ward before and after the introduction of primary nursing practice. QUALPACS was developed by Wandelt and Ager (1974) to evaluate the quality of nursing care delivered to patients while care is in progress. It evaluates the process of care and can be used in any setting in which nurses are interacting with patients or intervening, directly or indirectly, in meeting the patient's nursing and health care needs.

The scale is used to measure objectively the quality of interactions and interventions by members of the nursing staff or by other persons responsible to and supervised by nursing personnel. It has been tested and used extensively in the United States of America (e.g. Felton 1975) and a few nursing care researchers in the United Kingdom have used QUALPACS to assess the quality of nursing care to patients (e.g. Carr-Hill *et al.* 1992).

This scale comprises 68 items which are categorised into 6 subgroups listed below:

(1) Psychosocial - individual: Actions directed toward meeting the psychosocial needs of individual patients. (15 items)

(2) Psychosocial - group: Actions directed toward meeting the psychosocial needs of patients as members of a group. (8 items)

(3) Physical: - Actions directed toward meeting the physical needs of patients. (15 items)

(4) General: - Actions that may be directed toward meeting either psychosocial or physical needs of the patient, or both at the same time. (15 items)

(5) Communication: - Communication on behalf of the patient. (8 items)

(6) Professional implications: - Care given to patients which reflect initiative and responsibility indicative of professional expectations. (7 items)

The standard of measurement is the quality of care a first-level staff nurse is expected to provide. A first - level staff nurse is one who holds state licensure as a registered nurse and is employed to provide nursing care that meets the nursing needs of patients in the employing institution or agency. This standard of judgement is constant and cannot be adjusted according to the level of the nurse performing the action. The minimum observation period is considered to be two hours, with time made available for review of documentation and care plans. Two or more raters should observe nurse-patient interactions or interactions performed on behalf of the patient during the two hour period. All observed interactions are analysed in terms of the 68 items, and scored from 1-5, with 1 attributed to the poorest performance and 5 to the best.

A cue sheet has been prepared by the developers of QUALPACS, which gives examples of activities that can be scored under each item and can be modified for each clinical specialism if necessary. The overall evaluation is reflected in the mean score derived from the sum of the measurement of a variety of observed actions of interactions or intervention.

The basic principle of QUALPACS involves an observer watching nurses caring for selected patients and rating the nurse - patient interactions on 68 criteria in the instrument. At the end of the session, the ratings are averaged to provide a single measure of overall quality. The exercise is repeated sufficient times to give a representative sample of patients, and results from all the sessions are averaged to give the overall estimate of the quality of care on the ward.

The decision to use QUALPACS out of all available quality tools was that since the study as shown earlier in this chapter, is designed after King's (1981, 1983) model which proposes an interaction structure for nurse and client relationship, the researcher picked QUALPACS as it has this interactive component. Another reason for the choice of QUALPACS is that it allows for the process of nursing to be rated on a 5 - point

scale, and not the yes/no approach of other quality measures. QUALPACS was seen to be relatively easy to score and relatively simple to understand. QUALPACS has been described by Carr-Hill *et al.* (1992) as allowing for more direct observation of the process of nursing. This also made QUALPACS suitable and appropriate for this study. Furthermore, the use of QUALPACS may lead to the enhancement of nursing practice at the end of the exercise - but this would be a confounding factor.

Wandelt and Ager (1974) reported a concurrent validity of 0.56 and reliability score of 0.96. Shukla (1981) showed that inter-rater reliability was judged on the basis of three studies with the samples of 96, 6, and 11 patients, and was found to be 0.74, 0.91 and 0.64 respectively. Inter-item reliability was 0.96 using the Kuder-Richardson estimate. The validity of measurements reported by Shukla (1981) was done by correlating the average QUALPACS scores of 21 nursing units with the independent ranking of the same units by nursing supervisors and the Director of Nursing. The average rank order correlations between QUALPACS scores and average independent rank order was 0.44. Manley (1989) calculated inter-rater reliability by determining the correlation coefficient between raters, using Spearman Rho's coefficient. A correction factor was determined by calculating the mean of the differences for two-rater recordings. Manley's inter-rater reliability for QUALPACS subsections are: Psychosocial: individual = 0.7, Communication = 0.4, Physical = 0.6, General = 0.7, and Professional Implications = 0.8. The psychosocial: group subsection was not assessed in Manley's study.

In the present study QUALPACS instrument was prepared in two ways:

(1) For the learning process or the orientation for the observer-rater (see Appendix III). To aid this a special form was designed by the writer on which the items are merged with the cues. This was seen as a very easy way to increase the familiarity of the raters with the scale and ease their scoring activity. This type of form was used during tryouts of the scale.

(2) For the main study: When the first type of QUALPACS document (that used for training of the raters) had been mastered by the raters, and to reduce

the bulk of the document, the standard QUALPACS form (Appendix IV) was used to score the nurse - patient interaction in order to assess the quality of care received by patients in the model ward in the main study. This did not have the cues on the same form.

5.9.2. Nurse-patient and nurse-family interaction sheets

These are checklists designed by the researcher specifically to monitor the nurse-patient and nurse-family interactions. They were intended to record the results of the observations of the quality and quantity of interactions in nurse -patient and nurse - family relationship in the model ward. These tools borrowed characteristics of 3 observation instruments used in other nurse - patient interaction studies (Hamera and O'Connelle 1981, Clark and Zornow 1989, Hale 1988).

Hamera and O'Connelle (1981) used their observation tool to measure patient-centred variables and their relationship to primary and team nursing practices. The variables measured in their study were nurturance received, patient involvement, and frequency of nurse-patient contacts. They carried out direct observation on patients 24 hours a day for 5 days of hospitalisation and audio taped interactions using a specimen record method.

Clark and Zornow (1989) in their study to determine the efficiency of nursing organising systems, compared task behaviours performed by nursing personnel working within team nursing, the total patient care nursing and the primary patient care organising systems. She used an observation tool to observe these task behaviours in a community hospital. Eight study units were involved in the study. All classifications of personnel on three shifts were included. Nursing personnel were observed for 30 minute periods for a sampling of task behaviours. Observations were made every hour over each 24 hour time period and on everyday of the week for every study unit for 6 weeks.

Hale's (1988) observation tool was used to determine interaction pattern between nurses and patients in a maternity hospital before and after the adoption of a patient-centred

method of organising care delivery. The length of each period of interaction, the number of different patients with whom each staff member interacted, the number of staff interacting with one particular patient, the initiating factor in the interactions and who initiated the interaction were assessed.

The interaction observation tool (Appendices V and VI) used in this research was designed to measure the quality of nurse - patient and nurse - family interactions; the initiator of interaction, nursing activities involved in interaction, level of involvement of patient and family and quantity of interaction; length or duration of interaction, episode or number of interactions.

5.9.3. Modified riser satisfaction questionnaire

This questionnaire was used to measure the patient's (Appendix VII) and family's (Appendix VIII) satisfaction with nurses and nursing care in the model ward before and after the introduction of primary nursing. This questionnaire was chosen for the study because of its relative ease of administration and scoring, relative simplicity, reliability level, relatively few items and its relationship to behavioural criteria being measured in the present study. Also because of the scientific manner which it was developed (Sliefert 1986).

The Riser Patient Satisfaction Scale (PSS) uses an attitude measurement methodology, a self-report questionnaire which was developed by Nancy Riser in 1975. This scale is made up of 25 items which are subdivided into three subscales which measure patient's attitude toward nurses and nursing care. The first subscale called 'Technical-Professional' subscale deals with the behaviour of the nurse which fulfils instrumental or goal achievement functions. For example, nurse knowledge, physical care for patient and expertise in implementing medical care. The second is known as 'Educational-Relationship' subscale and is concerned with the exchange of information between the patient and the nurse. It involves such activities as answering questions, explaining and demonstrating. The third is called the 'Trusting-Relationship' subscale and deals with

verbal and non-verbal communication measures. For example, interest in patient, sensitivity to people and their feelings, and listening to patients' problems.

A 5-point Likert scale from strongly agree to strongly disagree is used to indicate level of agreement with or disagreement. There are 14 positively stated items and 11 negative statements. In the original tool (Riser 1975), a low score indicates a higher level of satisfaction with nurses and nursing care while a higher score indicates dissatisfaction but in the present study the reverse is true - a high score indicates satisfaction and a low score indicates dissatisfaction. A value of 5 is attributed to strongly agree and 1 to strongly disagree for items scored in a positive direction while a value of 1 is attributed to strongly agree and a 5 to strongly disagree for items scored in a negative direction. Whereas Riser (1975) states that 5-10 minutes is required to answer the questions, Ventura *et al.* (1982) gives an approximate time required to fill in the responses as 10-15 minutes. In this study the approximate time required to fill in the response was 20-25 minutes.

The Riser scale was developed for assessment in primary care settings, but has since been adapted for use in in-patient settings (Hinshaw and Atwood 1982; La Monica, Oberst, Madea and Wolf 1986; Munro *et al.* 1994; Blair and Walts 1982; Ventura *et al.* 1982). In the present study, it was necessary to reword items in Riser's patient satisfaction questionnaire to make them applicable to the clinical setting studied. Any question which was not translatable or suitable to the study population and the clinical setting being studied was replaced. For example: "The nurse gives good advice over the telephone" was changed to: "The nurse gives good advice concerning my care".

The Riser Patient Satisfaction Scale was tested by Riser (1975) in two sequential trials. In trial I (N=78), estimates of reliability using coefficient alpha were .80, .86 and .89 for the three subscales respectively. In trial II with 52 subjects, reliability estimates were .63, .82, and .81. Coefficient alpha for the total scale score in the second trial was .91. Subscale inter-correlations in trial I ranged from .64 to .76 and .59 to .80 for trial II.

This same Riser questionnaire was modified to measure the family satisfaction with care in the present study. In the family satisfaction questionnaire some questions were reworded to reflect that a family member/significant other would be answering the question and not the patient. For example, item 5 in subscale I: "the nurse takes time before doing things for me" was changed to "the nurse takes time before doing things for my relative".

5.9.4. Questionnaire for determining the focus of nursing care (Appendix IX)

This questionnaire was used to assess the focus of nursing care; patient-centred, task-oriented, or a combination of the two, in the model ward prior to and after the introduction of primary nursing. This assessment was necessary to explain the type of nursing care delivery system utilised before and after the introduction of primary nursing. The questionnaire was designed by MacKay and Ault (1977) to assess the approach to nursing care used in their pilot hospital prior to the implementation of individualised nursing care. The questionnaire was filled in by the researcher after direct and indirect observation of practice, review of patient and nursing records and interview of nursing practitioners. This questionnaire was chosen for its ease of use so that practitioners in the ward could use it on their own to assess their focus of nursing care from time to time.

5.9.5. Primary nursing practice assessment form (Appendix X)

This tool, otherwise called *Hermann hospital nursing staff development: Nursing assessment form*, was adapted from Lippincott (1985). The questionnaire was used in this study to assess the extent of primary nursing practice in the model ward 5 to 6 months after change had been introduced. This tool was considered suitable because it addresses all the elements listed by Manthey (1980) as areas demonstrating the appropriate practice of primary nursing. These elements are verbal report; audit of care plans; assessing 'off duty' rota; presence of 'allocation board' or other evidence of patient allocation; presence of bed labels with primary nurses' names; observation of a handover; observation of a ward round; and observation of nursing care

5.10. Pilot study

The pilot study was originally planned to take place in Britain on black patients, preferably Nigerians, in February 1993. This plan did not materialise because of two important reasons.

(a) The difficulty encountered by the researcher to gain access to hospitals for the purpose of the pilot work and

(b) The inability of the researcher to find the required sample (Nigerian patients). It was also found inappropriate to use Nigerian patients in the UK because of the likely bias of cultural influences that the patients in this category are bound to face - i.e. they are likely to respond similarly to British patients.

All research methods and instruments used in the main study were pilot tested on the 16th and 17th of April 1993 by the researcher and her research partner. This was carried out on five patients and their families in Male Ward II at St Luke's Specialist Hospital, Anua - another medical-surgical ward which had similar characteristics to the model ward. This pilot study was done to assess research instruments for clarity of questions, timing of observations, suitability of the respondents for the study and establishment of reliability and validity of instruments. The pilot study also enabled the researcher and the research partner to develop some skills that helped them in the training of the research assistants. It also assisted realistically on the decision on the number of days that would be used for the main study.

The decision to use two days for data collection and not five days which was originally intended for the study, arose from the experience earned during the pilot study. It was initially planned that the QUALPACS assessment would take five days, the interaction assessment - two days, and the satisfaction assessment - two days. It was found to be possible for one observer to observe two to three patients during an observation session. This was because of the layout of the Male Ward II which was the same as that of the model ward. Therefore it was assumed from the pilot study that the two groups of

patients in the main study required 12 to 16 sessions (36 - 48 hours) for quality assessment, 76 - 80 sessions (36 - 40 hours) for interaction study and 20 - 40 hours of 30 minutes - 1 hour for each patient and a family member for satisfaction study.

5.11 Practicality, reliability and validity of instruments

These are important qualities which should be considered when selecting instruments for data collection. The *practicality* of the research tool concerns its cost and appropriateness for the study population (Nieswiadomy 1993). *Validity* refers to the extent to which various research elements measure what each purports to measure; an instrument's ability to gather the data that it is intended to gather (Seaman 1987). *Reliability* refers to consistency, stability, accuracy and dependability with which the scale or instrument measures.

5.11.1. Practicality

Since the researcher had never used QUALPACS before this study, she had a discussion with Dr. Gibbs at the University of York, who had used this instrument for data collection. To further increase her skill in the use of this instrument, she undertook a tryout on two patients in a nursing home at Cottingham - Hull.

The measuring instruments used in this study were not costly to produce, but it was costly to train the research assistants to be able to use the tools. They were easy to administer, since proper training of the research assistants was undertaken. They were considered appropriate for the study population after they were duly tested in the pilot study. The time required for the data collection was ascertained before the actual procedure. Consideration was given to illiterate respondents for whom the assessors had to read and translate the questions on the questionnaire into local language and then fill the responses in for them. The interview was conducted in local language and tape-recorded.

5.11.2. Validity

Nieswiadomy (1993) remarks:

> The greater the validity of an instrument, the more confidence you have that the instrument will obtain data that will answer the research questions or test the research hypothesis (p 204).

There are four main types of validity: face, content, construct and criterion.

(1) *Face Validity*: An instrument has face validity when on cursory examination, this instrument shows that it can measure what it is supposed to measure. It is the extent to which the instrument appears to be logically appropriate. The instruments for data collection in the study were evaluated by my peers - two research students in the field of health service research, and my supervisor for face validity.

(2) *Content validity*: This is concerned with the scope or range of items used to measure the variable. It refers to the degree to which a test or other measuring instrument samples the content area which is to be measured. The content of the instruments was compared with available literature on the topic to determine their adequacy. A panel of experts - lecturers in the Institute of Nursing Studies, the University of Hull, evaluated the instruments during a seminar organised for the researcher to discuss her research proposal in February 1993. Copies of the instruments and objectives of the study were given to them. Comparisons were made between these evaluations and necessary changes were effected. For example, they suggested that the satisfaction study should extend further than just being quantitative to include a case study of families; they felt that there was need to conduct a more detailed interview with the family. Also some questions in the satisfaction questionnaires were criticised as being ambiguous and some additions, deletions and changes were done.

(3) *Criterion Validity*: This refers to the extent to which an instrument corresponds to or is correlated with some criterion measure of the variable of interest. There are two types of criterion validity and these include:

(a) *Concurrent validity* which addresses an instrument's ability to obtain a measure of subjects' behaviour that is comparable to some other criterion of that behaviour.

(b) *Predictive validity* refers to the extent to which a test can predict a behaviour or responses of subjects in the future

(4) *Construct Validity*: This "judges the extent to which the research tool measures the concept or variable that the researcher wants it to measure. Construct validity is an indirect approach that estimates the extent to which a subject actually possesses the characteristics presumed to be reflected by a particular scale or test." (Seaman 1987: p 319)

Crocker (1974) upholds the method of ascertaining the content and construct validity of instrument through professional experts. Crocker feels that validity can be checked by finding the relationship between what we have measured and one of the following:

(i) actual figure performance;

(ii) expert opinion;

(iii) result of another test of known and accepted validity.

(Crocker 1974: p 46)

The study instruments fulfil the Crocker's criteria. Expert opinion was sought before instruments were used and since most of the instruments had been used in other studies, the validity of the test is known from existing studies.

5.11.3. Reliability

It is very important to collect data that are reliable. Three types of reliability are discussed as follows.

(a) *Stability Reliability:* This refers to the extent to which repeated administrations of an instrument or measure gives the same results. A stable instrument of measurement remains consistent with repeated applications. To determine the stability of a measuring instrument, test-retest reliability measures may be done by comparing the results of a test on two different occasions. Test scores are compared by computing a reliability coefficient or correlation coefficient between the two sets of scores.

(b) *Equivalence Reliability*: This is concerned with the degree to which two different forms of an instrument obtain the same results or two or more observers using a single instrument obtain the same results. Inter-rater or inter-observer reliability are terms applied to comparisons of two or more observers or raters who use the same instrument. This reliability is determined by the degree which two or more independent raters are in agreement using the following formula:

$$\frac{\text{Number of agreements}}{\text{Number of Agreements + Disagreements.}}$$

(c) *Internal Consistency Reliability*: This addresses the extent to which all items on an instrument measure the same variable. This type of reliability is appropriate only when the tool is examining one concept or construct at a time. Many procedures are available to measure this type of reliability. These include:

The Split-half method - The items on the instrument are split into two halves, and the correlation between the scores on the two parts is computed. The comparison can be done by obtaining scores on the first half of the test and comparing them with scores on the second half of the test or by comparing odd-numbered items to even-numbered items.

Other methods used are Coefficient Alpha (or Cronbach's Alpha) and the Kuder-Richardson Formula 20 (KR 20).

Cronbach's Alpha is represented thus:

$$r = \frac{K}{K-1}\left[1 - \frac{Sitems}{Stotal}\right]$$

Where:

r	=	the estimated reliability
k	=	the total number of items in the test
S items	=	the variance of each individual item.
S total	=	the variance of the total scores

Kuder-Richardson Formula 20 (KR 20) is represented as:

$$r = \frac{K}{K-1}\left[1 - \frac{SumPQ}{Stotal}\right]$$

Where:

r	=	the estimated reliability
k	=	the total number of items
P	=	the Column mean - proportion of persons passing the item
Q	=	1 - P
S total	=	Variance of the total scores

When testing the reliability of questionnaires and interviews, the researcher considered Obasi's (1989) warning that the estimation of the reliability of these methods could create special problems since repeated measures on subjects are extremely difficult to obtain. Reliability of factual questions were evaluated through internal checks. Total scale reliability of the family and patient satisfaction questionnaires were evaluated using the Cronbach's alpha on data from pilot study.

Table 5.3. Cronbach's Alpha for the results of the patient and family satisfaction questionnaires

Questionnaire type	No. of items	Alpha
Patient Satisfaction	25	.48
Family Satisfaction	25	.83

Equivalence reliability of QUALPACS was checked through scoring of inter-rater reliability for all subsections and total scale which were calculated using Spearman Rho's coefficient. Inter-rater reliability was checked on data collected when raters worked in practice sessions. Checking was done on two occasions. The reliability for the total scale ranged from .57 (on first practice) to .90 (on second practice after revision of procedure). The inter-rater reliability results obtained just before pre-implementation data collection are displayed on Table 5.4.

Table 5.4. The inter-rater reliability results for all subsections of QUALPACS for Assessors I and II using Spearman Rho's Coefficient.

Subsection	r
Psychosocial: Individual	.93
Psychosocial: Group	.81
Communication	.64
Physical	.88
General	.72
Professional Implications	.68
Total	**.90**

Internal consistency of QUALPACS was recorded for 53 items out of 68 items[5] which had been recorded for five patients in the pilot study. The obtained Cronbach's alpha was .86.

[5] *QUALPACS ratings of as few as 30 items will yield a reliable measurement of the quality of care received by a patient. As few as 4 nurse-patient interactions may provide ample observations to allow rating a sufficient number of items to provide a reliable score (Wandelt and Ager 1974)*

Siegel (1956) and Siegel and Castlellan (1988) assert that one of the uses of the correlation is to test for reliability, the type depending on the nature of the data. Contingency coefficient (C) is a suitable measure for testing the reliability of non-parametric data such as that which is involved in the nurse-patient, nurse-family interaction. The formula of Contingency coefficient (C) is shown below:

$$C = \sqrt{\frac{X^2}{N + X^2}}$$

Where N = Population

X^2 = Magnitude of the discrepancy between the observed and the expected values in each of the cells.

X^2 is represented as: $\Sigma\frac{(O-E)^2}{E}$

O = Observed frequencies for each cell

E = Expected frequencies for each cell

Σ = Add up the results of $\frac{(O-E)^2}{E}$

The reliability of the nurse-patient and the nurse-family interaction sheets checked from interaction scores from the pilot study are shown in Table 5.5.

Table 5.5. The reliability of the nurse-patient and the nurse-family interaction sheets using contingency coefficient.

Interaction Sheet Type	**r**
Nurse-patient Interaction Sheet	.51
Nurse-family Interaction Sheet	.89

5.12. Changes to the original plan of work

The study was planned to be conducted at the University of Nigeria Teaching Hospital Enugu. All necessary preparations were carried out as appropriate:

(1) Letters were sent to the Directors of Nursing and Medical services of University of Nigeria Teaching Hospital in December 1992.

(2) Selection of ward and primary nursing co-ordinator at UNTH were done in January 1993. Preparation of the co-ordinator was started early by sending materials on primary nursing to her.

(3) Selection of a research partner at UNTH took place in January 1993. Initial preparation of the partner also started in January 1993.

(4) Early stimulation of staff at UNTH to see the need for change was done through letters written by the researcher to some colleagues in the hospital early in the study.

When it was obvious that University of Nigeria Teaching Hospital which was planned to be the original site for this project could not be used, St Luke's Specialist Hospital Anua had to be chosen for the study and all preparation done hurriedly but accurately.

5.13. Gaining access to the research site

Initial negotiations for gaining access into the research site started with the Controlling body of Nursing profession in Nigeria - The Nursing and Midwifery Council of Nigeria. A change in the mode of delivering nursing care has been seen as a major change in nursing (Archibong 1993, Wright 1990), therefore it was deemed necessary to involve the Council early and at all stages of this project. A letter written by the researcher which was countersigned by the researcher's supervisor and a research proposal were sent to the Council in December 1992 - six months before introduction of primary nursing into the Nigerian Nursing System. The researcher met with the Registrar of the Council on the 5th of April 1993. This change was welcomed as a long-due development and the Registrar on behalf of the Council pledged to give a whole hearted support to make this project a success. The Registrar was impressed with the relationship between primary nursing and the nursing process and he suggested the project should be seen as a tool to fully implement and sustain the nursing process

practice in Nigeria. The Nursing and Midwifery Council of Nigeria granted approval for the introduction of primary nursing into the Nigerian Nursing System.

The decision to use St Luke's Specialist Hospital Anua - Uyo as the model hospital for the introduction of primary nursing into the Nigerian Nursing System was taken on the 12th of April 1993. The researcher met with the Deputy Director of Nursing Services in Akwa Ibom State of Nigeria, Deputy Director of Nursing Education of the same State, and the Commissioner for health in Akwa Ibom State for permission to allow her access to the model hospital which is controlled by the State Ministry of Health. This permission was granted and the permission letter from the Commissioner of Health is shown in appendix XI.

On the 15th of April 1993, the researcher had a discussion session with the Chief Consultant in charge of the hospital and head of the nursing services department of the hospital - Assistant Director of Nursing Services. An agreement was reached that the researcher should give an itinerary of her programme. All heads of the 15 nursing units were informed about the change and they were all willing to allow their units to be used for the study provided that they had some guidance and support. They were reassured that such guidance and support were going to be given and that the researcher was going to organise an orientation course to explain what the project was about and other aspects of primary nursing. On the 5th of May 1993, the Ministry of Health in conjunction with the hospital organised a conference to declare the primary nursing project opened. Senior members of staff of the nursing department of the Ministry of Health and heads of other departments in the hospital were in attendance. At this conference, a short address was delivered by the Chief Nursing Officer in charge of the Hospital (Appendix XII) and the researcher gave an outline of her project and roles and responsibilities of the researcher and participants (Appendix XIII).

5.14. Selection and training of research assistants

Due to the specific nature of the study; the time available and the need for the collection of different types of data (quality study, satisfaction study, interaction study, focus of nursing care and primary nursing practice), it was necessary that research assistants be employed to help the researcher. Six research assistants were employed; two to collect data on the quality study, two to assess the interactive processes in the nurse-patient and nurse-family interaction and two to administer the satisfaction questionnaire to patients and family members and to conduct interviews with patients and family members.

The use of more than one assessor for observation studies was to increase objectivity and reduce the risk of observer bias. The rationale for having more than one rater is given by Wandelt and Ager (1974) as follows.

> * When there is no opportunity to share thinking and decision with another person, the process and outcome of justifying certain decisions can be frustrating and leave the individual lacking confidence in the value of the judgement.
>
> * At best, when two persons share thinking and decisions there may continue to be doubts and questions, but these can be more easily lived with when shared.
>
> * Because of the complexity of the situations and of the bases for all decisions that must be made, and despite the demonstrated reliability of QUALPACS, it is proposed that concerned persons - raters, those rated, and those who will base actions of the findings in the evaluations - will have more confidence in evaluations resulting from ratings done by more than one person (p 42).

Since the selection of the assessors required careful consideration, the following qualities were the pre-requisites:

* *Indigenes of the locality.*
* *Non-staff of the model ward:* so that patients will be willing to disclose their opinions, and express their candid thoughts without inhibition.
* *Fluency in the local language.*

* *Educational qualification*: First degree holders in nursing or nurses with equivalent qualifications well grounded in basic research skills - these individuals were preferred because there was not enough time to give training on data collection skills. The degree programme in nursing prepares graduates to carry out research.

* *Personal characteristics*: Consideration was given to those characteristics likely to facilitate the positive relationships necessary for exploratory questioning to occur.

(a) Since the model ward accommodated male and female patients, the selection of research assistants of both sexes was considered, in consonance with Cormack's (1991) advice that "it is generally advisable to employ interviewers of the same sex as the subjects where possible, ..." (p 210).

(b) Age of the assessors was also an important consideration. All of them fell between the ages of 25 and 45. This was in line with Topf's (1988) contention that very young people often lack the tact and the necessary interpersonal skills and that much older people are often unwilling to follow instructions carefully. Cormack (1991) also advises that assessors should be as close to the age of respondents as possible.

(c) Honesty and trust worthiness - one who will not fake responses and ease his/her burden.

* The assessors' *general appearance* was also considered. People with extreme characteristics - being too glamorous, extremely enthusiastic and pessimistic, those expressing strong political affiliations, and those with past negative experience of acting as assessors - were avoided.

* *Multiple attributes* - intellectual, professional and personal - were combined in the choice of research assistants.

On the basis of these considerations the researcher selected six graduate nurse educators, indigenous to Akwa Ibom State, three males and three females aged 25-45 years to

assist her with the collection of data in this study. The research assistants were staff of the Ministry of Health. None of them was working in the hospital under study. They were recruited for the study and remunerated by the researcher.

The research assistants were trained by the researcher. Three training sessions of four hours each - making a total of 12 hours - and two practice sessions of two hours each - making a total of four hours - were conducted. The training was quite rigorous and the researcher and the research partner continued to work closely with the assessors throughout the course of the study.

During the training sessions, the researcher provided the assessors with a description of the study and its purpose. General procedures were discussed and the observation guides, interview guide and the questionnaires were reviewed in detail. The purpose of each question was pointed out, and the meanings of all words were clarified. All questions on the questionnaire were explained using both English and local languages. The behaviours to be observed were determined. The processes of recording information were made explicit, special attention was given to the use of probes, and any variations that would be allowed in the interview process were discussed. Since structured observation was employed in the study, the observers were advised on how to indicate the frequency of occurrence of these behaviours on the checklist. The QUALPACS cues were reviewed and an agreement reached on additions to make.

Tryouts were carried out in groups - two quality assessors, two interaction assessors and two satisfaction assessors - so that assessors doing the same assessment would receive the same instructions. Role playing of interviews was done, and tryout of QUALPACS (using the QUALPACS document for learners) and the interaction tools were also carried out on patients in Male Ward II in St. Luke's Spec. Hospital - the ward used for the pilot study. Practice on patients was done on several occasions to ascertain that the inter-rater reliability scores were high enough to ensure that pairs of assessors were comparable in their measurements.

5.15. Procedure for data collection

Informed consent was obtained from nurses, patients and relatives (Appendices XIV, XV and XVI) before study commenced to ensure that the rights of the research subjects are protected. Data collection took two days for each data collection phase, that is, two days during pre-implementation phase and two days during the post-implementation evaluation. Six research assistants were used for data collection; two for the quality study, two for the interaction study, and two for the satisfaction study. The researcher assessed the nursing organisational pattern utilised in the ward in the preprimary nursing data collection exercise while the research partner did the assessment at the postprimary nursing period. The data for the different studies were collected concurrently. Before observation, the observer openly identified that he/she would be conducting research, introduced himself/herself to the nursing personnel in charge of the ward who would in turn introduce him/her to patients without necessarily indicating on which patients attention would be focused. The rules for observation are shown in appendix XVII.

Two care periods - morning and evening care periods comprising 7.30AM-1.00PM and 2.30-9.00PM respectively, were chosen for assessment. These periods have been found as the heavy periods for nurse-patient interaction which would give maximum chances of observing the interaction patterns (Shukla 1981, Carr-Hill *et al.* 1992). For the quality study, each day for each observer was divided into two sessions of six hours - one session in the morning and one session in the evening care periods respectively. A total of 16 sessions (48 hours) were covered for the patients by two independent assessors in two days each for the pre - and post - implementation data collection, respectively. Each group of two to three patients was observed for two sessions of six hours (3 hours in the morning and 3 hours in the evening) on two different days as shown in Tables 5.6a and b. This was to ensure that a patient was observed at as many varied periods of the day and days of the week as possible. It was possible to observe a group of patients because of the structure of the ward. Pairing was done such that patients in the long ward were observed together, and those in the cubicles and the bay were observed together. To

encourage objectivity and prevent comparison of results, the two observers assessed the same patient at different times and different days. The raters usually sat distant from the patients being observed so that they could be as inconspicuous as possible, yet observe interactions without being involved. The tables below show the time-table for QUALPACS assessment for the two assessors for 10 patients in two days to collect data.

Table 5.6a. QUALPACS Observation time per care period for **Assessor I**

Days	**Morning care period**		**Afternoon care period**	
	Patient	Time	Patient	Time
1	01	7.00AM-10.00AM	010	2.30PM-5.30PM
	02		09	
	03		08	
	04	10.15AM-1.15PM	07	5.45PM-8.45PM
	05		01	
2	06	7.00AM-10.00AM	02	2.30PM-5.30PM
	07		03	
	08		04	
	09	10.15AM-1.15PM	05	5.45PM-8.45PM
	010		06	

Table 5.6b. QUALPACS Observation time per care period for **Assessor II**

Days	**Morning care period**		**Afternoon care period**	
	Patient	Time	Patient	Time
1	05	7.00AM-10.00AM	07	2.30PM-5.30PM
	06		08	
	09		01	
	010	10.15AM-1.15PM	02	5.45PM-8.45PM
	04		09	
2	03	7.00AM-10.00AM	010	2.30PM-5.30PM

07		05	
08		06	
02	10.15AM-1.15PM	03	5.45PM-8.45PM
01		04	

For the interaction study, two days each were used to observe the patients and their family members in the pre - and post - primary nursing period. The activities and interactions which were observed were pre-coded and categorised. Using the interaction sheets, the interactions between nurses with patients and family members were directly observed. Ten sessions were required for 10 patients and 8 family members per day per assessor; which comprised five sessions during the morning care period and five sessions during the evening care period for the preprimary nursing group. Eight sessions were required for 8 patients and 6 family members per day per assessor; comprising 4 sessions during the morning and 4 sessions during the evening care periods for the postprimary nursing group. One patient and a family member were observed by two independent observers at different periods of the day and on different days. A total of 20 sessions of 10 hours for preprimary nursing group and 16 sessions of 8 hours, were used for the observation allowing for assessment of each patient and family member for an hour; 30 minutes during the morning shift and 30 minutes during the evening shift by each observer. Tables 5.7a and b shows the observation time-table for the two assessors.

Table 5.7a. Interaction Observation Time for **Assessor I**

Days	**Morning care period**		**Afternoon care period**	
	Patient	Time	Patient	Time
1	05	8.00-8.30AM	07	2.30-3.00PM
	06	9.00-9.30AM	08	3.30-4.00PM
	09	10.00-10.30AM	01	4.30-5.00PM
	010	11.00-11.30AM	02	5.30-6.00PM
	04	12.00-12.30PM	09	6.30-7.00PM
2	03	8.00-8.30AM	010	2.30-3.00PM

07	9.00-9.30AM	05	3.30-4.00PM
08	10.00-10.30AM	03	4.30-5.00PM
02	11.00-11.30AM	06	5.30-6.00PM
01	12.00-12.30PM	04	6.30-7.00PM

Table 5.7b. Interaction Observation Time for **Assessor II**

Days	**Morning care period**		**Afternoon care period**	
	Patient	Time	Patient	Time
1	01	8.00-8.30AM	010	2.30-3.00PM
	02	9.00-9.30AM	09	3.30-4.00PM
	03	10.00-10.30AM	08	4.30-5.00PM
	04	11.00-11.30AM	07	5.30-6.00PM
	05	12.00-12.30PM	01	6.30-7.00PM
2	06	8.00-8.30AM	02	2.30-3.00PM
	07	9.00-9.30AM	03	3.30-4.00PM
	08	10.00-10.30AM	04	4.30-5.00PM
	09	11.00-11.30AM	05	5.30-6.00PM
	010	12.00-12.30PM	06	6.30-7.00PM

Prior notice was given to the family members about the assessment and what time they would be needed to come in to see their patients. During an interview session, the family member and patient were asked to answer the questions together. Both the patient and a family member were treated as one family.

On filling out the questionnaires:

- The literate respondents filled the questionnaires on their own. After due explanation of questions by the assessor, they were given time to fill them and were advised to give the filled questionnaire to any staff on duty. All questionnaires were handed in by the second day of the data collection exercise in each of the two evaluation periods; preprimary and postprimary nursing periods.

- For the illiterate respondents, the interviewer read out the questions, translated them from English language to local language as agreed and then translated the subjects' responses from local to English language and filled in the blank spaces or ticked the appropriate responses as necessary. The questions were consistently and carefully asked such that they would produce data which would be compared across respondents; literate and illiterates. Even subtle changes in the wording of questions were avoided.

5.16. Plan for data analysis

Computer assisted data analysis will be employed. Tables and other diagrams will be used to present the results. Descriptive and inferential statistics will be adopted: statistical tests will be used to test the hypotheses in the study. These tests are shown in Table 5.8 below.

Table 5.8 Area of the study, level of measurement and statistical tests used.

Area of study	**Level of Measurement**	**Statistical test**
Respondent characteristics	Nominal	Percentages
Quality	Interval	Unrelated one-tailed t-test
Interaction	Nominal	Chi-square, Phi coefficient Percentages
Satisfaction (a)Quantitative	Interval	Unrelated one-tailed t-test, Eta coefficient, Eta^2, Pearson product-moment correlation coefficient, Cronbach alpha, inter-item correlation, subscale correlation.

Satisfaction (b) Qualitative Interview report	Interview report	Report
Focus of nursing care	Nominal	Descriptives
Assessment of primary nursing practice	Nominal	Report

Since the ordinal scales in the quality and satisfaction study (quantitative) were allotted numbers 1-5, they will be considered as having equal numerical intervals (Greene and D'Oliveira 1982).

5.17. Summary

This chapter has attempted to show that action research methodology could promote maximum interaction between researcher and the client system. The chapter clearly demonstrates that quantitative methods can be used within an action research framework although the concepts underlying the action research approach are those of qualitative research (Hunt 1967).

It can be argued, therefore, that action research is the most appropriate approach for nursing in the sense that it is situational, collaborative and participatory, while change is effected in the functioning of the 'real' world. It also encourages utilisation of nursing practice data. However, what happens in one action research situation cannot be generalised to another situation and this is clearly demonstrated in Silverman's (1985) statement: "What goes on in one setting is not simply corrective to what happens elsewhere - each must be understood in its own term" (p 21).

PART FOUR: THE ANALYTIC RESEARCH

CHAPTER SIX

INTRODUCING PRIMARY NURSING INTO A MODEL HOSPITAL IN NIGERIA: ST. LUKE'S SPECIALIST HOSPITAL ANUA - UYO IN NIGERIA

6.0. Introduction

Having considered the role of the family in health care delivery, and the need for primary nursing to bring the family into the limelight in the care of an ill family member, the thrust of this chapter is to bring to bear the process of changing from old practices to new ones that will promote family-centredness in care. Sliefert (1986) has remarked that the major focus of primary nursing studies has been on the overall care process, with little attention given to what nurses actually do during the care process. In this section an attempt is made to work on this weakness. The investigator will present the theoretical aspects of change and the detailed picture of the change from traditional task-oriented nursing to primary nursing care on ward I of St Luke's Specialist Hospital Anua. Issues discussed include: concept of change, types of change, norms and principles of change, models and strategies of change. The phases of change in this study and the different activities involved in each phase, the difference between the previous and the present system, will also be discussed. The time-table of the change is shown in Appendix XVIII.

6.1. The concept of change

Change has both positive and negative attributes. On the one hand, change means experiment and the creation of something new. On the other hand, it means discontinuity and the destruction of familiar social structures and relationships. Despite the positive attributes, change may be resisted because it involves confrontation with the unknown and loss of the familiar. Also change implicitly devalues past action. Resistance to change is a natural and common phenomenon. Change is threatening and presents those involved in it with new situations, new problems, ambiguity and uncertainty.

Bevis (1982) defines change as an altering, making different, converting and a metamorphosis. It is the process by which alterations are made in the function of the society (Mauksch and Miller 1981). Arndt and Huckabay (1980), view change as evolving out of incompatibilities and conflicts in the system or dissatisfaction either with one's own behaviour or specifically with the situation at hand. Change may be immediate or it may take time. Wright (1989) quoting Hall (1977), defines change as an attempt to alter or replace existing skills, attitudes, norms and styles of individuals and groups. It involves discontinuity with old behaviour, in order to implement new ones. Change therefore implies conscious effort to alter the status quo in order to substitute a more appropriate behaviour.

Nurses in the non-primary nursing systems are unfamiliar with the practice of primary nursing and therefore its implementation involves managing a complex change process. The introduction of primary nursing practice will bring about change in the way nurses in these systems organise their care to clients. The change process is thus an important area that should be viewed in this context, since it is not enough just to introduce an organisational change, such as primary nursing, in a piecemeal manner.

6.2. Types of change

In nursing today, we find ourselves well beyond the point of debate over whether there is need for change or not. Our current predicament revolves around the question of how one becomes involved in the process of change. In many instances, we find ourselves faced with two alternatives:

(a) we can either utilise models that have been specifically designed to aid in the implementation of planned change. The advantages of this type of change are obvious: one is able to control the change and predict with accuracy the outcome, or

(b) we can let change occur spontaneously without attempting to control the process or the outcome.

From the foregoing discussion, two major types of change have been identified, which include planned or unplanned change (Mauksch and Miller 1981, Bennis, Benne and Chin 1985) based on the variables of mutual goal setting, deliberateness of change and the power ratio between the change agent and the client system involved in the change programme.

Planned change: This is a conscious, deliberate and collaborative process involving the change agent and the client system. Both parties see the need for change, make conscious effort to prepare and plan for the change and then implement the change process together. They also look forward to the outcomes of the change. Planned change may be positive or negative. It involves a mutual goal setting by one or both parties, equal power ratio between the two systems (client and the change agent) and 'deliberateness' on both sides. This kind of change is predictable, intended and anticipated (Mauksch and Miller 1981), involving the utilisation of valid knowledge (Bennis *et al.* 1976). It is a change with a purpose and usually adopts a shared or participative decision making pattern.

Unplanned change: As the name implies, this type of change is unpredictable, unintended, non-deliberate and unanticipated in nature. It happens unknowingly and sometimes may be obvious only when it has begun or after it has taken place. It is haphazardly done, with unequal participation levels of both the change agent and the client system. Unplanned change includes any change with non-mutual goal setting or non-deliberateness of the change or unequal or unbalanced power ratio between the change agent and the recipient of the change.

6.3. Norms and principles of planned change

Without an effective plan of action, a change process may not be successful. Like an unplanned change, a planned change can be positive or negative. It does not mean that if a change endeavour is planned then it must produce positive results all the time. It is

important to make a planned change programme effective in order to be successful or yield positive results. According to Benne (1961), effective planned change is one without unnecessary incompatibility between the systems involved. Benne has provided five useful norms that will help stimulate and guide change. These norms have been coined into an acronym referred to as **ECTEA** by Archibong (1993). These ***norms*** include:

E - *Experimental*: The introduction of change must be experimental.

C - *Collaborative*: Planned change must be collaborative.

T - *Task-oriented*: Planned change should aim at providing appropriate solutions to problems facing the people, and prepare the group to solve subsequent problems.

E - *Educational*: Any change planned for a group or an organisation must offer an educational avenue or a learning experience for the participants.

A - *Anti-individualistic*: No one individual in the change process should dominate the scene and groups should accept individual differences in any aspect of the encounter.

A change situation is a dynamic balance of forces (driving and restraining) working against each other (Lewin 1947). Driving forces move the situation toward the expected change, while the restraining forces move the situation away from the expected change. A state of equilibrium occurs, when forces toward and against the expected change are equal in strength (Arndt and Huckabay 1980). A state of quasi-equilibrium maintains an organisation or a group in the status quo as shown in Figure 6.1. But when there is an alteration of force field from quasi-equilibrium to another level on the scale, change occurs. Alteration in this state of balance can be positive (acceptance) or negative (resistance). Positive alteration or acceptance of change is when the driving force to the anticipated change is increased in the desired direction or there is a reduction in the intensity of restraining forces (Figure 6.2). Negative alteration or resistance to change occurs when there is an increase in the restraining forces or a decrease in the intensity of the driving forces (Figure 6.3).

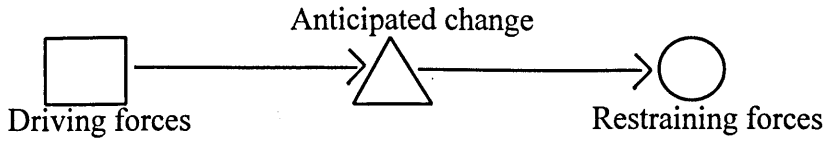

Fig. 6.1 The state of quasi-equilibrium in change

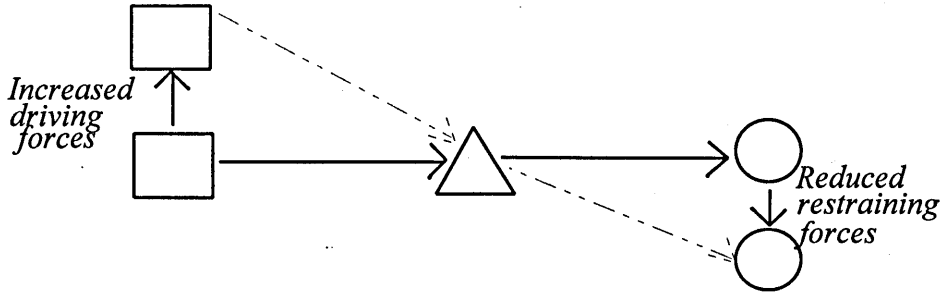

Fig 6.2 State of acceptance of change

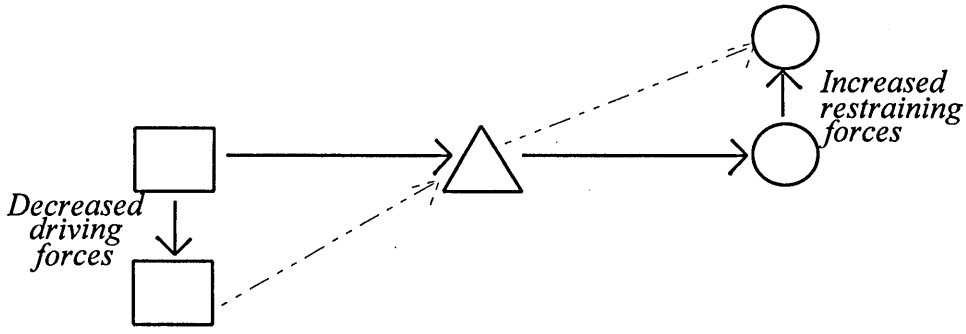

Fig 6.3 State of resistance to change

In any change circumstance, all forces that seek to cause resistance need due consideration if a change programme is to be successful. Ersser and Tutton (1991) have described a framework of resistance to change outlined by Breu and Dracup (1976) in which Klein's eight principles of change have been listed as a guide to reduction of resistance and increase of acceptance of change. These ***principles*** are:

(1) There is a universal tendency to seek to maintain the status quo by people if they view their needs as being met.

(2) There is increase in resistance if one views the anticipated change as threatening.

(3) Resistance to change is directly proportional to the pressure for the change.

(4) Resistance to change decreases when change is perceived as being reinforced by those who are trusted and respected.

(5) Resistance to change increases when those involved in the change foresee that the anticipated change will not be as effective as the present situation.

(6) The sense of commitment to change increases when the perceived level of involvement of the participant increases.

(7) Acceptance of change is more likely when change is anticipated under conditions of minimal threat.

(8) Coercion will produce temporary change which is accompanied by heightened tension and unstable results.

Additionally, resistance to change is not at all times detrimental, some positive aspects of resistance can really help the change process. Resistance to change may force the change agent to clarify the purpose of the change, may disclose inadequate communications within the group, provide clues on the prevention of the possibility of unexpected consequences and disclose inadequacy of problem-solving and decision making processes.

There are many likely resisters to nursing change programmes. These include, doctors, other health professionals, nurses, hospital administrators, the client, client's family and significant others. These groups of resisters should be handled tactfully when the nurse-change agent is introducing change.

6.4. Models of change

Many models of change have been described (Chin 1976; Bennis 1965; Buchanan 1967; The National Training Laboratories 1966; Dalton 1973; Greiner 1973; Gross and Walt 1969; Ginsberg and Reilley 1964; Caldwell 1968; Gross and Walt 1969; Mangione 1970; Rogers 1962; Havelock 1970; Lewin 1958; Lippit, Watson and Westley 1958; Ottoway 1976). These models provide information that can be extremely helpful when

considering the implementation of planned change. Since the transition to primary nursing is a planned change, Lewin's (1958) model of change in conjunction with Lippit *et al.'s* (1958) were utilised to bring about the change in this project. These two models are described as follows.

Kurt Lewin in 1958 identified three basic steps in a change process. These are: unfreezing, moving and refreezing.

Unfreezing: This stage involves discarding present habits or doing away with old norms. Wolff (1977) views it as a stage of primarily preparing for the change by raising the consciousness of the participants in the change program so that they become unhappy with the status quo.

Moving: This involves building up new norms. It involves movement and reduction of energy, resources and forces, with exploration of preferred outcome of review. It is at this point that the change is implemented, therefore it is referred to as the changing phase. This phase is dependent on the outcome of the unfreezing phase. If the equilibrium has been moved toward the driving forces, then change can occur, otherwise if the equilibrium is tilted more towards the restraining forces, then the change will not succeed. The goal of the moving phase is the enactment of the anticipated change (Bernhard and Walsh 1981).

Refreezing: This involves settling into the new pattern of working. It is concerned with the integration of the value system and stabilisation of a new equilibrium. The basic thing in the stage of refreezing is the need to incorporate the change into daily life so that it becomes the status quo (Wolff 1977). Refreezing is the end stage of a change process, indicating that the change has been fully accepted and internalised.

Lippit, Watson and Westley's (1958) model is based upon the use of a change agent in bringing about planned change. They conceive of the change agent as an individual outside the organisation who collaborates with the client system to bring about a planned change. The client system must take responsibility for bringing about the change, while the change agent provides support and guidance during the various stages of change. The stages of Lippit *et al.'s* model are:

(1) Development of the need for change.

(2) Establishment of a change relationship.

(3) Clarification and diagnosis of the problem.

(4) Examination of alternative routes and goals.

(5) Transformation of intentions into change efforts.

(6) Generalisation and stabilisation of the change.

(7) Achieving a terminal relationship.

6.5. Strategies of change

Many approaches that can be used in introducing change into any setting have been identified. Chin and Benne in Bennis *et al.* (1976) define the process of strategy selection as the deliberate and conscious use and application of knowledge as a tool for modifying patterns and institutions of practice, involving a clear understanding of the elements of the situation, restructuring the elements in the most advantageous way, and finding the best possible solution to the problem at hand. Wright (1989) urges nurses to have problem solving, decision making and communication skills to be able to select the strategies for change.

Three predominant change strategies have been named (Sugden 1984, Beyers 1984, Keyzer 1985, Hafer 1986, and Wright 1989). These strategies are: rational-empirical, power-coercive and normative-reeducative. Archibong (1993) has further grouped these strategies into two major categories; top-down and bottom-up strategies (see Table 6.1). This grouping illustrates the direction of authority in terms of problem identification,

design of the intervention and implementation of the change among other steps of the planned change.

Table 6.1. Strategies for change and their groupings.

Groups	Strategies
Top-down	Rational-Empirical Power-Coercive
Bottom-up	Normative-Reeducative

Top-Down Group

Archibong (1993) states:

> These are strategies so called because, the need for change, the focus of the change and the means of implementing and evaluating change are identified by those in position of power and imposed on the participants. These strategies are tied up to the belief that those in power have inherent right to exercise control over their subordinates and that the subordinates must accept these rights without any objection (p 143).

Rational-Empirical approach to change: This strategy assumes that:

(1) Ignorance is the prime impediment to progress and change.

(2) All persons have reasons and "some rational calculus of self interest" which direct needed change of behaviour (Wright 1989).

Bernhard and Walsh (1981) view the rational-empirical approach as the oldest and most frequently used strategy of change, which is based on reason and intelligence. Using this strategy, the change agent sees all group members as being reasonable enough and therefore gives them the opportunity to choose the outcomes that offer maximum value to them. Examples of rational-empirical strategy are the beliefs that the dissemination of information on the use of oral rehydration therapy will reduce death from diarrhoea in

children, and that the distribution of pamphlets on safer sex will reduce the incidence of sexually transmitted diseases (Archibong 1993).

Power-Coercive approach to change: This strategy:

(1) Employs the use of some kind of legitimate power to force compliance with change.

(2) Strongly views knowledge as the major source and ingredient of power, and that men and women who are knowledgeable are possessors of power.

(3) Assumes that desirable change is achieved through the transfer of knowledge (power) from these power possessors to those who lack specific knowledge (Bennis *et al.* 1976, Bernstein 1975, Chin and Benne 1976, Keyzer 1985). The power is based on the use of political, moral and economic sanctions to achieve the desired outcomes (Wright 1989).

(4) Assumes that people who are less knowledgeable (powerless) will always be subdued and comply with the instructions and leadership of those who are more knowledgeable (powerful).

Bottom-up Group

In this group the decision for change is determined by the target population for the change (client system), who have a felt need for change, perceive the change as relating to their daily practice, seek means of changing the situation and help to implement the intervention that will bring about change. The only strategy under this group is the normative-reeducative approach to change.

Normative-Reeducative approach to change: This is a more active strategy of change. Wright (1989) defines the normative-reeducative approach as:

> a means of bringing together the organisation's perceptions of the need for change (external needs for change) and the individual's or group's perceptions of the relationship of that change to daily practice (internal needs for change) (p 11).

Chin and Benne (1976) reiterate that people need to be involved in all aspects of the change process and their behaviour and actions are guided by a normative culture or standardised form which involves open channels of communication in social systems and agreed norms of behaviour. This strategy supports humans' rationality and intelligence and also views change as a function of individual values and attitudes and socio-cultural roles and relationships which should never be undermined. Its assumptions about people contrasts with those proposed by the other two approaches. Normative-Reeducative strategy considers the involvement and participation of the client system as a major aspect of change. Chin and Benne (1976) view change resulting from the normative-reeducative strategy as more than just an increased knowledge, but also comprising a modification of values, attitudes and behaviour.

The nursing profession is gradually moving towards a more patient-centred approach to care. The recent emphasis on the nursing process is an indication of nursing's adoption of the normative-reeducative approach. The active involvement of patients in the assessment of needs and problems, the design of care plans which will help to resolve the problems and in evaluating the effectiveness of the care, are aspects of the normative-reeducative process in nursing (Pearson 1985, Keyzer 1985, Wright 1986).

Selection of a change strategy

Although it is very likely that most people will settle for the normative-reeducative approach to change in nursing practice, it is imperative to warn that a combination of the three may be required to achieve a successful outcome. There are no hard and fast rules concerning which approach needs to be adopted in a particular circumstance. Each situation of change should be treated on its own merit. In selecting the most suitable approach to change, Wright (1989) suggests a few useful questions that should be asked at the different phases of change (Figure 6.4) synonymous with the phases of the nursing process. These questions are presented in Table 6.2.

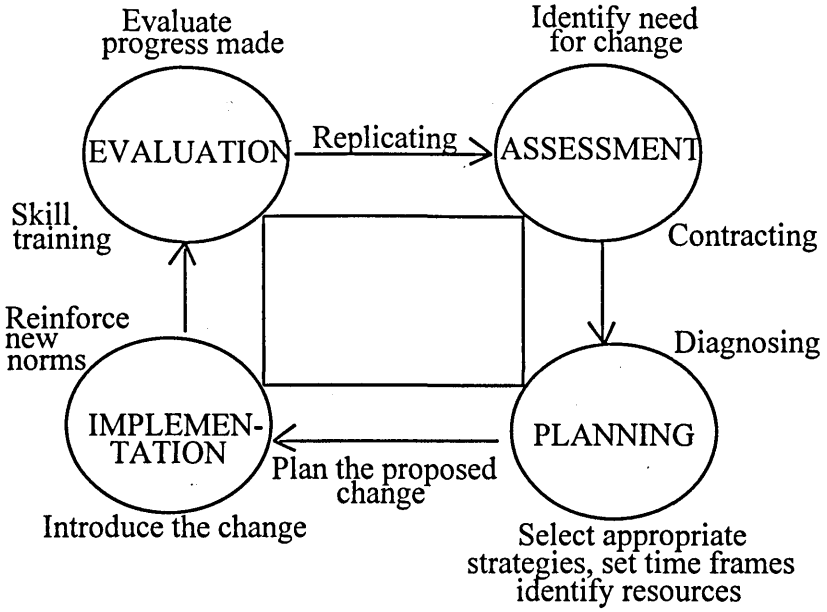

Fig 6.4. Phases of the change process

Table 6.2. Questions that will guide choice of change strategy

(a) ***Assessment of the problem that needs change.***	What is it that will be changed? Is it people's behaviour, attitudes or ideas? Why do you want to introduce the change?
(b) ***Planning and implementing the change.***	How are you going to implement the change? Where will the change be implemented? When will the change take place? Which resources will be needed to implement the change? Who is going to introduce the change?
(c) ***Evaluation of the change.***	What effect will the change have? Which criteria will be used to evaluate the outcomes of change? How will the results be communicated?

6.6. Phases of the change to primary nursing in the model ward

One of the objectives of this study was to introduce primary nursing into a model ward. From the assessment of the model ward in the pre-implementation era using Mackay and Ault's (1977) questionnaire, it was found that this ward was utilising the task-

oriented mode of organising nursing care (Table 6.3). In the post-implementation period the delivery of nursing care in the model ward was patient-centred.

Table 6.3. Focus of nursing care[6] in the model ward in the pre - and post - primary nursing eras.

Features	Preprimary era		Postprimary era	
	Yes	No	Yes	No
Part I Kardex contains identified problems, nursing interventions and expected outcomes	X	√	√	X
Assigned staff members responsible for planned care 24 hours per day, 7 days per week	X	√	√	X
Evidence that the interventions for patient's problems are carried out 24 hours per day, 7 days per week	X	√	√	X
Evidence of the use of communication plan in the ward	X	√	√	X
Diagram of communication plan	X	√	√	X
Written responsibilities of nursing staff members in relation to patient assignments	X	√	√	X
Part II Nursing progress notes consist only of information on nursing procedures and task performed	√	X	X	√
Day shift does the major portion of the nursing care on the unit	√	X	X	√
Nursing staff members assigned to specific tasks, duties or procedures	√	X	X	√
Nurse assignment to the desk on administrative duties	√	X	X	√
Kardex or nursing report comprised only of basic data information, procedures and treatments	√	X	X	√
A nurse assigned the duty of medicine and/or injection nurse	√	X	X	√

The nursing staff adopted a very rigid approach to care and adhered strictly to ward routines and tasks in the pre-change period. The primary aim of the system of primary nursing which was introduced into the research ward was to promote a family-centred approach to care, to enable the nursing staff to nurse the patient as a whole, to make care personalised and individualised and to enhance continuity of care by having one nurse -

[6] *YES for all answers in part 1 would indicate patient-centred nursing care.*
YES in all answers in part 2 would indicate task-oriented nursing care.
YES answers in at least three answers each in both parts 1 and 2 would indicate components of both patient-centred and task-oriented nursing care.

the primary nurse- take over the total responsibility of a group of patients from admission to discharge.

The change took into account some elements elaborated by Hale (1991) which include

1. The availability of an on-site change agent to work with the staff to bring about change
2. Literature and teaching in primary nursing to be made available.
3. Full support from managers and teachers.
4. Selection of a pilot site where the staff are willing and accept a need for change.
5. Time to develop experiment, learn and evaluate progress.

(p 12)

The phases of change in this project comprise:

(1) Preparatory phase

(2) Implementation phase

(3) Evaluation phase

Figure 6.5 and Table 6.4 show the phases of the change and the different activities which were involved in each phase.

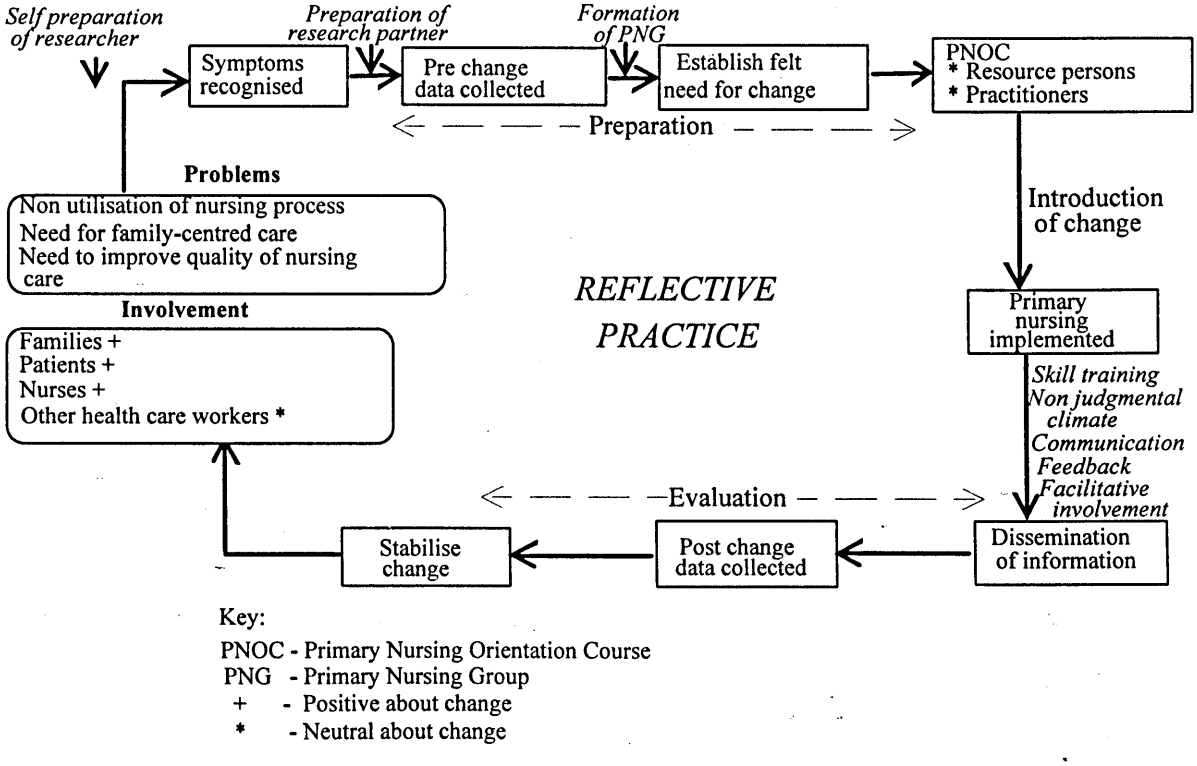

Figure 6.5. Phases of the change to primary nursing in the model ward.

Table 6.4. Phases of the change and the activities under each phase of the project.

Phase	Activities
I Preparatory phase	(1) Self-preparation of researcher.
	(2) Selection and preparation of a research partner
	(3) Pre-implementation data collection.
	(4) Establishing a felt need for change.
	(5) Adopting and facilitating a bottom-up change strategy.
	(6) Developing appropriate structures for family-centred nursing.
	(7) Facilitating professional learning and reflective practice.
II. **Implementation phase**	(1) Introducing innovation and facilitating change.
	(2) Providing support.
	(3) Creating a non-judgmental climate where creativity is fostered.
	(4) Feeding back data and facilitating communication.
	(5) Skill training
	(6) Collecting data.
III. **Post-change phase**	(1) Collecting data.
	(2) Disseminating information / sharing ideas about the change.
	(3) Stabilisation of the change.

6.6.1. The preparatory phase

This phase characterises the period of preparation for the study and includes all activities that were carried out with the aim of setting the grounds for the successful implementation of primary nursing practice in Nigeria. These activities addressed the issues of pre-implementation data collection, the researcher's self-preparation, preparation of the practitioners to see the need for change and accept the change, the

preparation of the controlling body of nursing profession in Nigeria and the preparation of the patient and family.

6.6.1.1. Self-preparation of the researcher

As the facilitator, the writer found it necessary to prepare herself for this onerous task of changing nursing practice in Nigeria to be family-centred through adoption of a work organisation pattern known as primary nursing. This preparation was aimed at enhancing her familiarity with the concept of primary nursing and equipping herself with the skills necessary for the practice of primary nursing. This is in line with Mauksch and Miller's (1982) advice that to be an initiator or a facilitator in a change programme, an individual must be conversant with the subject matter. Therefore literature searches were conducted on the subject matter and visits to primary nursing projects in the United Kingdom were carried out. Personal contacts with the nursing researchers and practitioners of primary nursing were undertaken to ascertain the different ways in which primary nursing is practised in the UK. Before the visits were done, the writer collected a list of established primary nursing centres from the Primary Nursing Network. The writer visited three primary nursing wards in Hull, and a primary nursing project in the Institute of Nursing, Radcliffe Infirmary, Oxford. It was also possible to discuss with the originator of primary nursing, Marie Manthey, who was at The European Nursing Development Agency (TENDA) in Lancashire, to see nurses who were undergoing some form of training on the 'Named Nurse Concept.'

6.6.1.2. Selection and preparation of a research partner

Considering the amount of work involved in this study and the fact that the researcher would not be available at all times to monitor the project, it was necessary that a research partner be used. The use of a research partner who was an insider in the organisation was to offset the constraints of the 'outsider' model of change adopted in this project. Some qualities were taken into consideration in the choice of a partner, viz.:

(1) A nursing practitioner in the model hospital.

(2) A nurse who is knowledgeable and will be able to perform the task of monitoring the project in the absence of the researcher. A nurse with at least a first degree preferred.

(3) One with sound clinical nursing expertise with teaching skills

It was planned at the outset of the project for an early preparation of the research partner. Someone was selected as early as December 1992 (5 months before change) at UNTH, the hospital that was initially proposed for the change to take place. But due to the unforeseen circumstances that led to the change in the original site for the project, there was an overall alteration in the set steps and preparation for the project. Because it would be impractical for the already selected research partner to be used for the new project site, it was mandatory to choose another partner. The new research partner was selected on the 12th of April 1993. He holds a first degree in Nursing Administration and works in the Nursing Administration unit of St Luke's Hospital: he had a strong educational and administrative background. He had the conceptual and educative skills needed for the implementation of primary nursing and was strongly committed to the philosophy of primary nursing. He had strong support from nursing administration which allowed him the freedom to plan and make decisions. He was involved in the routine administration of the nursing services in the hospital and undertook some direct patient care activities in situations of nurse shortages.

The researcher had a series of meetings and discussions with the research partner, initial discussion sessions of two hours per day occurred between the 14th and 18th of April 1993. Topics discussed included the nature of the project, objectives of the study, the role of the research partner in the study; the concept and practice of primary nursing, data collection exercises, selection and training of research assistants, primary nursing orientation course, etc. They both worked hand in hand in making the project in the hospital a success. The pilot study and scoring of the wards were carried out by the researcher and her research partner. Both of them conducted ward meetings with nurses and with patients and families. In some instances, the research partner did represent the

researcher in meetings in order to learn how to manage the project independently in the absence of the researcher.

6.6.1.3. Pre-implementation data collection

On the 27th and 28th of April, one month prior to the implementation of primary nursing into St. Luke's Specialist Hospital Anua, preprimary nursing data were collected as a pre-test to offer a baseline for comparison with postprimary nursing data. These pre-test data were collected before preparatory activities took place to rule out any possible effect that these activities might have on the initial findings of the study. The data collected were:

(1) Focus of nursing care: This information was to elicit the nursing delivery pattern the model ward was utilising before and after the implementation of primary nursing. The assessment was done through the use of a questionnaire designed by MacKay and Ault (1977) (see Appendix IX).

(2) Quality of patient care (using QUALPACS).

(3) Patient and family satisfaction with nursing care (with the use of the Modified Riser satisfaction questionnaire and semi-structured interview).

(4) Patient and family interaction with nurses (using the interaction sheets).

6.6.1.4. Establishment of a felt need for change

An important feature that was emphasised in this project was the establishment of a felt need for change; to get the client system in the change process to see the need for change; to make them uncomfortable with the status quo. This exercise commenced as soon as the researcher took the decision to research into the area of family-centred care. She started by writing some informal letters to colleagues (nurses) in Nigeria a few months after she had commenced her postgraduate programme. These letters mostly addressed the issue of quality of nursing care rendered to patients in Nigerian Hospitals. The writer never suggested in the letters whether the quality of care was poor or good;

she always sounded neutral in such letters. Their responses were on the negative side, most of them complaining of poor quality of care, some stating they were not satisfied with their jobs and others sounding indifferent. In the follow-up letters written by the researcher to find out if they were interested in having any thing done to change the situation, all responses were very positive and this gave the researcher the zeal to go on with designing a means to introduce a nursing pattern that might help to solve the problems expressed in the letters of these nursing practitioners.

The ward sister in charge of the model ward was informed of the proposed change and the wish to use him/her as the primary nursing co-ordinator for the model ward. The co-ordinator also gave the writer the impression that nurses in the chosen ward in particular and the whole hospital were concerned about the lowered standard of nursing and were keen on having any change that would help to raise the standard of nursing in the hospital. The writer was careful not to sound as if she was imposing the change on the nursing practitioners, patients and the nursing and hospital administrators and other health care practitioners.

After the collection of the pre-implementation data, the researcher called a first meeting with all staff of the chosen ward to discuss with them formally about what they thought about the state of nursing care and what could be done to improve the standards of nursing care. Some of the nurses accepted the need for the change, while others argued on the feasibility of a programme of change in the Nigerian Nursing System. A second meeting was arranged, this involving the patients and their relatives. In this meeting, a video on primary nursing practice was played and this was seen to increase the acceptance of the need for the change. The feasibility of the practice of primary nursing seemed clearer to the practitioners, they became more interested in the change; to try out what they have watched other nurses do in the film. A discussion session ensued after watching the video and the writer explained some ambiguities and reassured them some lecture sessions were going to be planned so that they would know more about the concept of primary nursing in order to be able to practice it. All patients and relatives

unanimously asked for the change. The researcher outlined their roles in the proposed changes, and attempted to identify the general feelings and attitudes of the staff concerning primary nursing. She also clarified the expectations of all concerned and helped to explain the roles within the project. The researcher and the staff agreed on some elements on which the project should focus. These included:

1. Development of a teaching programme.
2. Identification of resource persons.
3. Formation of a Primary Nursing Group (PNG).
4. Development of standards of care and the ward mission statement.
5. Changing the organisation of nursing to primary nursing.

The researcher also informed other health team members about the proposed change. Formal meetings and informal discussions were held with doctors who had patients in the model ward. This was an important factor to consider since literature has shown conflicts between nurses and doctors as a potential constraint to primary nursing practice (Archibong 1993). Furthermore, the researcher organised a lecture session (an opening seminar on the introduction of primary nursing into the hospital) for all heads of units in the hospital to give a brief picture of what is involved in primary nursing and how this system of care would enhance their own practice. Appendices XII and XIII show the address which was presented by the Assistant Director of Nursing of St. Luke's Hospital at the opening seminar and that by the researcher, respectively.

6.6.1.5. Adoption of a bottom-up strategy for change to primary nursing in the model ward

A bottom-up strategy for change was adopted to help the nurses empower themselves and raise their self-esteem. A bottom-up strategy of change involves 'worker participation' (Ersser and Tutton 1991). The client system was facilitated to see the need for change and they were very involved in all stages of the change. Care was taken not to allow the top echelon of nursing or general hospital administration to impose the change on the model ward. Ward nurses were given time to think through the need for the change. A Primary Nursing Group (PNG) was formed to help staff to plan the

change the way they wanted it provided their plans did not go contrary to primary nursing principles and philosophy. Solutions were sought from the nurses rather than being imposed by the author and others in authority. The formation of this group was based on Manthey's (1992c) advice that for primary nursing to succeed an informal group of nurses should be constituted. The PNG was formed after the first meeting with nursing practitioners. It was decided that the group would consist of a subset of the ward staff because of ease of management and to facilitate decision making. Staff were advised to nominate their representatives. Members were picked from all staff grades in the model ward. Therefore the PNG was made up of eight members; the Assistant Director of Nursing Services (ADNS) of the hospital (who volunteered to be a member), one chief nursing officer (CNO), one principal nursing officer (PNO), one senior nursing officer (SNO), one nursing officer I (NO I), one nursing officer II (NO II), one ward orderly and the research partner. The group was led by the writer to set its goals.

The Goals of this group are:

(1) Addressing the philosophy of care and setting standards before the implementation of primary nursing (See Appendix XIX for Philosophy of care set for the Model Ward)
(2) Provision of leadership for implementing and maintaining primary nursing.
(3) Realistically developing a primary nursing system that would be feasible in the setting.
(4) Setting standards and laying down the accepted independent decision making role of the associate nurse while the primary nurse is not on duty.
(5) Regulating the pace of the transition programme.
(6) Liaising between the model ward and the hospital administration to communicate the needs of the practitioners e.g. staffing needs, etc.
(7) Deciding on the handover pattern to be adopted.
(8) Deciding on the patient allocation system to be utilised.

6.6.1.6. Development of appropriate structures for family-centred nursing

Family members and other people significant to the patient were involved in all stages of the change; in the preparatory phase, in the implementation phase and in the evaluation phase of the change, in accordance with Dahlen's (1978) advice that the primary nursing care concept demands closer contact with patients and families. A

meeting between the researcher, the research partner, the nursing staff and the patients and families took place on the 9th of May 1993 - the first of its kind in the hospital. In this meeting, a family member said:

> This meeting, I feel, is an indication of what the new system has in stock for all of us. We feel part of the system and not just visitors, family members but members of the health team. If such meetings are held regularly, we will be very happy to discuss our problems and we hope that things will improve in the ward.

All patients and family members openly welcomed the change. This is reflected in the statement of a patient:

> If that type of nursing will make me have one nurse whom I can chat with, tell my problems, confide in and feel more secured, then I am ready for it.

6.6.1.7. Facilitating professional learning and reflective practice

Professional learning was facilitated through the institution of two types of educational preparation training. (1) Educational preparation of the resource persons and other key people that could take on the role of the change agent. (2) Educational preparation of the practitioners (nurses in the model ward).

Educational preparation of the resource persons

Three discussion sessions of four hours each with the resource persons were organised from 10th through 12th of May 1993, to explain the concept of primary nursing and how it could be practised. This was particularly important because, as a group, the resource persons were required to adapt the most, and to encourage participation and discussion of possible practical problems. The resource persons included the primary nursing co-ordinator, the ADNS in the hospital and other senior nurses who were interested in the practice of primary nursing. The training was not only intended to increase the understanding of primary nursing for key nursing experts, but also aimed at preparing them to be able to take over the change process from the writer, own the change and see themselves as the change agents. Since this was an 'outsider' model of action research as described by Titchen and Binnie (1993c), the writer saw herself as not

having any authority in the situation and therefore would not initiate or carry out the change on her own. The writer was thus acting to support these 'would-be' change agents. The researcher continued to bear in mind that if the participants in the change are not given the opportunity to own the change and there are no change agents to take over from her, there would be a reversion to the old ways when she (outsider) left the situation. The idea of training the 'would-be' change agents at the beginning of 'outsider' type of action research is derived from works of other action researchers (Lathlean and Farnish 1984; Smith 1986; Hunt 1987; Webb 1989; Armitage *et al.* 1991; Wilson-Barnett, Corner and De Cale 1990; Meyer 1991). The plan to shift the target population's reliance from the writer to reliance on itself was in line with Rogers' (1972) advice that change agents should attempt to put themselves "out of business by enabling ... (their) clients to be their own change agents" (p 197).

The 'outsider' model of action research is contrasted with the 'insider' model where the clinical leader initiates and manages a change programme; he/she is an insider in the organisation who can integrate authority in the setting and therefore would be accepted and respected by the other members of the group. In this case, since the change agent belongs to the group, he/she is always present to monitor the change and there is no fear that the participants will revert to their old ways at any point in time in the change process.

Educational preparation of other nursing practitioners

A two-day Primary Nursing Orientation Course (PNOC) was organised by the researcher for the staff of the model ward. The purpose of the PNOC was to familiarise the staff with concepts, process and experiences associated with decentralised decision making. Other nurses in the hospital participated in this course. The nurses in the model ward were divided into two groups and the course was arranged for the two groups on different dates. Each group had two days for the course, making a total of four days for the two groups; 18th and 19th of May 1993 for group I and 20th and 21st of May 1993 for group II. The time-table for the course is shown in Table 6.5.

Table 6.5. Primary nursing orientation course time-table for group I on the 18th - 19th May 1993 and for group II on 20th - 21st May 1993.

Day I	
Time	**Topic**
9.00-9.25AM	Introduction to course and course assignment information
9.30-10.00AM	The change process: How to be an effective change agent.
10.05-11.00AM	Primary nursing: Historical and conceptual Issues.
11.00-11.40AM	Communication skills
11.45AM-12.20PM	Assertiveness training
12.25-1.25PM	Lunch
1.30-2.30PM	Steps in decision making
Day II	
Time	**Topic**
9.00-10.00AM	Benefits and difficulties associated with the practice of primary nursing
10.05-11.00AM	Role structure in primary nursing
11.05AM-12.00PM	The structuring of the primary nursing unit.
12.05-1.05PM	Lunch
1.10-1.30PM	Staff scheduling in primary nursing unit.
1.35-2.00PM	Evaluation in primary nursing practice
2.05-3.00PM	Nursing process in primary nursing practice

The decision to have the course in two groups was to allow the model ward to be covered by the other group of nurses when one group was having the course. This helped a lot as the nursing care on the ward continued during the period of the course - there was no need to destabilise the nursing system in the hospital by asking nurses in other wards to work in the model ward while the course was in progress.

The course covered areas of change, the primary nursing concept, skills required for the successful practice of primary nursing, role structure in primary nursing practice and the

nursing process, using the textbook written by the researcher (Archibong 1993) for this purpose. Experts were carefully selected to discuss the different subjects. At the end of the course, a certificate of participation was issued to the participants (See Appendix XX). Other members of the health team were informed about the proposed change, what they were to do and how the change would help in improving patient care and the general relationship between nursing care and other facets of health care. Guidelines on the roles of the primary nurse, associate nurse, the primary nursing co-ordinator, ward orderly and the ward clerk were distributed to all nurses in the model ward.

6.6.2. Phase II: Implementation Phase

6.6.2.1. Introducing innovation and facilitating change

Primary nursing was implemented in the model ward on the 26th of May 1993 after due motivation of the nurses, patients and others to have a desire for the change and due preparation of self and participants in the change programme. The change was facilitated to promote stability and prevent or reduce the risk of failure or reverting to old ways. The writer kept a diary of events that took place regarding this change.

One of the aims of this study was to introduce primary nursing into the model ward. The primary purpose of primary nursing that was introduced into the model ward was to enable nurses to change their approach to a family-centred mode of organising nursing care; to promote individualised nursing care to patients and the family.

The change will be discussed under the following subtitles:

(a) Change in work allocation.

(b) Change in assignment of patients to nurses.

(c) Changes in handover and recording system.

(d) Changes in associated practices:

Collaborative duties

Nursing process

Change in roles and responsibilities.

A. Change in work allocation

Taking into account the differentiation of staff and the type of ward design, the PNG suggested the use of the modular primary nursing system in the model ward. The ward was divided into four modules; each of which was headed by a primary nurse. The original four sections of the ward were converted into four primary nursing modules as shown in Figure 6.6. These are:

Module I: Infections like cellulitis.

Module II: Assault and minor injuries secondary to Road Traffic Accident (RTA)

Module III: Medical, burns and post-operative cases.

Module IV: Fracture resulting from any other cause.

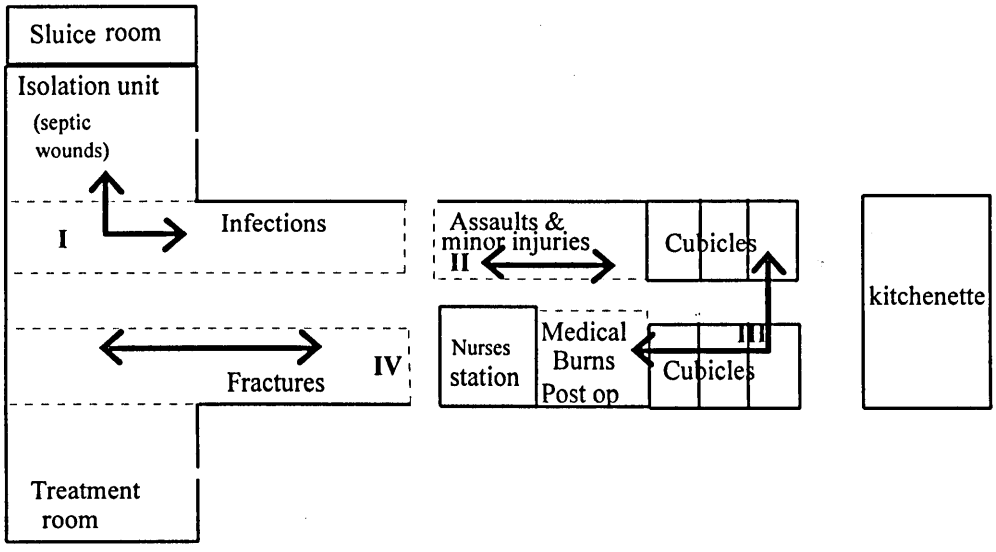

Fig 6.6. Layout of the Model ward showing the four primary nursing modules

In order not to cause administrative resistance to change, the researcher did not ask for any alteration in the existing staffing level in the model ward. Primary nurses acted as associate nurses for patients whose primary nurses were not on duty. Primary nurses were encouraged to desist from taking major decisions for their associate patients in order to avoid conflict between them and the primary nurses for these patients.

The primary nursing co-ordinator sometimes acted as associate nurse or primary nurse. The primary nurse stayed permanently in his/her module and took care of his/her primary patients from admission till discharge. The case load for the modules were not equal in size. In module I, which was for a more long term group of patients, there were 10 beds, while there were 9 beds each for the other modules as shown in Table 6.6.

Table 6.6. Primary nursing modules and their number of beds

Module	**Number of Beds**
Module I:	10
Module II:	9
Module III:	9
Module IV:	9

The primary nursing co-ordinator prepared the rota and made sure that all shifts were properly covered to prevent discontinuity in care which may result from borrowing of nurses from any other ward in the hospital. Primary nurses worked on all shifts. The rota was prepared such that there was at least one member of each module on morning duty and evening shift respectively. In the absence of the primary nursing co-ordinator, the nurse in charge of emergency situations (compound nurse) in the hospital was contacted if need arose.

B. Assignment of patients to primary nurses

The assignment pattern adopted in this study was the attachment of primary nurses to medical groups in the ward. To ensure continuity of care, fixed assignment of associate nurses to modules was carried out. A routine was adopted in which an associate nurse might be assigned on a particular shift to help in any other module if necessary. The bulletin board had a display of the names of primary nurses, associate nurses and their patients. It was not always possible to have the primary nurses to carry out admission of their patients. The initial planning of patient care was carried out by any nurse in a particular module who admitted the patient. A review of the care plan was done by the

primary nurse whenever he/she resumed duty. When possible, the rota was prepared such that the primary nurse attached to a particular medical team was on duty on the consulting or clinic day for that medical group in order to be able to admit his/her patients direct from the clinic.

The primary nurse accepted a twenty-four hour responsibility for his/her caseload and demonstrated this by:

- planning care beyond his/her own span of duty,
- handing over personally to his/her associate nurse,
- seeking reports on her patient's progress from associate nurses and other staff involved in the care of that patient, and
- making and recording all significant changes in the care plans for her patients.

On admission, the primary nurse or any other nurse who admitted the patient introduced himself/herself and the other members of the module to the patient and the family, explained the ward policy, roles of member of the module and ensured that the patient and his/her relatives understood clearly the ward policy and gave them the opportunity to ask questions. He/she also encouraged them to feel free and contact the primary nurse or any other member of the module when the need arose.

The first meeting between a patient and his/her nurse was always considered crucial; it was the basis for the establishment of relationship. The primary nurse usually agreed the goals and objectives of the care plan with the patient and relatives and reviewed the patient's progress with them as well. Responsibility for suggesting appropriate nursing intervention remained with the primary nurse but the patient was continuously allowed to play a major role in decision making concerning his/her care.

The associate nurses followed the care plan and consulted the primary nurse before making any major change. When the primary nurse was not on duty and there was urgent need to make major changes, the associate nurse was required to consult any senior nurse on the ward before such changes were made. Afterwards, it was the responsibility of the associate nurse to inform the primary nurse of the changes, when the primary nurse resumed duty.

C. Handover and recording system

The kardex system of recording the patient's progress was used in the ward. A care plan was kept for individual patients using an existing format. Handovers were of two types. Type I involved the report on all patients in the ward by the night staff which took place once a day in the nurses' station. Type II involved the individual primary nursing modules direct handover at the patients' bedside which took place on all shifts. This was to allow patients and families to be involved in the continuous planning and evaluation of their care. The report book was still in use but this time having input from all the modules and on all patients.

D. Changes in associated practices

A performance review system was adopted through regular meetings of the individual primary nursing team with the research partner and the researcher. In addition there were meetings for this purpose involving only the primary nurses with the researcher and research partner. The regularity of these meetings progressed from weekly at the initial stage of the change to monthly when the change stabilised. In the meetings, case presentations took place and reflection on practice and supervision were done. Change of roles and responsibilities occurred in the model ward. The chief nursing officer in charge of the ward became the primary nursing co-ordinator. The role of the charge nurse (CNO) changed from that of executor to that of resource person for the nurses, directing the staff, giving assignments, planning the working shifts and introducing the new staff to the change.

The co-ordinator in agreement with all the staff in the ward selected the primary nurses based on the following criteria set by the PNG.

(1) Five years post-qualification experience.

(2) Clinical expertise with nursing of particular patient types.

(3) Commitment to work.

(4) Regular attendance at continuing education programmes.

(5) Patients' needs.

Four out of the twenty-five trained nursing staff were chosen as primary nurses. Therefore the remaining nurses were associate nurses. Module I had one primary nurse, five associate nurses and one ward orderly, Module II - one primary nurse, five associate nurses and one ward orderly, Module III had one primary nurse, five associate nurses and one ward orderly who also covered Module IV, and Module IV was made up of one primary nurse and five associate nurses (see Figure 6.7).

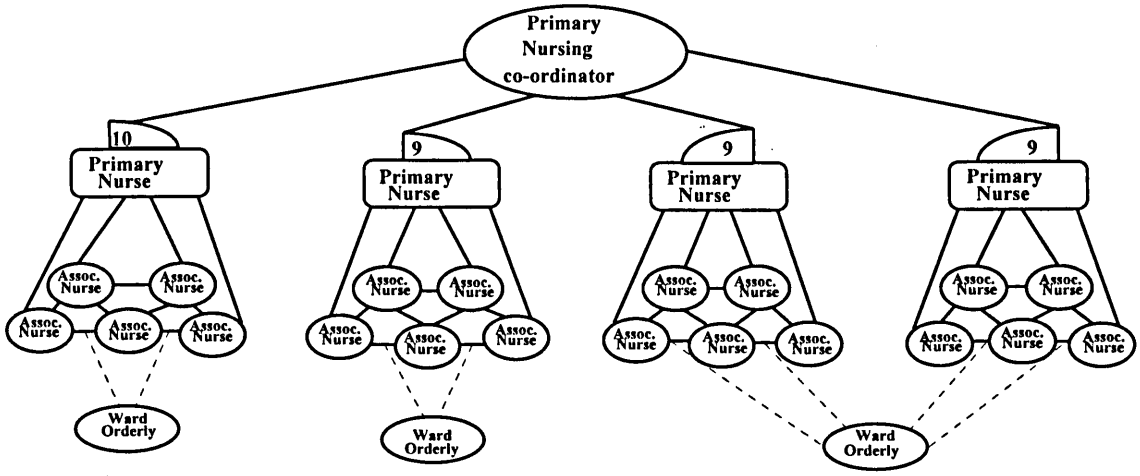

Figure 6.7. The modular primary nursing system practised in the model ward.

Primary nurses and other members of each module liaised directly with other health team members on matters concerning their patients. The primary nurse and other nurses in the module were charged with the responsibility of discussing the care and the treatment plans for their patients with all other staff involved in the care. Handling of

relatives was mainly done by the primary nurse or associate nurse on duty in any particular module. Each individual primary and associate nurse was encouraged to undertake this role when necessary with some support from the primary nursing co-ordinator until the confidence of that nurse improved. However, any nurse who felt incapable or not ready to discuss with relatives was encouraged to ask the nurse in charge to talk on his/her behalf, but it was essential that the nurse was present at the conversation.

Allocation of duty within each module was by patient allocation. Decisions concerning patients in each module were made by the primary nurse in conjunction with the associate nurses. Patients and family members were involved in decision making concerning their health care. The nursing process had also gone beyond the theoretical stage in which it was before the introduction of primary nursing. Care plans were drawn up for individual patients. Also progress notes were kept for individual patients. Evaluation of all patients was done on all shifts.

Continuity of care for individual patients was provided. Visiting hours were more flexible in the model ward. Nurse contact time with patients was seen to increase. This was ensured by redefining the work of support staff (ward orderlies). All non-nursing duties were carefully carried out by these staff under the supervision of the primary nurse thus giving nurses time to carry out direct patient care. A summary of changes which occurred after the introduction of primary nursing as compared to the previous system is shown in Table 6.7.

Table 6.7. Comparison of previous nursing care delivery system to present system

Elements	Previous system	Present system
Accounta-bility and continuity	Charge nurse had 8-hour authority and responsibility for care of all patients in the ward. 8-hour task allocation for other nurses.	PN has 24-hour authority and accountability for care of patients in a caseload. Patient allocation within modules.

Patient advocacy	No one identified nurse the patient/family could approach to get problems solved.	PN is the person patient/family can approach to get problems solved.
Handover & report systems	At the nurses' station. Problem-oriented report on selected patients. Use of report book only.	Type I: Nurses station; night staff handover to all nurses on all patients. Type II: Patient bedside; handover by individual primary nursing module on all shifts. Wellness and problem-oriented report on all patients. Report book, care plans and progress notes.
Decision making	Charge nurse made decisions concerning nursing of all patients in the ward.	PN prescribes care. AN may change care temporarily to meet immediate needs of patients. AN follows care plan and implements care prescribed. PNC makes administrative decisions.
Family involvement	Visiting hours were fixed and family members were less involved in the care of their patients.	Flexible and non-restrictive visiting times. Family involved in all aspects of care; assessment, planning, implementation and evaluation.
Nursing process	Rudimentary	Care plans drawn up for individual patients. PN initiates care plan (when possible), prescribes care, provide and evaluate care. ANs carry out plan designed by PNs and evaluate care.

Key:

PN	Primary nurse
AN	Associate nurse
PNC	Primary nursing co-ordinator

6.6.2.2. Time scale of change

These changes were introduced gradually with one change following on logically from others. It was so planned that the first set of change would be in the allocation of work and assignment of patients to primary nurses. These were followed by the change in the recording system and associated practices.

Although the change was introduced in May 1993, the practice of primary nursing in the ward was disrupted by a strike action by the doctors and nurses which took place

between July and August, 1993. Effective practice resumed in September, 1993. Another interruption in the scale of events in this study was the transfer of the primary nursing co-ordinator in October, 1993. The new primary nursing co-ordinator was equally very interested in the change and this motivation helped in her preparation to take up the role. She was given two days orientation and educational preparation by the research partner. She carried on smoothly from where the previous co-ordinator had stopped.

6.6.2.3. Provision of support

The researcher, research partner and resource persons were very involved in advising and facilitating the change process, largely supporting the staff, encouraging informed decision making and supporting the taking of calculated risks by practitioners. This was in line with Manthey's (1978) advice that "for primary nursing to succeed, it has to be done in an atmosphere where risk taking and judgement making are supported, where everything isn't done according to rules and regulations but where a nurse is expected to use clinical judgement in this or that precise situation" (p 326).

6.6.2.4. Creating a non-judgmental climate

A non-judgmental climate was created and creativity was fostered. Everyone was given an opportunity to practise nursing at their own pace and without pressure and an atmosphere of support was provided. Regular meetings were held and everyone was allowed to make contributions and suggestions.

6.6.2. 5. Feeding back data and facilitation of communication

The researcher kept the practitioners informed of all that happened in the unit. All data were fed back to them. Any aspect that needed to be re-addressed was treated in an appropriate way. Communication was facilitated and misunderstandings / misinformation cleared up. This was ensured by making available the research partner and other resource persons at the time for consultation and advice. The researcher encouraged the research partner to make himself available and encouraged the

practitioners to ask for assistance when there was need for it. Whenever possible the researcher was also available to answer questions.

Regular meetings between the researcher, research partner and members of the model ward took place. The major focus of this project was the development of a structure for meetings between the researcher, the nursing staff, patients and families. In these meetings, issues concerning the nurses in their work were discussed and the researcher / research partner fed back their perceptions to them. Researcher's / research partner's perceptions were based on observations of patients, nurses, informal discussions with patients and families, nurses records, etc.

6.6.2.6. Skill training

Coupled with the initial preparatory classes that were given to practitioners, staff were exposed to the mastery of those skills which would enhance their practice and the researcher, research partner and the resource persons were available to explain areas of difficulties.

The change and experiences gained were kept to one site at the moment but might be transferred to other wards in due course. The researcher gave seminars/talks to other nurses outside the hospital who were interested in the adoption of primary nursing practice. Others were welcomed to the model ward to watch how the programme ran.

6.6.3. Evaluation phase

6.6.3.1. Data collection

Data collection took place in all the phases of the project; the pre-change, during the change and the post-change phases. In the pre-implementation phase, the data were meant to serve as basis for comparison with the post-implementation data and to act as a pointer to the direction of change. During the change, the data served to give an on-going report on the progress of change, to help detect problems early and provide solutions. Data collected in different phases of this study are shown in Figure 6.8.

Pre-change period *April 1993*		Post-change period *December 1993*
* Focus of nursing care * Quality of nursing care * Nurse-patient interaction * Nurse-family interaction * Patient satisfaction * Family satisfaction	**Change period** * Interviews with research ward staff patient and family * Meetings with staff patient, family and others * Diary of events	* Focus of nursing care * Assesment of primary nursing practice * Quality of nursing care * Nurse-patient interaction * Nurse-family interaction * Patient satisfaction * Family satisfaction

Fig. 6.8. Stages of data collection in the model ward.

6.6.3.2. Disseminating information / sharing ideas about the change

Information about the change has been disseminated through public lectures, visits of nursing experts from all over the country, announcement of the change by the media (Akwa Ibom State Radio Corporation News Item 17th October 1993). Nursing practitioners from other hospitals attended the Primary Nursing Orientation Course.

6.6.3.3. Stabilisation of change

This was encouraged through regular meetings with practitioners of change. The research partner continued to work on the project even after post-implementation data had been collected. This is reflected in the report by the research partner shown in Appendix XXI.

6.7 Report of nurses' responses on the assessment of the primary nursing practice in the model ward

Using the primary nursing assessment form (see Appendix X) designed by Lippincott (1985), the practice of primary nursing in the model ward was assessed. The primary nurse and an associate nurse in each module was given the questionnaire to fill in. From the responses the primary nursing practice in the model ward is described as follows.

Primary nursing had been practised in the model ward six months before the assessment took place. Assignment of patients to primary nurses was through head nurse

assignment and the primary nurses would in most cases be the admission nurse. This was made possible by having the primary nurses attached to medical groups. Each primary nurse was rostered to be on duty on the consulting day of the medical team to which he/she is attached. Patients could then be admitted by the primary nurses direct from the Out Patient Department (OPD). In case of emergency, an associate nurse would admit the patient, draw up a temporary care plan, which would be reviewed by the primary nurse as soon as she is available.

In making assignments / selecting primary patients, the patient condition was matched with the nurses, in the sense that nurses' skills were considered in their attachment to particular medical groups. For example, the primary nurse for the trauma and assault section was a trained emergency nurse. Primary nurses were rostered to work on any one of the shifts.

Primary and associate nurses were identified by names on chart and bulletin board. The patients were made aware of their primary nurses through self-introduction by the primary nurse and by introduction of the primary nurse by the ward co-ordinator. Verbal and written reports were given, both with the entire staff included and exclusively in the different modules through walking rounds.

Care plans other than report books were used for the report. Progress reports were made on all patients. Care plans were initiated, most of the time, by primary nurses and occasionally by associate nurses. Those who contributed to the care plan included, the primary nurse, associate nurse, patient, and family. Care plans were initiated within 24 hours of patient admission into the ward.

Other shifts always followed the primary nurse's plan of care. Commenting on this point one nurse stated:

> Other shifts can deviate from primary nurse's plan of care in the absence of the primary nurse where patient condition improves or deteriorates. But the primary nurse would review the care plan as

> soon as s/he reports on duty. Evaluation of the care plan was done as frequently as necessary, at least every 24 hours, depending on patients' condition. Patient care conferences were held monthly. Discharge planning were done.

The primary nursing co-ordinator acted either as primary nurse or associate nurse. There was a primary nursing orientation course to prepare nurses for primary nursing practice but there had not been any other course since the practice took effect. Primary patients were reassigned to another primary nurse if the primary nurse for a module was away over a period of one week.

Varied responses to the question about whether the nurses felt they were doing primary nursing occurred and these are shown in the direct statements that follow.

One nurse responded:

> I feel I am doing primary nursing for the following reasons:
> (1) I try to treat my patient as individual and provide the best possible care using available resources.
> (2) I introduce myself as the primary nurse to the patient and the associate nurses within 24 hours.
> (3) I include my patients in the plan of care as well as members of his/her family.

Another nurse remarked:

> I plan patient care for 24 hours with the patient and the family, I involve the patient and family in the care I carry out for them, I treat my patients as individuals, I address their total needs, and within the module we use patient allocation system. The unit is headed by a primary nursing co-ordinator. Primary nurses and associate nurses work hand-in-hand to give 24 hours care to their designated patients. We are responsible and accountable to the care of all the patients under our care.

On how the respondents felt about primary nursing generally, the nurses in the model ward had this to say:

One nurse stated:

> I feel more satisfied in dealing with my patient because it affords me the opportunity to know more about my patient, his/her family, occupation and problems. I feel it will make the patients to recover from their illness fast.

Another nurse commented:

> My patients are more willing to confide in me after seeing that I am interested in them and helping them to solve their personal problems. Generally, I think the primary nursing concept should be embraced in all the wards in the hospital.

Adding to this, another nurse asserted:

> Primary nursing is the best system of nursing because it is easy to practice. It is less tiring, open and honest system conducive for both patients/families and nurses. The patient is involved in the planning of his care, it improves the professional standard of nursing. Therefore I feel that it should be practised in the whole country.

6.8. Summary

The majority of authors who discuss implementation of primary nursing recognise the need for planned change (Elpern 1977, McCarthy and Schifalacqua 1978, Ferrin 1981). This chapter has shown how primary nursing was successfully implemented in the model ward through systematic planning of the change. Utilising Lewin's (1958) model in conjunction with Lippit *et al.'s* (1958) model of change to prepare for the change, implement and evaluate the change to primary nursing.

It is commonly believed that one of the most important prerequisites to the implementation of primary nursing is a positive attitude towards the nursing process, because of its emphasis on patient-centred nursing (Manthey 1980b). The staff of the model ward did not only show a positive attitude to the nursing process but used it in assessing, planning, implementing and evaluating the care given to patients. Primary nursing practice in the model ward was also characterised by change in work allocation, change in patient assignment, changes in handover and recording system and changes in associated practices; collaborative duties, and roles and responsibilities. The change did

not require more nurses to succeed nor was there any additional cost to the hospital to run the primary nursing ward.

The three major elements of this change were: The involvement of the staff at the unit level, support from management and support and participation of patients and families. Although the other health care practitioners were not particularly positive towards change yet they were not resistant. There is hope that full participation of these health care workers will take place with time as the practice of primary nursing continues in the model ward.

CHAPTER SEVEN

DATA PRESENTATION AND INTERPRETATION OF RESULTS

7.0. Introduction

When confronted with a bulk of data relating to each of a number of variables, the researcher is faced with the task of making the raw data meaningful. When large amounts of data are organised it becomes possible to detect patterns and tendencies that would otherwise be obscured (Bryman and Cramer 1990). This chapter is concerned with making the raw data meaningful for patterns to be easily discerned. This chapter presents: statistical techniques used for data analysis, and presentation and interpretation of data on personal characteristics of the respondents, quality study, satisfaction study and interaction study.

7.1. Statistical techniques used

A decision on which statistical procedures to be chosen for any study is based on the following factors:

1. Levels of measurement or type of data obtained from the research tools used.
2. Type of research questions asked in the study.
3. Type of sample design or sets of subjects involved in the study - related or unrelated samples.
4. Number of variables measured.
5. Number of experimental conditions or research instances involved in the research, e.g. two group design or one group design.

Careful consideration of the above conditions made the writer decide to use both descriptive and inferential statistics for data analysis. Since unrelated samples were used for the study, unrelated statistical tests were adopted. Descriptive statistics

undertake to order, measure and summarise data. They are basically used to describe the characteristics of a sample or population in terms of one variable (Reid 1987). Since descriptive statistics can oversimplify the data, thus distorting one's understanding of how individual respondents performed in the study (McCall 1980), inferential statistics can be used to determine if the difference found between groups is a real difference or is only a chance difference. Inferential statistics are used to make inferences from the study population.

In the present study the following statistical tests were used:

To show the difference between two variables:

T test, Chi-square

To show association between two variables:

Phi-coefficient, Cross tabulation, Chi-square, Eta coefficient and Eta^2, Pearson Product-Moment correlation coefficient.

To test for internal consistency and discriminant validity:

Cronbach Alpha reliability test

Inter-item correlation

Subscale correlation

The level of 0.05 significance ($P \leq 0.05$) was used for statistical tests. Data were analysed by using a Statistical Package for Social Scientists (SPSS) (Norusis / SPSS 1985a).

Areas of study and statistics used

(a) Introduction of Primary nursing into a model ward in a hospital in Nigeria. (This has already been discussed in the preceding chapter)

Sample size: All patients and all nurses in the ward; A thirty-seven bedded ward with 28 nurses (25 trained and 3 ward orderlies).

Data collection instruments: Scoring sheet to select model ward, questionnaire for determining the type of nursing care used in the model ward.

Data level: Nominal

Statistics used: Descriptive

(b) Respondents characteristics:

Sample size: Pre-implementation period - 10 patients and 8 family members.

Post-implementation period - 8 patients and 6 family members

Data Collection instrument: Nursing notes and patients case notes.

Data level: Nominal

Statistics used: Descriptive (Percentages)

Areas analysed: Age, sex of patient, length of stay, diagnosis, sex of family member, relationship of family member to patient, and regularity of visit of family member.

(c) Quality study

Sample size: Pre-implementation period - 10 patients and 8 family members.

Post-implementation period - 8 patients and 6 family members

Data Collection instrument: QUALPACS

Data level: Ordinal/Numerical - According to Greene and D'Oliveira (1982) and Lord (1953), it is perfectly justifiable to allot numbers to ordinal scales and then treat the ordinal data from such scales as if they represent equal numerical intervals. Also mean scores are used.

Statistics used: Unrelated t test

Areas analysed:

Psychosocial individual subsection.

Psychosocial group subsection.

Physical subsection.

General subsection.

Communication subsection.

Professional implication subsection.

Overall means.

(d) Satisfaction Study

Sample size: Pre-implementation period - 10 patients and 8 family members.

Post-implementation period - 8 patients and 6 family members

Data Collection instrument: (1) Patient satisfaction questionnaire and family satisfaction questionnaire. (2) Semi-structured interview with patients and family members.

Data level: (1) Ordinal/Numerical (Same as that explained under quality study).

(2) Nominal.

Statistics used: (1) Unrelated t test

(2) Qualitative analysis; interview report and discussion.

(3) Eta and Eta^2 test for association.

(4) To test for internal consistency and discriminant validity:

Cronbach Alpha reliability test, Inter-item correlation,

Subscale correlation

(5) Pearson product-moment correlation coefficient.

Areas analysed: For both family and patient data

Technical -professional section
Educational relationship section
Trust relationship section
Overall score
Information for evidence of task / patient-centredness

(e) Interaction study

Sample size: Pre-implementation period - 10 patients and 8 family members.

Post-implementation period - 8 patients and 6 family members

Data Collection instrument: Nurse-patient and nurse-family interaction sheets.

Data level: Nominal

Statistics used: Descriptive

Chi-square, Phi coefficient.

Areas analysed:

Quantity of interaction: Episodes of interaction.

Duration of interaction

Quality of interaction: Level of involvement in all interactions

Initiating factor in interaction and level of involvement in nurse-initiated interactions

Proportion of interactions which were supportive.

For both patients and families.

7.2. Presentation and interpretation of data

Data will be presented in this order:

Respondent characteristics

Quality study

Satisfaction study

(a) Quantitative

(b) Qualitative

Interaction study

7.2.1. Respondent characteristics

In order to bring out factors in the respondents that could influence the findings, it is necessary to describe the profile of the patients and families in the pre - and post - primary periods.

Table 7.1. Profile of respondents in the Preprimary Nursing Period

	Patient				Family member		
No.	**Sex**	**Age (Yrs)**	**Length of stay**	**Diagnosis**	**Sex**	**Relation-ship with patient**	**Regu-larity of visit**
01	M	35 -	4 weeks	Chronic leg ulcer	M	Friend	Daily
02*	M	Ad[7]	4 weeks	Chronic leg ulcer	-	-	-
03	M	Ad	3 weeks	Fractured Lt. femur	F	Sister	Daily

[7] *Ad refers to adults - patients who could not state their ages.*

04	M	Ad	2 weeks	Hyper-tension	F	Spouse	Daily
05	F	22	1 week	Burns	F	Friend	Stay in[8]
06	F	45	8 days	Hernio-rrhaphy	M	Son	Daily
07*	M	Ad	1 week	Matchet cut	-	-	-
08	M	55	8 days	R.T.A.	M	Son	Daily
09	M	19	2 weeks	Chronic leg ulcer	F	Mother	Stay in
010	M	15	1 week	P.U.O.	M	Father	Stay in

* Patient's relative not available for assessment.

Table 7.2. Profile of the respondents in the Postprimary Period

		Patient				Family member		
No.	**PNM**	**Sex**	**Age (Yrs)**	**Length of stay**	**Diagnosis**	**Sex**	**Relation-ship with patient**	**Regu-larity of visit**
01	1	M	35	5 weeks	Gunshot injury	F	Mother	Stay in
02	2	M	15	4 days	Traumatic urethral stricture	F	Mother	Stay in
03	2	M	35	10 days	Matchet cut	F	Spouse	Stay in
04	4	M	Ad	8 days	Laceration to Lt. thigh	F	Spouse	Daily
05*	3	M	48	3 Months	Burns	-	-	-
06	2	M	53	2 days	Injury to face and mouth	Ma le	Son	Daily
07*	4	M	25	4 days	Trauma/ Dislocation of Rt. shoulder	-	-	-
08	3	M	Ad	I Mth. 3 days	Lapara-tomy for ruptured spleen	F	Spouse	Daily

* Patient's relative not available for assessment.

[8] *This type of visit involves a family member staying around the ward (sometimes on the veranda or at patient's bed side) in case there was need to purchase drugs for the patient at any time. Usually these relatives were those who lived far away from the hospital, who could not be contacted in emergency. In most cases, they went back home at night time and returned the following morning and the cycle continued.*

Sample size

Tables 7.1 and 7.2 show that 10 patients and 8 family members were involved in the preprimary nursing evaluation study, while 8 patients and 6 family members took part in the postprimary nursing evaluation. In general terms, the sample size should have been larger considering the number of variables included in the study. Specifically, the patient sample size seems adequate for the quality study based on the advice of the QUALPACS developers (Wandelt and Ager 1974) that as few as 5 patients or 15% of the total population can be used for quality assessment by using this instrument. QUALPACS is designed to measure the overall quality of nursing care in a nursing unit and not the quality of care of individual patients. The use of 10 out 17 patients (59%) in the study ward at the preprimary nursing period and 8 out of 15 patients (53.3%) in the postprimary nursing period far exceeded the recommended size and was therefore found to be appropriate for QUALPACS assessment in the present study.

On the other hand, this sample size appears to be small for any meaningful generalisations to be made from the other two studies - satisfaction and interaction studies. However, this is not a problem since the nature of this action research would not allow any generalisations to be made (Silverman 1985, Elliot 1991). It is important to note at this point that this evaluation study is meant to ascertain the beginning impact of the change to primary nursing in the model ward; to indicate ***trends*** in the data. It should not be considered as an end result of the change but a means to an end.

Any significant results which do appear should be treated with caution because they may not indicate genuine population differences but may only suggest the direction of change. The important aspect of the analysis should be how changes in one area reflect corresponding changes in another area and not so much the actual level of significance of the results.

Patient population

Tables 7.1 and 7.2 also indicate that all (100%) patient respondents in the postprimary nursing group were males as opposed to 80% males and 20% females in the preprimary nursing group. This is because the model ward was originally a male ward which admits female patients when there is no bed in the female surgical ward. Patients in the two groups were in the age range of 15 to 60 years.

Table 7.3. Length of stay of patients in the two study groups

Period	**Length of stay**		**Total**
	Short (<3 weeks)	**Long (> 3 weeks)**	
Preprimary nursing	8 • 80 * 62 ° 44.4	2 • 20 * 40 ° 11.1	10 °55.6
Postprimary nursing	5 • 62.5 * 38 ° 27.8	3 • 37.5 * 60 ° 16.7	8 °44.4
Total	13 °72.2	5 °27.8	N=18

- • Row percentage
- * Column percentage
- ° Percent total

The analysis of subgroup differences (Table 7.3) shows that the majority of patients (62%) who stayed for a shorter period (less than three weeks) were in the preprimary group but 60% of patients who stayed much longer (more than three weeks) were in the postprimary group. Furthermore, almost twice as many patients in the preprimary nursing group stayed for a shorter period while twice as many postprimary patients stayed in the ward for a much longer period before data collection. This finding was contrary to the researcher's expectation, which was informed by the experience of other researchers (Eichhorn and Frevert 1979), that more patients in the preprimary group would be hospitalised for longer period considering the nature of their health

conditions; majority of patients with chronic leg ulcers, medical cases, burns, orthopaedic cases, etc. But patients in the postprimary period who had seemingly short term conditions - trauma, surgical cases, etc. stayed longer.

This finding might have implications for all aspects of the present study. The longer hospitalisation period seen in the postprimary nursing group might allow more time (a) for the nursing process to be reflected in the quality of care, (b) for a good nurse-patient/family relationship to develop and therefore resulting in an improvement in the quality and quantity of interactions between nurses and the family, and (c) for patients and families to build up a level of confidence in nurses and nursing care which in turn affect their perception of care.

Patients in the two groups exhibited mostly surgical conditions, with a few (20%) medical conditions in the preprimary nursing group. The consequence of this difference in the patient type is its effect on the length of stay. This variable was clearly evident in Eichhorn and Frevert's (1979) study which showed varying degrees of improvement in the different client groups, although the length of stay was not shown in their study. In the present study, it is difficult to ascertain if the 20% difference in the patients type was necessarily responsible for the difference in the length of stay between the two groups.

Population of family members

Interestingly, there was a 50:50 sex percent ratio for male to female in preprimary nursing family group but the postprimary family group had a ratio of 17:83 (refer Tables 7.1 and 7.2).

On the relationship of the family member to the patients in this study, the greatest percentage (62.5%) of the family members in the preprimary nursing group fell in the 'other' category - comprising friend, son or sister; 25% were parents; only 12.5% were spouse. In the postprimary nursing group, the majority (50%) were spouses, 33.3%

were parents and only 16.7% were in the other category (son). The implication of this variable might be in how nurses involved family members in the care of the patient in relation to perceived 'closeness' of family member to patient. If the nurses did not mind the differences in the level of relationship and involved all family members in the same way, then this would have no consequence for the findings of this study. If nurses did consider this variable at all in judging the extent to which they should involve the family in the care of the patient, then the difference in the two groups might have some influence on the results of this study.

Family members in the preprimary group visited the patient daily (62.5%) or stayed in (37.5%) while those in the postprimary nursing group either visited the patients daily (50%) or stayed in (50%) hospital with the patient during the day but went home in the night.

In the two groups regular family visits and 'staying-in' is in support of Eldar and Eldar's (1984) assertion which is as follows:

> The view that it is the family's responsibility to care for its sick member is so deeply rooted in many societies that relatives will not leave a sick person when he (she) is admitted to hospital... In many parts of the Third World today, ... many families are still reluctant to hand over the care of their sick to anyone else, and will bear all kinds of inconvenience, from long journeys and inadequate transport to loss of income, to remain with them during treatment (p 40).

The researcher's experience with relatives regarding their presence at patients' bedside at all times typifies hospital life in many developing countries, e.g. Friedl's (1956 cited in Eldar and Eldar 1984) description of a hospital scene in a rural Greek hospital and Eldar and Eldar's (1984) experience with the Philippines. This practice of giving families greater freedom to be with their sick relatives and to share in their care even in hospital helps to alleviate their worries and makes them feel more useful. For a patient, the transition from hospital life after discharge is considerably eased if he/she has not

been isolated from his/her family during treatment. However the practice can cause problems to the smooth running of hospital activities.

In summary, because of the constraints of time, finance and other limitations the researcher faced, it was not possible to select a matched sample of patients and families across the two study groups. All statistical procedures adopted took into consideration the unrelatedness of the samples and uncorrelated statistics were used for data analysis.

7.2.2 Quality Study

Table 7.4. Subsection and overall QUALPACS mean scores[9] for 4 sessions in the Preprimary nursing period

Subsections	*Assessor I*		*Assessor II*		Mean	SD
	Session 1	Session 2	Session 3	Session 4		
Psychosocial: Individual	1.7	2.1	2.3	2.2	2.1	0.3
Psychosocial: Group	1.5	2.5	2.4	2.3	2.2	0.5
Physical	1.9	1.4	2.5	2.3	2.0	0.5
General	1.4	1.9	2.2	2.1	1.9	0.4
Communication	1.8	2.3	2.4	2.2	2.2	0.3
Professional Implication	1.6	2.9	2.6	2.4	2.4	0.6
Overall Scores	1.7	2.2	2.4	2.3	2.2	0.3

[9] *Definition of QUALPACS scores:*
1 = Poor care
2 = Between poor and average care
3 = Average care
4 = Between average and best care
5 = Best care

Table 7.5. Subsection and overall QUALPACS mean scores for 4 sessions in the Postprimary nursing period

Subsections	*Assessor I*		*Assessor II*		Mean	SD
	Session 1	Session 2	Session 3	Session 4		
Psychosocial: Individual	3.3	3.0	3.5	3.2	3.3	0.2
Psychosocial: Group	3.3	2.8	3.3	2.8	3.1	0.3
Physical	3.6	3.4	3.3	3.1	3.4	0.2
General	3.4	3.2	3.1	3.7	3.4	0.3
Communication	2.9	3.0	3.2	3.3	3.1	0.2
Professional Implication	3.4	3.4	3.3	3.2	3.3	0.1
Overall Scores	3.3	3.1	3.3	3.2	3.2	0.1

Tables 7.4 and 7.5 illustrate single session ratings made for all subsections and overall QUALPACS scores for the pre- and post-primary nursing groups. Calculated means for four sessions in the preprimary nursing group (Table 7.4) indicate that overall quality of care was in between poor care and average care (2.2) ranging from 1.9 to 2.4 in all subscales . The postprimary group (Table 7.5) demonstrated average care (3.2) with means scores ranging from 3.1 to 3.4 in the six subscales.

Table 7.6. Differences in QUALPACS mean scores by subsection

QUALPACS subsection	Preprimary nursing (n=10)	Postprimary nursing (n=8)	t value	p
Psychosocial: Individual	2.1	3.3	7.01	.0005
Psychosocial: Group	2.2	3.1	3.24	.009
Physical	2.0	3.4	5.02	.001
General	1.9	3.4	6.54	.0005
Communication	2.2	3.1	5.78	.005
Professional Implications	2.4	3.3	3.37	.008
TOTAL	2.2	3.2	6.61	.0005

The differences in the mean quality scores were tested for statistical significance by using the one-tailed unrelated t test. The data in Table 7.6 clearly show significantly higher mean scores on all six criteria and the overall scores (P<.001 to .0005). This finding is in line with most other studies that used QUALPACS to measure a relationship between primary nursing and the quality of care. With the exception of Shukla (1981), other investigators reported supportive evidence (Eichhorn and Frevert 1979, Felton 1975, Hegedus 1980, Steckel *et al.* 1980, Williams 1975, and Manley 1989). Felton (1975) and Williams (1975) reported significantly higher mean scores in all subsections of QUALPACS for primary nursing over team nursing and Manley (1989), demonstrated a significantly higher mean for primary nursing over total patient nursing care, and the present study illustrated a significantly higher mean for primary nursing over functional nursing.

Psychosocial - individual and general subsections indicated the highest statistical difference (.0005 respectively) between groups. This contrasts with Manley's (1989) results in which these subscales demonstrated the smallest significant differences. Advancing Manley's argument, this may be due to the fact that more time was available to develop psychosocial care for individual patients in this medical-surgical ward as opposed to her Intensive Care Unit (ICU) patients. These marked improvements in the elements which address the individual needs of the patient may suggest the effect of the utilisation of the care plans in the postprimary nursing period which was not the same in the preprimary nursing period.

The psychosocial - group subsection showed the second greatest difference between the groups. Eichhorn and Frevert (1979), in contrast, found no significant difference on this subsection between the study groups, although there were marked improvement in QUALPACS scores. The difference found in this study was not surprising because with primary nursing a nominated group of patients are nursed by designated group of nurses. Therefore the psychosocial needs of the patients are being met as members of a group.

Contrary to Shukla's (1981) findings, this study demonstrated a highly significant difference (.008) between pre - and post - primary groups on the professional implications subscale. The dramatic improvements in the professional subscale after the introduction of primary nursing into the model ward was similar to Manley's (1989) study. This may reflect the expectation that if so much emphasis is placed on assertiveness, autonomy, accountability, responsibility and decision-making, then the professional status of nursing is bound to improve. This result has reaffirmed the prevalent belief related to discussion of primary nursing as synonymous with professional nursing practice (Manthey 1992a, Pearson 1988).

QUALPACS scores on the communication subscale has been found to improve significantly for primary nursing units in many studies. In Shukla's (1981) study it was the only subscale that showed a significant difference out of six criteria measured. The difference in communication between the two groups in this study may reflect the effectiveness of primary nursing practice in improving communication on behalf of the patient. The primary nurse, the centre of primary nursing practice, communicates to the patients and families, receives feedback which he/she must interpret effectively for healthy interaction to occur and be sustained. The result of the present study is understandable in the sense that communication in the preprimary nursing period might have often been haphazard: nurses often assuming that some one on the previous shift had told the family about the patient's progress or that nurses in the next shift would do what was necessary. This may also have accounted for omissions in care which characterised the team nursing unit in Marram *et al.'s* (1976) study.

The least difference was recorded in the physical care. No difference was expected on this subscale based on the results from other studies (Felton 1975, Steckel *et al.* 1980, Gliddon 1980, Eichhorn and Frevert 1979), where mean scores on physical care was of similar high quality in both primary and non-primary nursing units. The difference in the present study might possibly be due to the use of the nursing process in the

postprimary period which may have accounted for greater continuity in physical care resulting from one primary nurse producing a care plan for individual patients in his/her module, to which other nurses adhered. This explanation may not suffice for the difference reported in Martin and Stewart's (1983) study in which they used an alternative quality measuring tool - Rush Medicus Quality Monitoring Methodology. They found that primary nursing units scored significantly higher in the "formulation of care nursing care plans" but no significant difference between primary and non-primary nursing units in the 'physical care' category.

Several factors may be suggested for the higher scores in the postprimary nursing group against the preprimary nursing group. Firstly, the competencies of nurses were not tested in this study. Shukla's (1981) study demonstrated that structural superiority may not be as important in improving quality of care as the competency of the nursing staff. Competencies of nurses may have changed in the postprimary group as a result of the Primary Nursing Orientation Course (PNOC) which they undertook, and this may have accounted for increased quality of care.

Secondly, staff may have 'acted up' to meet up with expectation of the change (Hawthorne effect). One way to check this problem was to take them unawares in both pre- and post-primary nursing data collection exercise. Nurses and other participants in care were not informed of the date and form the data collection would take.

Thirdly, the high quality scores may suggest improvement in scoring and not necessarily improvement in quality of care. It was possible that the assessors had become more familiar with QUALPACS over time with a result of better scoring in subsequent data collection period. It was unlikely since the assessors did not have to use the tool after the first assessment until a day before (20th December 1993) postprimary nursing data collection. On this day, they had a 2 hour rehearsal on how to do the scoring. Consequently, lower scores were expected in the postprimary nursing period considering it had been six months since they used the tools last in the pre-data

collection and they may probably have forgotten how to use the tool. But the contrary ensued and it might, therefore, be assumed that the result reflects genuine or accurate scoring. However, presumably they knew about the change to primary nursing and may have been influenced by expectation.

Another factor which may have influenced the scores was the short period (5 to 6 months) that primary nursing practice had been in operation before postprimary nursing data were collected. This may have exerted the greater influence on the postprimary scores, being that there may not have been enough time for the effect of the change to manifest. Contrary to the present findings, the likely results would then have been that either (a) the scores in the two groups would have been similar or (b) the scores in the post-change period would have been lower reflecting the effects of the resistance which may occur immediately following a change (Wright 1989). This may have been overcome by the attitudes of staff and patients/families which were exceptionally positive towards the change. Some studies have identified attitudes of participants of change as a possible force.

The final factor which may have affected scores was that of the patient population. Variations in patient's sex, age, diagnosis and length of stay were noted in Tables 7.1, 7.2 and 7.3. The difference in patient diagnosis and length of stay in the two groups may have been responsible for the higher scores in the postprimary group. The work of Eichhorn and Frevert (1979) showed significantly marked improvements in the QUALPACS scores for the care of medical and burn patients as opposed to the scores for surgical patients. Contrary to their speculation of longer hospitalisation for these groups of patients, the reverse was true in the present study. But their speculation that longer hospitalisation might have given time for the nursing process to be reflected in the quality of care was true in this study. The higher quality score in the postprimary group might have been scored by the greater % of patients who had stayed in the ward for a much longer period.

7.2.3. Satisfaction Study

7.2.3.1. Quantitative

Table 7.7. Mean differences in patient satisfaction[10] with nursing care in the preprimary nursing and postprimary nursing periods

Subsections	Preprimary nursing (n=10)	Postprimary nursing (n=8)	t value	p
Technical-professional	22.0	27.0	3.37	.002
Educational-relationship	20.5	24.5	2.56	.01
Trusting-relationship	34.9	40.38	1.77	.05
TOTAL	77.4	91.88	3.25	.003

Table 7.8: Mean differences in family satisfaction with nursing care in the preprimary nursing and postprimary nursing periods

Subsections	Preprimary nursing (n=10)	Postprimary nursing (n=8)	t value	p
Technical-professional	23.13	26.17	1.42	.09
Educational-relationship	19.0	25.0	4.32	.005
Trusting-relationship	35.63	39.5	1.61	.07
TOTAL	77.75	90.67	2.61	.01

Using the one-tailed unrelated t test, the preprimary nursing scores of patient (Table 7.7) and family (Table 7.8) satisfaction with nursing care were compared with the postprimary nursing scores. The modified Riser patient and family satisfaction instruments were used for data collection. They divide satisfaction into 3 subsections; Technical-Professional, Educational-Relationship and Trusting-Relationship. Analysis will be presented under the 3 subsections.

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[10] *Definition of scores:*

Subscale I & II:	*0-1 = Not satisfied*	*13-24 = Satisfied*	*25-36 = Very satisfied*
Section III :	*0-19 = Not satisfied*	*20-38 = Satisfied*	*39-57 = Very satisfied*
Total Scale:	*0-42 = Not satisfied*	*43-84 = Satisfied*	*85-126 = Very satisfied*

Results

(a) Patient Satisfaction

As shown in Table 7.7, there were marked improvements in scores after primary nursing had been introduced into the model ward. The mean scores for the Technical-Professional subscale - measuring how satisfied the patients were with the nurses' knowledge of nursing, physical care and expertise in performing dependent roles[11] - demonstrated that the postprimary nursing group were 'very satisfied' scoring 27 out of 35, while the preprimary nursing group were 'satisfied' with a score of 22. Further, the difference in the 2 scores was statistically significant (P = .002), representing the highest difference.

The second greatest difference (P=.01) was found in the groups' scores on the Educational-Relationship subscale. The preprimary nursing patients were 'satisfied' (20.5) while the postprimary nursing patients were 'very satisfied' (24.5).

The Trusting-Relationship subscale demonstrated the least significant difference (P=.05) between the two groups, with the postprimary nursing group scoring 40.38 (very satisfied) and the preprimary nursing group scored 34.9 (satisfied). Whereas the preprimary nursing patients were 'satisfied' with score of 77.4 out of 125 for the total scale, the postprimary nursing patients were 'very satisfied' scoring 91.88.

(b) Family Satisfaction

Using the modified Riser Satisfaction Instrument designed for measuring family satisfaction with nursing care before and after introduction of primary nursing, Table 7.8 illustrates increased family satisfaction with nursing care after introduction of primary nursing. Family members in the postprimary nursing care period were more satisfied (scoring 26.17) than those in the preprimary period (with a score of 23.13)

[11] *These are the functions of the nurse which cannot be executed without orders from others.*

with the technical-professional aspect of nursing care. However the difference in the scores of the 2 groups was not statistically significant (p = .09).

Scores of the Educational-Relationship subscale showed that families in the postprimary nursing care period (score = 25) were significantly (P = .005) more satisfied than those in the preprimary nursing group (score = 19). Furthermore, the results of their scores on the Trusting-Relationship aspect of nursing care in the model ward revealed a near significant difference (P=.07) between the pre - (score of 35.6) and post - (score = 39.5) primary nursing groups. Summarily, the overall scale scores present a significantly higher (P=.01) satisfaction for the post - (90.67) than the pre - (score = 77.75) primary nursing family group.

Discussion

As is usual with most consumer satisfaction studies (Sliefert 1986; Fox and Storms 1981; Ventura *et al.* 1982; Korsch *et al.* 1968; Lewis *et al.* 1969; Sussman *et al.* 1968; Hulka *et al.* 1970, 1971; Munro *et al.* 1994), the obtained scores were positively skewed. This skewness, according to Riser (1975), may suggest that "the patient may have difficulties verbalising dissatisfaction with the nursing care he (she) must continue to rely upon in the future" (p 50); the patient may have been reluctant to criticise nursing care for fear that required care would not be provided in the future.

The results from patient satisfaction data in this study is contrary to Ventura *et al.'s* (1982) findings, where the t tests showed no significant difference between the primary and non-primary nursing units in any of the subscales or the total scale of the Riser satisfaction instrument. The difference between Ventura *et al.*'s study and the present one may have been due to a wide variation in subject population (difference in culture, sample size, patient type, etc.). This might create major problems in attempting to make valid comparisons across the studies. In general terms, because the conceptual definitions of satisfaction are not consistent across the measures, comparisons among studies are mostly not meaningful.

The high satisfaction ranking of nursing care by patients and their families in this study might suggest an association between the conditions of care (e.g. quality of care) and the opinions of the consumers of such care (Fox and Storms 1981). An interpretation of this finding might be that if the quality of nursing care was demonstrably better than average as seen in the quality study, then the consumers would perceive the care as being good. It reaffirms, therefore, that primary nursing by increasing the visibility of individual competency and performance (Ventura *et al.* 1982, Pearson 1983) facilitated an improved level of quality (Manthey 1980a) which may increase patient satisfaction.

It would be expected that primary nursing whose philosophy emphasises more supportive nursing care (Archibong 1993), would have caused patients to be more satisfied with the other subscales than the physical aspects of nursing care portrayed by the Technical-Professional subscale. It was surprising to note from the present study that, postprimary patients and families were more satisfied with the physical aspects (77% scores for patient and 75% for family scores) than supportive aspects (72% score for patient and family respectively) - see Table 7.9 that follows.

Table 7.9. Comparison of % mean satisfaction scores for pre- and post-primary nursing patient and family groups

Subscale	**Total possible sub-scale score**[12]	**Patient Scores**				**Family Scores**			
		PNP n=10		**No PNP n=8**		**PNP n=8**		**No PNP n=6**	
		Mean	%	Mean	%	Mean	%	Mean	%
I Technical-Professional	35	27	77	22	63	26.2	75	23.1	66
II Educational	35	24.5	69	20.5	57	25	71	19	54
III Trusting-Relationship	55	40.4	73	34.9	63	39.5	72	35.6	65
Physical Care (Subscale I)	35	27	77	22	63	26.2	75	23.1	66
Supportive Care (Subscales II+III)	90	64.9	72	55.4	62	64.5	72	54.6	61

[12] *Total subscale score refers to the maximum possible score.*

Fitzpatrick and Hopkins (1983) and Aronson (1968) record a similar trend of higher levels of consumer satisfaction with technical (physical care) as opposed to non-technical aspects of health care. These authors advance some reasons for these high rankings which offer a likely explanation for the present study, that (a) consumers are incapable of judging and they take for granted technical competence, but are more critically aware of the manner of health care practitioners, and (b) it is threatening to contemplate that the care one is receiving is not of the highest quality. Donabedian (1987) believes the opinions of the consumer are "the paramount consideration in defining the quality of the interpersonal processes...", but does not consider the consumer able to judge 'technical' areas of care.

If patients and families really defer judgement on physical aspects of care, thus giving high ratings by default, it goes to show that they may be discriminating when ranking the supportive aspects. Under this interpretation, the satisfaction ranking reflects actual quality only for the non-technical (supportive) aspects of nursing care. Seen in this light, one could speculate from the patients' and families' ratings of the supportive aspects of nursing care, as shown in Table 7.9, that there was an impact of primary nursing practice in the model ward. This is evident in the findings that postprimary patients and families were more satisfied than their preprimary counterparts.

A plausible explanation of the results of the high levels of satisfaction in the postprimary nursing group could be that the measurement was accurate and that the patients and families were really satisfied with nurses and nursing care as shown in the mean scores. Alternative explanations for the finding of higher satisfaction scores in postprimary nursing group may relate to several factors which are discussed as follows.

The differences in the sample population in the pre - and post - primary nursing periods: Differences in people's orientations toward health, differences in what they want and expectations from health (nursing) care might affect their satisfaction with

health care. These orientations are largely accounted for by the socio-demographic characteristics of an individual; sex and age are the two strongest socio-demographic factors in health care utilisation (Aday and Anderson 1975) and consequently may correspond more strongly to difference in orientations toward care (Fox and Storms 1981). In the present study, patients in the two groups fell within a similar age range, but it was difficult to ascertain the specific mean age of respondents in the two groups since 4 patients in the pre- and 2 patients in the post-primary nursing groups were unsure of their ages. The term 'adult' has been used to represent middle age.

Table 7.10. Correlation[13] of patient satisfaction scores by sex

Subscale	**Sex**		**F**	**P**	**Eta**	**Eta^2**
	Male n=16	**Female n=2**				
I Technical-Professional	22.6	20	.61	.4	.19	.04
II Educational-Relationship	24.2	24.5	.01	.9	.03	.0007
III Trusting-Relationship	37.6	35.5	.24	.6	.12	.01
Total	84.3	80	.26	.6	.13	.02

Table 7.11. Correlation of family satisfaction scores by sex

Subscale	**Sex**		**F**	**P**	**Eta**	**Eta^2**
	Male n=5	**Female n=9**				
I Technical-Professional	22.2	21.2	.14	.7	.10	.01
II Educational-Relationship	24.0	24.7	.08	.8	.08	.007
III Trusting-Relationship	37.2	37.3	.003	.96	.01	.0002
Total	83.4	83.2	.0007	.98	.008	.0001

There was a difference in the sex of respondents in the 2 groups; 100% males in the post- and 80% males and 20% females in the pre-primary nursing group. When satisfaction scores were correlated with sex of the patients (Table 7.10), it was

[13] *Cohen and Holliday's (1982) interpretation of correlation scores:*
Below 0.19 = Very low
0.20 to 0.39 = Low
0.40 to 0.69 = Modest
0.70 to 0.89 = High
0.90 to 1 = Very high

observed that although male patients were more likely to have a higher satisfaction scores than their female counterparts in 2 subscales (Educational-Relationship and Trusting-Relationship) and the overall scores of the satisfaction instrument, the correlation as measured by Eta showed a very low relationship between gender and satisfaction. A similar finding ensued from the family data (Table 7.11).

This result does not support the findings of other studies on patient satisfaction with health care which showed a contrary finding; women being more satisfied than men (Pascoe 1983, Weiss 1988, Ware *et al.* 1978, Hall and Dornan 1990). This contrast in findings between the present study and others may be due to the small size of women in the sample when compared to men. One could argue that the gender-satisfaction relationship from this study is too insignificant to have made any contribution to the differences in the satisfaction scores for the pre- and post - primary nursing groups, reaffirming that the difference (Tables 7.7 and 7.8) could really have been as a result of the change to primary nursing.

Table 7.12. Correlation of patient satisfaction scores by length of stay

Subscale	**Scores by length of stay**		**F**	**P**	**Eta**	**Eta^2**
	< 3 wks n=13	**> 3 wks n=5**				
I Technical-Professional	21.8	23.8	.64	.4	.20	.03
II Educational-Relationship	24.3	23.8	.08	.8	.07	.005
III Trusting-Relationship	37.1	38	.10	.8	.08	.006
Total	83.2	85.4	.13	.7	.09	.008

Table 7.13. Correlation of family satisfaction scores by length of patient stay

Subscale	**Length of stay**		**F**	**P**	**Eta**	**Eta^2**
	< 3 wks n=11	**> 3 wks n=3**				
I Technical-Professional	21	23.7	.79	.4	.25	.06
II Educational-Relationship	23.7	27	1.6	.2	.34	.11
III Trusting-Relationship	36.9	38.7	.33	.6	.16	.03
Total	80.5	87.3	1.4	.26	.32	.10

One of the dilemmas in asking consumers' opinions about their care is the stage of contact with the provider at which fullness and frankness of answers can best be ensured. The picture presented by French (1981) is that "in the ward there is on the one hand salience and immediacy, balanced by inhibitions caused by worries of repercussions from the staff and ... with discharged patients, there is the fading memory and interest, complicated by a halo of gratitude, but enhanced by privacy and a loss of inhibition" (p 20). French's call for satisfaction studies to conduct multiple sessions with patients as in Munro *et al.* 1994, Clark (1979) or Corman, Hornick, Kritchman and Terestman (1958) is not supported by some studies which demonstrate that patients are more critical while still in hospital (Raphael 1969, Houston *et al.* 1972, Davies Committee 1973).

This study went a step further to examine not just the criticalness of patients while in hospital but also the effect of the length of patients' and families' contact (length of stay) with nurses and nursing care on their level of satisfaction. The data on Tables 7.12 and 7.13 show that, with the exception of the Educational-Relationship subscale, patients who stayed longer in hospital tended to be more satisfied with the physical aspects and trusting-relationship aspects of nursing and they also recorded higher scores in the total satisfaction scale. This was also true of the family members whose patients had been in hospital for a longer period, in the sense that they were more satisfied with all aspects of nursing care measured. However, the findings demonstrate a very weak association between length of contact with nurses and patients' level of satisfaction with nurses and nursing care (Eta =.07-.20 for all subscales and total patient scale). A very weak to weak association between length of stay and family satisfaction with nurses and nursing care was also noted which is illustrated by Eta ranging from .16 to .34 for all subscales and total family satisfaction scale .

Although there was a weak relation between length of stay and satisfaction, one should not ignore the difference in the length of stay between the two groups - pre - and post - primary groups. The fact that the preprimary patients and families had a shorter period

of contact with nurses, while the postprimary nursing group had a longer period of contact may have contributed to the significant difference between the two groups. It is perplexing, to say the least, that finding a weak relationship between satisfaction and this background variable may suggest the need to reconsider the reliability and validity of the satisfaction instruments and their suitability to the two sample groups (patient and family groups).

Internal consistency of the instruments.

Table 7.14a. Measures of Internal Consistency for patient satisfaction instrument (PSI) n=18.

Subsections	**Coefficient alpha**	**Inter-item Correlation**
Subscale I Technical-Professional	.67	.20
Subscale II Educational-Relationship	.46	.07
Subscale III Trusting-Relationship	.58	.12
Total	.83	.63

Table 7.14b. Measures of Internal Consistency for family satisfaction instrument (FSI) n=14.

Subsections	**Coefficient alpha**	**Inter-item Correlation**
Subscale I Technical-Professional	.60	.17
Subscale II Educational-Relationship	.70	.31
Subscale III Trusting-Relationship	.38	.05
Total	.85	.73

Table 7.14a illustrates that only the technical-professional subscale had a near acceptable criterion[14] alpha score of α =.67 and the total scale had a mature criterion score of α = .83 for the patient satisfaction Instrument. For the family satisfaction

[14]*The criterion level used for coefficient alpha with the new psychosocial subscales is .70 or above and for mature subscales is .80 or above (Edwards 1970).*

instrument (Table 7.14b), one subscale (Educational-Professional) reached the acceptable criterion of α = .70, the Technical-Professional subscale had a near acceptable reliability score of .60 and the total scale had an alpha of .85. This consistency may be seen as appropriate for this study considering that the instruments were originally designed for subjects of varied cultural background.

Both instruments had low average inter-item correlation ranging from .07 to .20 for the patient satisfaction instrument and .05 and .17 for subscales III and I respectively, of the family satisfaction instrument, but the average inter-item reliability score for subscale II met the criterion, which is .30 - .70 (Hinshaw and Atwood 1982). However, examination of the inter-item correlation matrix revealed that the number of inter-item correlations fitting the .30 to .70 criterion were 9/21 (Technical-Professional), 7/21 (Educational-Relationship) and 18/45 (Trusting-Relationship) for the patient satisfaction tool, and 9/21, 13/21, 12/45, respectively, for the three subscales in the family satisfaction tool. Comparison of the reliability and inter-item correlations show no redundancy of items.

Table 7.15a. Inter-subscale Correlation Coefficient[15] for patient satisfaction instrument n=18

Factor	**Subscale II Educational-Relationship**	**Subscale III Trusting-Relationship**
Subscale I Technical-Professional	.33	.51
Subscale II Educational-Relationship		.54

[15] *The citerion level for item-subscale correlation is .50 and the subscale-subscale correlation criterion is .55 - .70 (Anastasi 1976, Gordon 1968).*

Table 7.15b. Inter-subscale Correlation Coefficient for family satisfaction instrument n=14

Factor	Subscale II Educational-Relationship	Subscale III Trusting-Relationship
Subscale I Technical-Professional	.43	.74
Subscale II Educational-Relationship		.64

Discriminant validity of the instruments was analysed by measuring the subscale inter-correlations in comparison with the reliability coefficients for the two instruments. In the patient satisfaction instrument (Table 7.15a), except in one case, each subscale possessed a reliability coefficient greater than its coefficient with another subscale. This exception involved subscale II that correlated with subscale III ($r = .54$) which is greater than its reliability coefficient of $\alpha = .46$. All other subscales showed some distinctness of clusters and thus some evidence of discriminant validity, although of a less than desirable degree. For the family satisfaction instrument (Table 7.15b), the subscale inter-correlations were higher and nearly equal to their reliability coefficients except for subscale II which correlated with subscale I with a score of .43.

The above findings suggest that (a) the scale measures one dimension of satisfaction, (b) it is insensitive to subtle differences in a group of respondents, and (c) variability of scores is lacking. This parallels the results of Riser (1975), Hinshaw and Atwood (1982), Ventura *et al.* (1982), and Sliefert (1986). The way around these problems has been to utilise the instruments in combination with a qualitative assessment of patient and family satisfaction with an aspect of care in the model ward before and after the introduction of primary nursing. An analysis of the qualitative satisfaction assessment will be presented later in this chapter.

One additional factor related to the sensitivity of the instruments may provide an alternative explanation. Perhaps the specific scales used were too 'easy' (it may have

been difficult to disagree with most of the items) and were not sensitive enough to measure differences within the group of those well satisfied.

The relationship between patient and family satisfaction scores

Descriptively, a comparison of patient and family satisfaction scores shows that there was a trend toward increases in the level of satisfaction in the postprimary nursing group as opposed to the preprimary nursing care group. Although the increase is significantly evident in all subscales and the overall scale on patient satisfaction instrument, family satisfaction scores are significantly higher only in one subscale (Trusting-Relationship) and the overall scale of the family satisfaction instrument.

One interpretation of this difference would take a very simplistic form; since this instrument was originally designed to measure patient satisfaction, it would have been inappropriate to use the same constructs and/or items in measuring family satisfaction with nurses and nursing care. Contrary to the above claim, the reliability result (Tables 5.3 and 7.14 b) illustrates that the family satisfaction instrument appears to be more consistent than the patient satisfaction instrument. A moderately high alpha is recorded for 2 out of 3 subscales and the total family satisfaction scale ranging from .60 to .85. The one exception was subscale III with alpha score of .38.

Another argument for the difference may be that since the family members were not the direct recipients of nursing care, their assessment of the technical-professional care showed the least significant difference as opposed to patients' assessment which showed the highest significant difference on this subscale between the pre - and post - primary nursing groups.

A further concern in this study is the influence of the family on the level of patient satisfaction with nurses and nursing care. In a family conscious society such as Nigeria, where the present study was carried out, a big question that needs examining in the course of this discussion is: were the patients really satisfied with the nurses and

the nursing care or were they satisfied because they had someone they liked/loved, a member of the family with him/her who represented his/her interest? Another way of viewing this issue might be to ask if the nurses were working harder to impress the family members which in turn made the patients satisfied.

Table 7.16. Correlation between patient and family mean satisfaction scores

Subsections	**Family scores n=14**	**Patient scores n=14**	**r**	**P.**
Technical-professional	24.4	24.2	-.05	.9
Educational-relationship	21.6	22.8	.49	.08
Trusting-relationship	37.3	37.4	.61	.02
Total	83.3	84.4	.54	.05

A correlation of patient and family scores (Table 7.16) shows some interesting findings:

- That there was a linear relationship between the two sets of scores.
- That the scores for the technical professional (physical care) subscale showed a very weak negative association (r = -.05) which was not significant. This is not surprising and might suggest that the patient group was more interested in the physical aspect of care, thus tending to be more critical than the family group.
- That family members whose patients had higher scores in Educational- and Trusting - Relationship aspects of nursing care and the total scale were also more likely to have high scores and vice versa. A two-tailed Pearson's Product-Moment Coefficient(r) showed a significant relationship for Trust-Relationship subscale (P = .02) and overall scale (P =.05). However the relationship between patient and family scores for the Educational-Relationship subscale was near significance (P = .08).

Table 7.17. Correlation of patient satisfaction scores by regularity of visit of family member

Subscale	Regularity of visit		F	P	Eta	Eta^2
	Daily n=6	Stay in n=8				
I Technical-Professional	21.8	23.5	.65	.4	.22	.05
II Educational-Relationship	23.5	24.8	.51	.49	.20	.04
III Trusting-Relationship	35.2	39.0	1.5	.24	.34	.11
Total	80.5	87.3	1.4	.26	.32	.10

To further substantiate the place of the family in raising the level of patients' satisfaction with nurses and nursing care in the study, assessment of patients' scores in association with the regularity of visit of the family member closest to the patient was explored (Table 7.17). The data indicate that patients whose family members 'stayed in' with them were more likely to have higher scores than those whose families visited on a daily basis, although the association tended to range from very weak to weak. The nature of the visit may have allowed those who stayed in more time to be closer to the patients. This might have made patients happier which in turn would increase their satisfaction level with the care they receive. Another argument might be that the presence of family members may have influenced the nurses' attitudes toward the patient; they may have been working harder to impress the family thus resulting in higher quality care and subsequent higher levels of satisfaction by patients.

In an attempt to link this association with the results from the data in this study, it is important to ask if this finding is enough to explain the reason for the positive skewness of the satisfaction results. It might be argued that the 37.5% of families that 'stayed in' with their patients in the preprimary nursing period as compared to 50% of families who 'stayed in' during the postprimary nursing period may have contributed to the difference in the scores in the two groups. The association between visiting pattern of the family and patient's scores may be too insignificant to give such an effect. There is need for further research to address this issue.

Table 7.18. Correlation of patient satisfaction scores by relationship of family member to patient

Subscale	Relationship of family member			F	P	Eta	Eta^2
	Spouse n=4	Parent n=7	Others n=3				
I Technical-Professional	23.3	24.4	18.3	4.1	.05	.66	.43
II Educational-Relationship	26.3	24.4	21	3.1	.08	.60	.36
III Trusting-Relationship	40.8	36.3	25.3	.95	.41	.39	.15
Total	90.3	85.1	74.7	2.2	.16	.53	.28

An additional important finding on the influence of the family on the patient satisfaction level is the demonstration of the relationship of family member to patient and patient satisfaction scores. Results from Table 7.18 show that patients whose parents were the closest family member while receiving nursing care tended to be more satisfied with the Technical-Professional aspect of their nursing care. This finding using Eta^2 indicates that 43% of the score is attributed to the relationship of family member to patient. The same table demonstrates that there was a tendency for patients who had their spouses more often by them to have a higher satisfaction score on Educational-Relationship and Trusting-Relationship subscales and overall scale. However, the association was weak to moderate (Eta = .39 to .60) and 15 to 36% of the variation in scores would be attributable to a relationship between the variables. It might be speculated from this finding that parents may have helped in providing physical care to the patients thereby making the patients give a high ranking to subscale I. Following the same argument, one might therefore speculate that spouses may have provided supportive care to their loved ones thereby confounding the findings.

Given evidence of the important links between the family presence and the patient score on the satisfaction instrument, one may infer from the findings that because the majority (75%) of spouses in the family population were in the postprimary group, this may have accounted for the significantly higher score on subsclaes II, III and the

overall patient satisfaction scale. But it still rests on us to offer explanation for the significantly higher score on subscale I even when parents formed 50% of the two (pre - and post- primary) family populations, respectively. This, therefore, suggests that primary nursing may have been responsible for the high satisfaction scores in patient and family groups in the pospprimary period.

7.2.3.2 Qualitative satisfaction study

A semi-structured interview was employed to ascertain patient's/family's views on how information was obtained from nurses in the model ward in the two study periods. The analysis will focus on evidence of individuality of care and task- / patient-centredness.

It will be recalled from the discussion of the research methods in chapter 5 and so far from other results that a total of 10 patients and 8 family members were involved in the pre-change evaluation and 8 patients and 6 family members took part in the post-change test. Because of the huge amount of data that this interview yielded, the researcher decided to report on 4 families (comprising 4 patients and 4 family members) for each period of data collection making a total of 8 families to be reported on. It should be noted that all names in this report are fictitious.

Preprimary Nursing Period

Emman's family[16]

Emman (male) was admitted into the model ward eight days before data collection. The family member interviewed was the son who used to visit the patient daily. The family reported that they were always given prior information about changes in the care or treatment of Emman. Most times, the nurses spontaneously told the family about the changes. The nurses apparently were always available to answer the family's queries. Whenever possible, the family preferred to "approach a particular nurse for whatever request or information we needed." The nurse was preferred because she was approachable,

[16]*Family: Refers to the patient and the family member interviewed and will be used in this way throughout the interview report.*

kind and gentle. The family member said that nurses did come around to chat with him. But Emman quickly interrupted and said:

> ...they only come along to tell him about the new drugs to buy when he is here to visit me. No nurse has ever come around this bed to chat with me outside their treatment time. It was only yesterday, ...em!..., when one 'man nurse' came up to me to have a discussion with me without a dressing table or outside the medicine rounds. That was very unusual because, they only have time for their treatment. Even when they come to see my son, it is purely on business terms, to ask him to buy tablets or something. I am sure this 'man nurse' is new in the ward and I wish he would last here and would continue to do same to all of us.

To explore this point further, the son was asked if the nurses gave any consideration to the effect of this hospitalisation on the family. He answered: "no not at all, they just do not discuss anything outside the treatment that my father is receiving." Despite the fact that nurses do not discuss with the family outside their usual 'business' or routine, the family accepted being satisfied with the information and care rendered to them by nurses in the ward because they were more concerned with the physical aspect of the care rather than the psychosocial one as they disclosed that their expectation was to see nurses administer medication to the patient promptly. There was no evidence of discharge planning from the interview, the home condition of the patient was of no particular interest to the nurses.

Iqwy's Family

Iqwy (male) had been admitted into the ward one week before data collection. The family member involved in the evaluation was the father who 'stayed-in' with the patient. The family denied receiving prior information about changes in patient's treatment and nursing care from the nurses. In the family's report, they mentioned that they only saw things happen, they did not know why they happened. "A list of drugs would only be handed over to me to buy and I would be asked to purchase them immediately as there was urgent need to start the antibiotics for son", Iqwy's father said. Information was sometimes

spontaneously given to them and most times, they had to ask nurses for information. There was no particular nurse assigned to look after the patient but they preferred to inquire things from one nurse because of her attitude. The patient mentioned that the nurse in question was very approachable. There were no nurses who came around to discuss with Iqwy nor the family member outside treatment times. Discussions during treatment times were highly formal and related to the specific treatment being given to the patient. The family member "would have expected the nurses to involve me more in what they were doing for my son." The thing the family liked most about the nursing care of Iqwy was the treatment the nurses gave to help his wound to heal quickly. But they most disliked "the hurried manner in which some of the nurses adopted when dressing the wound." Iqwy's father complained about the treatment the nurses gave to him just like any other family member and no consideration was given to Iqwy's work and the effect of his illness on the other family members. The patient speaking to the interviewer said:

> nurses have never spent half the time you have spent to discuss with me about my family, they do not just bother. They do everything according to their routine; they wait till when it is time for treatment before attending to me.

Affy's family

Affy (female) was admitted into the ward eight days before pre-change data collection. The family member interviewed, her son, visited her daily. The son felt the interviewer was teasing him by asking if the nurses told them before hand about any changes that are about to be effected regarding the patient's care and treatment. He responded:

> you must be joking ...nurses in this ward ...tell me about changes that would be necessary. I would be very pleased if they even inform me about the changes as they are carrying out the treatment. I am used to the fact that we (patient and family) should only be taken by surprise in the sense that there is no point telling us ahead of time about these changes. Is there any use? Will they take my suggestions into account? They do it their own way, we only see the changes. Thank God they yield some positive results.

On how information about patient care and treatment is obtained from nurses, Affy said: "I always ask them whatever I want to know and same thing with my son; he is only told things when he asks." They agreed that the nurses are always available to answer their questions and to offer information. On answering the question about which nurse is always available when the family needs to talk to them (nurses), Affy remarked:

> it is difficult to say. In fact I can not even point to any particular one. It is confusing, since there are so many of them I talk to or ask questions. I find it distressful to have so many of them around, yet I can not actually confide in any of them. ...one person comes in to give tablets, the other comes in to give injection, the other comes in to dress wound. An awful lot but none to hold onto.

The family could not remember seeing any nurse spend some time to chat with them outside the usual routine treatment period. Affy explained: "the time nurses spend with me varies according to the procedure they are carrying out on me. If they are giving tablets, they don't spend time at all, but during dressing they spend a little more time." To explore further into what type of discussion transpires during the treatment times, the family member noted that "it is definitely the usual formal 'take your tablet, turn your buttock for injection kind of discussion" which has nothing to do with how the family is affected by the patient's illness, how the son's self-employed carpentry job is at a standstill due to his frequent visits to hospital. To show the expectation of the family member regarding nurses' concern about their family, he expressed his views:

> I believe if the nurses were looking after their own mothers, they would give more consideration to how the illness would affect other family members. In our own case, the nurses are only interested about my mother's illness and the treatment

But the son was most delighted with "nurses' timely administration of her drugs as prescribed by the doctor." In suggesting the type of family-centred care they would prefer, the family member gave an example:

> of a nurse in Itukmbang hospital who looked after my sister when she was a patient. This nurse was so nice to us and would find out

> from us what we cooked for my sister and was so concerned with the whole family; she used to come around to chat with us on each visiting time. She made it a point of duty to tell us the progress of our sister; why a test was necessary, why a drug was changed and so on. We felt we were contributing and committed to the care of our sister. We felt part of the system. Luckily, I have seen that nurse in this hospital, she came in to see my mother the other day. I wish all nurses would be like this nurse.

Ima's family

Ima (male) had been admitted into the ward one month before data collection. The family member interviewed was his closest friend who used to visit daily. They reported that they were never given any prior information on the changes in patient care nor treatment. The family member remarked: "we only see the changes without any pre information as to why the change was necessary." The nurses did give the information spontaneously as the changes were taking place and they sometimes asked the nurses about whatever thing did bother them. From the response, they (family) did not approach any particular nurse to seek information but they would have preferred some specific nurses to whom they could relate more cordially and on a more one-to-one basis. Nurses did not go to the patient nor the family member to chat outside their 'treatment routines.' Ima mentioned that nurses "did not even have pity on me considering that if I was not in hospital, I would have been able to do one good thing or the other for my family and my friends." The patient felt that the nurses had no particular interest in him and continues: "they do everything according their rigid routine and would wait till it's time for treatment before attending to me." The family member complained that the information he and his friend received from the nurses was not adequate enough to satisfy them. He blamed this on the hospital system, that he thinks:

> every thing depends on the hospital management. The bureaucracy and routinisation that characterise this hospital force nurses to be this formal with us. It is difficult to pinpoint the actual cause of the problem. May be due to the way the nurses are organised.

The family member's reason for regular visits apart from buying drugs, was to fill the communication gap between the nurses and his friend. He found time to talk at length with his friend each time he visited. He told him about "other aspects of life apart from his illness, drugs, wound and hospital environment." Ima's family confessed that they were not satisfied with the nursing care they received. The family member expressed his expectation of nurses in the care of his friend and stated: "I expect them (nurses) to give care without being judgmental but this is not the case in this ward."

Postprimary nursing period

Iffie's Family

Iffie (male) was admitted into the ward one week and three days before post-change data collection. The family member interviewed was his wife who stayed with him in the hospital during the day but went home at night. Iffie's family reported that they were usually given prior information before changes in the patient treatment. Iffie remarked: "they also tell me why these changes are necessary and when they would be effected." The family mostly asked for any information they wanted, but nurses occasionally gave them information spontaneously. They had a particular group of nurses they always approached for information, "Vicky, Susan, nurse Effiong and two others" they recalled the names of the nurses responsible for Iffie's nursing care. The patient continued:

> Vicky is in charge of this section, she is the one who always tells us about most changes we expect, she is always here to see to us. When she is not on duty any other member of this section would do the job very well.

The patient monopolised the discussion, he was always answering the questions being asked by the interviewer. He mentioned that the care he received from the nurses gave him a lot of comfort, especially that given by Vicky and her group. A specific question was directed to the wife to denote her contribution in the care given to the patient. She responded:

> Vicky even tells me about the plan of care she is drawing up for my husband and asks me to contribute, but I thought since I was not the

> patient I did not have much to offer. But she explained to me the need for me to contribute. I was so surprised that the suggestion I made was taken into consideration and I was so happy.

Iffie quickly interrupted and asked the interviewer to direct most questions to him "because my wife is never here most of the time." He explained: "When the nurses in this section consider any changes in my care, they ask for my opinion. They always take my suggestion into account in whatever care they carry out for me." When asked about the most striking thing in the nursing care which they received from the nurses, the patient stated: "I am so happy over how the nurses spend time to explain every aspect of my treatment and care to me and my wife." The wife remarked that she loved the way the nurses in the ward started their day with, "handover and morning prayers." Nurses sometimes came around to chat with them outside the treatment times especially if they asked for information. They stated that they were satisfied with the occasional chatting times that characterised their relationship with nurses in the ward and the patient said: "I don't blame them for not coming more regularly to chat with us outside their treatment times because, they (nurses) are a very busy set of people." Nurses were seen to give consideration for Iffie's family and work. The patient saw this as a way to "reduce and distract my thoughts." The wife expressed that the nurses try as much as possible to assist him to get well so that she would be able to settle back at home to look after the children. They remarked that nurses varied their treatment times in Iffie's care. The wife illustrated this in her comment: "if there is any problem, I would call on the nurses and they would come to sort him out immediately." Nurses advised the patient on what to do when they would be discharged. If readmission was necessary, the family would always come back to the ward "because the nurses' attitude towards us has been terrific."

Medy's family

Medy (male) came into the nurses' care in the ward five weeks before the post-change interview. The mother, the family member interviewed, stayed the whole day with the patient in hospital but retired home at night to look after the other siblings. Medy's family was given information before any form of change was made in the patient's

treatment and care and were always told why the changes were necessary. The patient's mother always asked for information from the nurses. Nurses were always available to answer family queries. They had a particular nurse they always asked information of and whenever she was not on duty they did not bother to ask any other nurse for information. They preferred to keep their problems to this nurse alone because they had so much confidence in her. Nurses usually came around to chat with them on general issues but they "would not let out personal problems except it was a very pressing one."

Medy reported that the nurses "do not involve me in whatever they do for me but they do ask my mother for suggestions." The mother agreed to being informed by the nurses of "what plans they have for the care of Medy and how they were going to go about carrying out the care. Well, I didn't have much to contribute because it is their work and they are meant to know the right thing for the patients under their care." Medy described an instance when nurses varied his treatment to suit his peculiar needs at the time, he remarked:

> This morning, I went to the nurse to explain that I would be going to the canteen for my meal. She arranged and had my wound dressed before the usual time for the dressing rounds. They do this most of the time to everybody. If one has any need to have his treatment given before the right time, they attend to such a patient quite outside the time they usually carry out that treatment. We are quite satisfied with the way information is given to us by the nurses and with the general care the nurses give to us and would always like to come back to this ward I if need for re-admission arose.

Feleke's family

Feleke (male) was in the ward ten days before interview. The family member interviewed, his wife, claimed to have been visiting the patient daily. Feleke stated that nurses never gave him prior information before any changes were being effected in his treatment and the wife chipped in stating:

> my husband would have forgotten the instances when the nurses told him about changes that were about to be effected in his care. I could only remember asking a nurse once for information, at other

> times, they tell me what changes are to be carried out on my husband and why these changes are necessary.

The family agreed to having a group of nurses who looked after the section of the ward they belonged, to whom they directed all questions. They stated that there was one in charge of the unit, whose name they did not remember at the time. They remarked that when these nurses were not on duty, other nurses in the ward would equally be helpful to them. Feleke's wife asserted that nurses were "very understanding and they explained things accurately in simple terms to us." When asked if nurses found time outside their treatment time to chat with them, both patient and wife answered positively.

The wife explained that the nurses spend more time chatting with them during the evening when they (nurses) had less work to do. Feleke's family stated that they were satisfied with the way information was being given to them. On involvement in decision making about patient care, the wife stated: "I hope nurses in the other sections had time to involve their patients in the care as much as the ones in this section do. The nurses who take care of my husband take my suggestions into consideration when doing things for him." The patient said that the most striking thing about the nurses was their "prompt attention to my needs and other patients' needs." He said further:

> I have been admitted into ward 2 of this hospital, ... that ward over there, ... em! The care I had from the nurses in this ward, is excellent as compared to that ward. Here, the nurses tell me what changes I should expect, why the changes are necessary, I am allowed to contribute to my care.

The interviewer asked: "If there is need to be readmitted, would you like to come back to this ward?" The patient answered: "by all means." Feleke's wife felt that the nurses had so much interest in her husband as a person and were equally interested in the welfare of his family. She remarked, "our chat always centres around my family, and my husband's petty trading business." The patient commented that nurses varied treatment times to suit his

present circumstance in the statement: "At anytime I have any problem, the nurses do not wait till it is treatment time to attend to me."

Emmie's family

Emmie, a male patient was admitted four days prior to post-change data collection. The mother was interviewed and she claimed that she visited the patient daily. The mother reported that nurses did inform her about imminent changes in the care of Emmie. The patient was "often informed about these changes as well." The son could not recount having any particular group of nurses responsible for the section of the ward he belonged, but the mother said there were about five nurses who specifically looked after him although they worked on different shifts.

Emmie insisted that any nurse he called always did attend to him promptly "because it is their duty to do so." Nurses did come to chat with his mother most times when she visited, but could not recall "nurses ever extending their discussion beyond my son's treatment to include home conditions or other family members." On this note, she recommended that "if someone is concerned with the welfare of the other, s/he should not restrict his interest to one aspect of the person but should extend his/her interest beyond the illness." The patient was not bothered about nurses not being interested in their home condition, he said: "I am not bothered because my family visits regularly, so they tell me about the home, my brothers and sisters. I don't expect the nurses to be concerned about this." The thing Emmie liked most about the nurses and nursing care was their "timely attention to my needs." For the mother, the most liked thing was "the attitudes of nurses in this ward is quite different from others whom I have come in contact with especially those in the maternity section." She did not dislike anything about the nursing care because:

> nurses in this ward are more willing to listen to me when I offer suggestion about the care of my son. Therefore I don't have any cause to complain in the sense that I know why they do what they do. Other nurses I have come across would not consider others know enough to have a say in what they are doing.

The mother commented that the nurses in the ward looked after all patients in the same diligent manner. She gave an example of "the man who died yesterday, if it were possible for nurses to give life they would have done so, they tried their best to make sure that he lived but he died at last." The mother commented that nurses vary the timing for her son's treatment. When asked if she would like her son to be readmitted, the mother had nothing against this but patient would not like to be readmitted. Prying further, the interviewer asked if there was anything the nurses had done which might discourage him from coming back to the ward. He smiled and stated:

> it has nothing to do with nurses and nursing care. As a matter of fact, if it is nursing care alone, there would not have been a problem, it is more to do with my work and my family condition ... and the facilities in the hospital are not encouraging either.

Discussion

From the report of the interviews with the families before and after the introduction of primary nursing, some differences were evident between the 2 groups in the manner information were obtained from nurses; individuality and task - and patient - centredness of care. The differences will be discussed as follows.

It could be elicited that information about care was haphazardly given to the families in the preprimary nursing period. Three families out of four had no prior information about changes in their care. A similar situation ensued in Franklin's (1974) study conducted in a traditional nursing system where many patients disagreed with the statement "the nurses tell me what will happen to me". The above response by implication suggests that families would have liked more information than they actually received.

Conversely in the postprimary nursing period, most families were told of imminent changes in their treatment and nursing care. Involvement of families in information seeking was obvious as families did not only wait to be told but were willing and able to ask for information. Families were aware of nurses in their module whom they relied

on for information but only one family of the four families interviewed could remember their primary nurse and other nurses in the group by names. This might be a reflection of the culture of Nigerian people who prefer not to call nurses by their names and not necessarily that they did not know their primary nursing group. In Nigeria, clients prefer to use formal titles e.g. nurse, sister, staff etc. for the nurses.

Similar to the findings from some British studies on verbal interaction carried out before the development of primary nursing in the UK. (Duff and Hollingshead 1968, Wells 1975), information in the preprimary nursing era was superficial, task- related, routinised and fragmented. Information given by nurses was limited to treatment matters. There was no evidence of discharge planning. This finding, like that reported by Dodd (1974) and Stockwell (1972) found that verbal interaction (chat) with families was limited and that nurses did not find time to talk to families when they were less busy. Knight and Field (1981) present a study showing how task-oriented and routinised form of nursing organisation led to routinised verbal communication with cancer patients.

On the other hand, verbal interaction and care in the postprimary period were family-centred and individualised. Families were given an opportunity to contribute to the care of the sick member of the family. Families were involved in drawing up the care plan. Nurses spent some time to chat with families outside their routine care. A similar finding ensued in Thomas' (1994) study where the nursing staff in primary nursing wards spent most and those in functional nursing wards spent least time communicating with patients. Also in Clark and Zornow's (1989) study, the greatest number of nurses in the primary nursing and total patient care units talked with patients more frequently than those on the team nursing unit. This may be a reflection of existential philosophy on which primary nursing practice is based. This philosophy believes in a person's freedom and ability to choose and accords the individual respect.

The system of functional nursing care which was utilised in the preprimary nursing period did not allow nurses time to be involved with families or they were so preoccupied with their routine care that they did not see it necessary to chat with patients. It is difficult to pinpoint the actual reason for this but Stockwell (1972), found that nurses felt that talking to patients in connection with subject outside treatment routines would result in disapproval from a ward sister or colleagues. Other authors suggest that nurses use a range of tactics to avoid giving patients information (McIntosh 1975, Bond 1978, Faulkner 1980, Thomas 1994). Quint (1965a) also hypothesised that nurses attempt to control all interactions in order to limit the quantity and depth of verbal communication with patients. Limited nurse-patient verbal interaction may be a means of preventing the development of nurse-patient relationships thus minimising a potentially anxiety-creating situation (Menzies 1960c). Task allocation, in Menzies' argument, facilitates this defence against anxiety; when tasks are performed for a large number of patients, the nurse is not brought into contact with "the totality of any one patient" (p 101) and his/her illness, and this offers protection.

Nurses in the preprimary nursing era were more interested in the technical or instrumental care with less emphasis on the supportive or expressive care. Care was routinised and fragmented. Interestingly, most families preferred to approach particular nurse(s) for information even when the Nursing System at the time did not promote designation of particular nurses to nominated patients. This was an indication that primary nursing, which compels practitioners to care for designated group of patients, would be a welcome change in the model ward. In the period when primary nursing had been introduced, more supportive care was reported. Care and information were more individualistic.

An interesting aspect to address in the interview was the families in the preprimary nursing period expressing satisfaction with care and information despite their report of inadequate nursing care. It was surprising to note that even when the family had

experienced some flaws in the care and information received, they still agreed to being satisfied with such care. This response from some families interviewed parallels the positive skewness recorded in the quantitative satisfaction study reported earlier in this chapter. This might confirm the reluctance patients and families show when asked to criticise nursing care for the fear that they could be deprived of required care in the future. It might also go to show that satisfaction means different things to different people and to the same at different times. Also families in the postprimary nursing period were equally satisfied with information received from nurses.

It can be viewed that expectation is closely linked to the level of satisfaction with care. The report demonstrates that families in the preprimary nursing group were more interested in physical care and were not particularly bothered about social aspects of care. This might explain why they agreed to being satisfied with information even when it would appear to have been inadequate. Conversely, information and care in the postprimary period focused mostly on social aspects of care, therefore it is not surprising to note from the report that families in the postprimary care period were overtly satisfied.

7.2.4. Interaction Study

Table 7.19. Differences in the Number of Interactions

	Preprimary nursing			**Postprimary nursing**			**t**	**P**
	n	**Mean**	**SD**	**n**	**Mean**	**SD**	**value**	
Nurse-patient Interaction	44	4.4	1.78	58	7.3	2.12	2.99	.0004
Nurse-family Interaction	10	1.25	.463	50	8.33	3.204	5.37	.0002

Table 7.19. illustrates that there were 44 nurse-patient contacts in the preprimary nursing period with an average of 4.4 contacts per patient during the observation period. The postprimary nursing period recorded 58 interactions showing an average of 7.3 contacts per patient. There were 5 times more nurse-family interactions in the

postprimary nursing period of observation (average of 8.33 contacts per family) than prior to the introduction of primary nursing (average of 1.25 contacts per family). A one-tailed t test revealed very highly significant differences in the number of nurse-patient (P = .0004) and nurse-family (P= .0002) interactions between the pre - and post - primary nursing groups.

This finding is not in line with Hamera and O'Connelle's (1981) study, where there were no differences between the two patient groups in the frequency of interactions, even though the staffing pattern in their study also remained the same before and after implementation of primary nursing. A probable reason for this contrast might be the difference in the comparative group in the two studies; Hamera and O'Connelle (1981) compared primary nursing group with team nursing group while a primary nursing group was compared with task or functional nursing group in the present study. Furthermore these researchers focused on those patients in the primary nursing care group who actually interacted with their primary nurses for a reasonable period of time during the observation. Whilst in this study it was the number of interactions with all nurses that was recorded.

Although staffing patterns remained the same in the pre - and post - primary nursing periods, workloads in both periods were different and this may have accounted for the difference in the number of contacts in the 2 groups of subjects assessed in the present study. This finding reaffirms the place of primary nursing in promoting frequent, consistent contacts with patients for round-the-clock-care (Zander 1980), while Wells (1980) and Armstrong-Esther and Browne (1986) cite task allocation as militating against nurse-patient (family) interaction.

One challenge that faces primary nursing practice is Hildegard Peplau's (1952) concept of professional closeness. Professional closeness calls for the necessity of nurses in primary nursing practice - especially the primary nurse - to maintain a balance between over - and under - involvement with patients and their families. An effective primary

nursing practice should promote sensible and responsive involvement and allow a reasonable level of concern and activity that can extend as long as the nurse has contact with the patient. The needs, concerns and experiences of patients and their families should be the focus of the primary nurse's energies. The challenge that comes to mind is the effect of these increased number of contacts in the postprimary nursing period on professional closeness; maintenance of balance between increased contacts in postprimary nursing period and the level of involvement of nurses with patients and families.

One of the central tenets of primary nursing is that each nurse should have a fuller understanding of the totality of his/her assigned patients' lives, which results in a closer nurse-patient relationship. This calls for the need to define acceptable boundaries of personal privacy. Lack of privacy can be an adverse side-effect for patients in a primary nursing system (Webb 1981), and over-involvement with one particular patient may lead to an unequal distribution of care within a nurse's caseload (May 1991). This closer nurse-patient / nurse-family interaction in primary nursing may affect patient autonomy and may pose difficulties for nurses too (Holden 1991). Nurses in primary nursing practice are exposed to the totality of individual patients, with their needs and anxieties, which may make considerable emotional demands. This may explain the contention that primary nursing is at the opposite end of the spectrum to functional nursing, which could act as a defence against anxiety (Menzies 1960b).

Table 7.20. Differences in the mean time of Interactions in minutes within 2 hours

	Preprimary nursing		**Postprimary nursing**		**t value**	**p**
	n	**mean**	**n**	**Mean**		
Nurse-patient Interaction	10	21	8	19.8	.15	.4
Nurse-family Interaction	8	5.9	6	14.9	2.73	.02

Over the entire 2 hour observation period (Table 7.20), nurses spent a mean time of 21 minutes interacting with each patient in the preprimary nursing period and 19.8

minutes per patient in the postprimary nursing era. However, the difference between the mean time of interaction in the pre - and post - primary nursing periods was not significant using a one-tailed t test (P =.4). On the other hand, nurses spent more time with families in the postprimary period (14.9 minutes per family) than in the preprimary nursing period (5.9 minutes per family), demonstrating a statistically significant difference of .02.

Critics of task-oriented nursing suspect that nurses would not have time to render personalised care because of high work loads. However some researchers found that reducing patient loads (which may be seen as an advantage of primary nursing) did not yield an increase in the time nurses spent with patients (New, Nite and Callahan 1965, Simon and Hudson 1964). Furthermore Hamera and O'Connelle (1981) did not find any significant difference between the team nursing care and primary nursing care in the amount of time professional nurses spent with patients. A similar finding was recorded in the nurse-patient interaction in the present study.

Quite different from the nurse-patient interaction result, a highly significant difference in the amount of time nurses spent with families was recorded between pre- and post - primary nursing nurse-family interaction. It is important to interpret this finding with caution since the distinction between nurse-patient and nurse-family interactions may not be discernible. In some instances during the observation, the family member and patient were observed simultaneously, in other cases, they were observed at different times. One might therefore wonder if the increased amount of interaction time the nurses had with the family member cannot be extended to include the patient. Explained simply, it might be assumed that it would have been unlikely that the nurse interacted with the patient or the family member without the other being involved. Viewed in this light, it might be justifiable to state that in general terms, nurses spent more time interacting with families receiving primary nursing care than those that did not receive primary nursing care.

Table 7.21. Level of patient/family involvement[17] in nurse-patient and nurse-family interactions before and after introduction of primary nursing

	Nurse-patient Interaction			Nurse-family Interaction		
	Passive	Active	Total	Passive	Active	Total
Preprimary nursing	31 • 70.5 * 47.8 ° 30	13 • 29.5 * 35.1 ° 12.7	44 ° 43.1	5 • 50 * 17.2 ° 8.3	5 • 50 * 16.1 ° 8.3	10 ° 16.7
Postprimary nursing	34 • 58.6 * 52.2 ° 33	24 • 41.4 * 64.9 ° 23.5	58 ° 56.9	24 • 48 * 82.8 ° 40	26 • 52 * 83.9 ° 43.3	58 ° 83.3
Total	65 ° 63.7	37 ° 36.3	N = 102	29 ° 48	31 ° 52	N = 60

• Row percentage * Column percentage ° Percent total

Table 7.21. shows that patients/families were actively involved in slightly over one third (36.3%) of the nurse-patient interactions. Out of this, patients/families receiving primary nursing care were actively involved in more interactions (64.9%) than those who did not receive primary nursing care (35.1%). In nurse-family interaction, patients/families were actively involved in above half (52%) of the interactions. About 84% percent of the interactions which patients/families were actively involved were recorded in the postprimary nursing period contrasting with those in the preprimary nursing period (16.1%).

This trend toward an improvement in the level of patient and family involvement in nurse-patient and nurse-family interactions after the introduction of primary nursing indicates a high probability that primary nursing practice would bring the family system into the picture of care. This involvement of patient and family in primary nursing care raises an important question. Do patients and families really want to be

[17] ***Level of involvement in interaction***
Passive involvement refers to: Nurse-initiated interaction, other health team members-initiated interaction and when patient remains quiet all through interaction.
Active involvement describes: Patient-initiated interaction, family-initiated interaction, when patient makes suggestions during discussion and when family makes suggestions during discussion.

partners in care? It must be understood that patients and families are not a homogenous group: social class, age, cultural background and degree of dependency, among many other factors, influence the ability and willingness to become partners.

What appears to be crucial to the debate about partnership in primary nursing is the understanding of the concept of partnership and the components of the process. "Partnership between nurse and patient" is frequently used by the practitioners of primary nursing (Wright 1990, Tutton 1987, McMahon 1989b, Casey 1988). Muetzel (1988) offers a critical contribution to the understanding of this concept. In business, partnership appears to embody concepts of shared control, trust and equality (Qualligan 1991). Further insight can be gained into partnership between the nurse and family by relating each of the above named components - sharing control, trust and equality - to nurse-patient/family interactions.

The need to give patients more control is emphasised by promoters of primary nursing (Archibong 1993, Wright 1990, Pearson 1988). The assumption that patients want control may need to be challenged. Billey (1989a) accounting for the use of care plans comments:

> It is not questioned whether or not the patient or his family actually wants to know more about their condition, whether they want to take a more active role or even whether they want to have a partnership relationship (P. 23)

At times during illness, patients may prefer to let others assume control of the situation or some patients may choose to participate by giving the primary nurse the permission to make decisions on their behalf (Black 1992). In Waterworth and Luker's (1990) study on patients' perception of their involvement in decisions concerning their own nursing care, a suggestion was made that "promoting individualised care is not necessarily synonymous with active patient involvement" (p 971). These investigators argue that some patients may not wish to be actively involved in their care. Their study raises an interesting debate about whether some patients feel coerced into accepting a share of the control.

Other factors involved in nurse and patient partnership are trust and equality. Maintaining trust is closely linked to patient's control and autonomy (Melia 1988). Patient's trust and confidence are rooted in the specialised knowledge and skills of nurses. The initial trust may, however, be eroded if the nurse fails to present the patient with sufficient comprehensive information to make an informed choice (Black 1992). Equality as a component of the nurse-patient partnership is demonstrated when the patient's contribution is valued and complements what the professional has to offer.

Table 7.22. Differences in the initiator of nurse-patient and nurse-family interactions

Period	Nurse-patient Interaction			Nurse-family Interaction		
	Nurses	Patient & Family	Total	Nurses	Patient & Family	Total
Preprimary nursing	40 •90.9	4 •9.1	44 °43.1	5 •50	5 •50	10 °16.7
Postprimary nursing	52 •89.7	6 •10.3	58 °56.9	36 •72	14 •28	50 °83.3
Total	92 °90.2	10 °9.8	N = 102	41 °68	19 °32	N = 60

• = Row Percentage ° = Percent total

As shown in Table 7.22, the majority of nurse-patient interactions in the two periods were initiated by nurses; 90.9% before and 89.7% after introduction of change. This is not surprising, considering that the very nature of nursing care gives nurses (providers) an edge over patients (receivers). Nonetheless, the introduction of primary nursing was expected to bring patients and the family more into the limelight and this is demonstrated in the finding that there were more patient/family-initiated nurse-patient contacts (10.3%) in the postprimary nursing period than in the preprimary nursing period (9.1%). There were the same number of nurse-initiated (50%) and patient/family-initiated nurse-family interactions before the introduction of primary nursing. However, out of the 19 nurse-initiated nurse-family interactions recorded, the majority (74%) occurred in the postprimary period. This finding parallels Perälä's

(1991) results cited in Thomas (1994) in which case patients initiated more interactions following the introduction of primary nursing.

Although initiation of activity was a specific type of active involvement, however, an individual could actively participate in an interaction without having been the initiator. It was assumed that patients and families were actively involved in patient/family-initiated interactions and therefore a further analysis of the nurse-initiated interactions was undertaken to measure level of involvement. Table 7.23. demonstrates that over three quarters (77%) of nurse-patient interactions in which patients/families were actively involved occurred in the postprimary nursing period. Furthermore, patients and families were passively involved in a majority (77.5%) of preprimary nurse-patient interactions. The difference in involvement levels in the nurse-initiated nurse-patient interaction between the pre - and post - primary periods was significant ($P < .001$) using chi-square.

Table 7.23 Involvement of patient and family in the nurse-initiated nurse-patient and nurse-family interactions

	Nurse-Patient Interaction $X^2 = 14.72$ $\phi = .4$ **P = <.001(S)**			**Nurse-Family Interaction** $X^2 = 4.59$ $\phi = .3$ **P = <.05 (S)**		
	Passive	**Active**	**Total**	**Passive**	**Active**	**Total**
Preprimary nursing	31 • 77.5 * 58.5 ° 33.6	9 • 22.5 * 23 ° 9.8	40 ° 43.5	5 • 100 * 20 ° 12.2	0 • 0 * 0 ° 0	5 ° 12.2
Postprimary nursing	22 • 43.4 * 41.5 ° 24	30 • 56.6 * 77 ° 32.6	52 ° 56.5	20 • 65.6 * 80 ° 48.8	16 • 44.4 * 100 ° 39	36 ° 87.8
Total	53 ° 57.6	39 ° 42.4	N = 92	25 ° 61	16 ° 39	N = 51

- • Row percentage
- * Column percentage
- ° Percent total

Similar findings were recorded regarding the level of involvement of patients and families in the nurse-initiated nurse-family interaction before and after introduction of primary nursing. Patients and families were passively involved in all (100%) interactions in the preprimary nursing group and all (100%) interactions in which patients and families were actively involved took place in the postprimary nursing period. Chi-square test shows a significant difference (P <.05) between pre - and postprimary nursing groups.

Table 7.24. Nursing activities[18] in nurse-patient interactions

Nursing activity	**Preprimary nursing**		**Postprimary nursing**	
	n	**%**	**n**	**%**
Clinical / Treatment+	21	41.2	86	39.4
Nursing care planning+	0	0	14	6.4
Education*	1	2	12	5.5
Emotional support*	2	3.9	10	4.6
Equipment+	2	3.9	6	2.8
Information*	12	23.5	30	13.8
Medication+	4	7.8	12	5.5
Observation+	3	5.9	14	6.4
Verbal*	5	9.8	34	15.6
Writing+	1	2	0	0
Total	51	100	218	100

Table 7.25. Nursing activities in nurse-family interaction

Nursing activity	**Preprimary nursing**		**Postprimary nursing**	
	n	**%**	**n**	**%**
Nursing care planning+	3	21.4	3	3.1
Education*	2	14.3	16	16.3
Emotional support*	3	21.4	13	13.3
Equipment+	1	7.1	14	14.3
Information*	2	14.3	31	31.6
Verbal*	3	21.4	21	21.4
Total	14	100	98	100

[18] *The activities performed by nurses during interaction were grouped into physical care (activities that are concerned with physical care of patients and carrying out care prescribed by other health care practitioners) and supportive categories (involving the social aspects of nursing care, exchange of information between the patient/family and the nurse. Other aspects of the latter category deals with nurses' sensitivity to patient/family and listening to patient/family problems).*

* Supportive nursing activities .

+ Physical nursing activities.

The data in Tables 7.24. and 7.25. indicate that there were more nurse-patient interactions in which physical care (55.4%) nursing activities were involved than supportive (44.6%). The reverse was seen in the nurse-family interaction in the sense that there were more contacts in which supportive (81.2%) nursing activities were involved than physical care (18.8%). Little wonder why the difference in the family satisfaction scores on the technical-professional subscale was not significant (Table 7.26.). This finding lends support to the thesis that the family found it more difficult to rate physical care because they were less involved in such aspect of care rendered to patients. It reaffirms Rosenthal, Marshall, Macpherson and French's (1980) contention that "while both patient and family may properly be considered clients, the patient is usually the primary client with the family occupying a secondary position" (p 87).

Table 7.26. Differences in nurses' activities involved in the nurse-patient and nurse-family interactions before and after introduction of primary nursing

	Nurse-patient Interaction X^2 .67 ϕ .05 P >.05 (NS)			**Nurse-family Interaction** X^2 1.2 ϕ .1 P >.05 (NS)		
	Physical	**Supportive**	**Total**	**Physical**	**Supportive**	**Total**
Preprimary nursing	31 • 60.8 * 20.8 ° 11.5	20 • 39.2 * 16.7 ° 7.4	51 ° 19	4 • 28.6 * 19 ° 3.6	10 • 71.4 * 11 ° 8.9	14 ° 12.5
Postprimary nursing	118 • 54.1 * 79.2 ° 43.9	100 • 45.9 * 83.3 ° 37.2	218 ° 81	17 • 26.5 * 81 ° 15.2	81 • 73.5 * 89 ° 72.3	98 ° 87.5
Total	149 ° 55.4	120 ° 44.6	N = 269	21 ° 18.8	91 ° 81.2	N = 112

- • Row percentage
- * Column percentage
- ° Percent total

There was a trend toward an increase in the number of supportive contacts after the introduction of primary nursing than before; in the nurse-patient interaction supportive contacts increased from 39.2%(pre) to 45.9%(post) and in nurse-family interaction, from 71.4%(pre) to 73.5%(post). This result supports Daeffler's (1975, 1977) findings that expressive nursing activities (explaining, reassuring, supporting the patient, etc.) are increased with primary nursing practice. However the differences between preprimary and postprimary nursing groups regarding the nursing activities involved in interactions were not statistically significant using chi-square.

7.3. Summary

Some measure of outcome is critical to an evaluation of any system of nursing care. In this study, quality of care, satisfaction levels and quantity and quality of interactions were measured to denote the impact of primary nursing in the model ward. Descriptive as well as inferential statistics were used to analyse the results of the study. Not only was change successfully implemented, but the findings from evaluation provide support for the beneficial effects of primary nursing as a mode of organising nursing care in the model ward.

The results suggest that when compared to functional nursing which was the nursing care delivery system used in the preprimary nursing period, primary nursing affords increased quality of care, heightened levels of patient and family satisfaction with nursing care, increased frequency of nurse-patient and nurse-family interactions, and improved quality of interactions between nurses and families in the model ward. Plausible explanations have been offered for the differences in the variables measured between pre - and post - primary nursing groups.

CHAPTER EIGHT

CONCLUSIONS AND RECOMMENDATIONS

8.0. Introduction

This chapter will pull together the main findings of the study, test research hypotheses, make recommendations and pose some implications. The study was set to promote family-centred care through the practice of primary nursing in Nigeria. The aim of the study was to introduce primary nursing into the Nigerian Nursing System and evaluate its impact on the family through measures of quality of nursing care, satisfaction levels and interactive processes. The study is important both because there is no evidence of primary nursing practice in Nigeria and there is little research on the impact of primary nursing on the family.

8.1. Test of Research Hypotheses

In the light of the empirical data now available, it is possible to test the initial hypotheses of the study as follows:

***Ho 1*:** There will not be any significant difference in the quality of nursing care received by patients before and after introduction of primary nursing into the model ward.

***He 1*:** There will be an improvement in the quality of nursing care received by patients in the model ward before and after introduction of primary nursing.

Quality of nursing care in this study has been defined as comprising six subsections: psychosocial-individual, psychosocial-group, physical, general, communication, and professional implications. The instrument used in measuring quality of nursing care in this study was QUALPACS. Analysis of data pertaining to the quality of nursing care rendered to patients in the model ward as seen in Table 7.6 demonstrated that there were significantly higher mean scores on all 6 criteria and the overall scores ($P < .001$

to .0005) after the introduction of primary nursing than before. This signifies a marked difference between quality of nursing care rendered to patients in the two periods (pre- and post - primary nursing eras) - an indication of an improved quality of nursing care in post-primary nursing care period. Therefore the null hypothesis is rejected. The results of this study therefore confirm the findings of Haussman *et al.* (1976) and Martin and Stewart (1983), that primary nursing has a positive influence on the quality of nursing care.

***Ho 2*:** There will not be any difference in the (a) Patient and (b) family level of satisfaction with care received in the different instances.

***He 2*:** (a) Patient and (b) family level of satisfaction with nursing care will increase in the different assessment phases of the research.

Satisfaction with nursing care has been shown to be the most important predictor of overall satisfaction with hospital care (Abramowitz, Cote and Berry 1987; Doering 1983). In this study, satisfaction with nursing care was measured by using an existing patient satisfaction instrument (Risser 1975, Hinshaw and Atwood 1982) which has been modified for use both with patients and families. The categories for satisfaction are three-fold: Technical-professional, Educational-relationship, and Trust-relationship aspects of nursing care. The data available on Table 7.7. show that patients in the postprimary nursing era were significantly more satisfied with all aspects of nursing care measured in the study. Family members in the postprimary nursing group (Table 7.8) scored significantly higher on one (Educational-relationship subscale) out of three categories and the overall satisfaction scale. Thus the null hypothesis is partially refuted.

***Ho 3*:** The (a) quality and (b) quantity of the nurse-patient and nurse-family interactions will not differ at the two instances.

***He 3*:** The introduction of primary nursing into the model ward would significantly increase (a) the frequency and duration of nurse-patient and nurse-family interactions,

(b) interactions in which patients and families were actively involved, and (c) those interactions in which supportive nursing activities occurred.

It is often assumed that contact between nurses and patients helps to hasten recovery (Altschul 1972). Freeman, Cameron and McGhee (1958) considered nurses to be the most important among the people in hospital to foster a relationship with patients that would promote recovery. They stressed the importance of a relationship with nurses and stated that the importance of such a relationship cannot be over-emphasised and the behaviour and attitude of the nurse may often be a vital factor in the recovery or otherwise of the patient.

In reports of the World Health Organisation (1957), the essential functions of nurses are associated with interpersonal skills. These skills have been described as having to do:

> with the relationship between the nurse and her patient in their day - to - day contact with each other ... they permeate all that a nurse does with and for an individual patient. From the patient's standpoint, the nurse is the mentally healthy person with whom he has most frequent contact. For him she is the fixed point in what must otherwise be an uncertain environment (pp 38-39).

Although the foregoing descriptions of the importance of nurses' role in fostering a relationship that would hasten patients' recovery were used in psychiatric settings (WHO 1957, Freeman 1958 and Altschul 1972), this is not far from what obtains in other areas of nursing. Since the central idea and the philosophy of primary nursing care emphasises a one-to-one nurse-patient relationship and individualised patient care, an obvious area of concern in this study was to investigate what happens between the nurse and the patient at the bed side. More specifically, an aspect of the present study was to find out more about the quality and quantity of nurse-patient and nurse-family interactions before and after the introduction of primary nursing care into a model ward in Nigeria.

Quantity of interactions:

There was a significantly increased frequency of nurse-patient and nurse-family contacts after primary nursing had been introduced. Whereas the mean duration of contacts in nurse-patient interaction decreased in the postprimary nursing period (though not statistically significant), the mean duration of nurse-family contacts increased significantly after the introduction of primary nursing practice.

Quality of interactions:

(a) Involvement level in interactions:

The data available (Table 7.21) indicate that there were more nurse-patient interactions during the postprimary nursing period (64.9%) in which patients were actively involved. The same was applicable to the postprimary nursing nurse-family interactions, in a greater proportion (84%) of which active involvement of the family were recorded.

Furthermore, patients/families in the postprimary nursing group were actively involved in a majority of nurse-initiated nurse-patient (77%) and nurse-family (100%) interactions. The difference in the number of nurse-patient and nurse-family interactions in which patients and families were actively involved was significant. The chi-square result being $P < .001$ for nurse-patient and $P < .0005$ for nurse-family interactions. The empirical findings therefore refute the null hypothesis but accept the alternative hypothesis that the introduction of primary nursing would significantly increase interactions in which patients and families were actively involved. This adds onto Ciske's (1974) contention that primary nursing care increases patient (family) participation in nursing care.

(b) Supportive nursing activities:

Although there were fewer (44.6%) nurse-patient interactions overall in which supportive nursing activities occurred, the majority (83.3 %) of these interactions occurred in the postprimary nursing care period. However, there were more (81.2%)

nurse-family interactions in which supportive nursing activities occurred, out of which, the majority (89%) took place in the postprimary nursing period. The items on Table 7.26 show that the difference in the number of nurse-patient and nurse-family interactions in which supportive nursing activities occurred in the two test periods did not differ significantly. Therefore the null hypothesis stands.

8.2. Conclusions

An action research strategy was used to involve the client system in this change. A model ward was selected for the study and pre - and post - tests were conducted to evaluate the effect of the independent variable on the dependent variables. The change was planned utilising Lewin's (1958) and Lippit, Watson and Westley's (1958) models of change. Appropriate steps were taken to break into the rigid hierarchical structure of nursing in Nigeria; starting from the controlling body of the profession (the Nursing and Midwifery Council of Nigeria) to the specific hospital and ward involved in the change. Nurses, families and patients were positive about the change, but other health care practitioners were neutral about the change. These health care workers did not openly disagree with the concept nor were they particularly encouraging either.

Quality study: Findings from the literature show varying results when quality of nursing care is evaluated as a measure of ascertaining the impact of primary nursing. Clearly in this study, there was a marked improvement in all areas of quality of nursing care received by the patients after the introduction of primary nursing. The greatest improvement in quality of nursing care when practising primary nursing in the model ward appeared to be in the areas of general and individual psychosocial care - elements which address the individual needs of the patient. However, the smallest improvements in quality of nursing care appeared to be in the area of physical care - elements of routine, technical nursing care. The finding could be interpreted collectively as signifying that a higher quality of patient care appeared to be associated with the nursing organisational pattern of primary nursing than with the functional nursing approach in the model ward for this study.

Some factors have been suggested that may have contributed to the higher quality scores in the postprimary nursing period. There may have been changes in the competencies of the nurses after having received educational training on primary nursing. During the course, some concepts which may have improved the competencies of nurses were discussed and this may have made nurses render better quality care to patients in the postprimary nursing period. Higher mean scores on QUALPACS after change had been instituted may have been an indication of proficiency in documentation by observers or raters not necessarily an improvement in quality of nursing care. It may have been a reflection of accurate recording in nursing notes as these written records were used to evaluate quality of care as well. It is possible that the improvement in quality of nursing care may have been a 'Hawthorne effect' generated by the practitioners' awareness of the post-change measurement thereby 'acting up' to provide better quality care. It may have reflected the assessors' expectation of improvement since they were not 'blind' to the experiment. Differences in patient and family population may have contributed to the difference between the two groups of respondents.

Satisfaction study: The results suggested a higher level of satisfaction for both patients and families after the change to primary nursing had been introduced. While the patient satisfaction scores showed significantly higher results for postprimary nursing than preprimary nursing groups on all subscales and the overall scale of the modified Riser Patient Satisfaction Instrument (PSI), the family satisfaction levels increased significantly in only one area - Educational-Relationship and the overall scale.

Positive skewness found in the satisfaction scores may have reflected consumers' reluctance to criticise care which they are meant to continue to receive. Differences in the sample population across the study may have affected scores. Sensitivity of the instruments used to measure the quantitative satisfaction has been suspected to have caused the change in levels of satisfaction across the groups under study.

There was a linear relationship between patient and family satisfaction scores. The implication of this finding is an indication of the role the family may play in the health of its members. For example the fact that patients whose family members 'stayed in' with them were more likely to have higher satisfaction scores than those whose families visited on a daily basis, may suggest the family as a source of satisfaction rather than the care given by nurses.

Interestingly, the responses from the interview lend support to the quantitative results. Specifically speaking, the fact that information was haphazardly given to families in the preprimary nursing care period, families were not involved in nursing care and nurses were more interested in technical aspects holding tightly to rigid routines in the ward may have made the satisfaction levels lower in this period of care in this study. It is worthy to note from the responses of these families in the preprimary nursing group that they were still satisfied with care given to them despite all the flaws in care reported. It therefore leaves doubts in ones mind and calls for the need to find out what 'being satisfied' means to different people.

Interaction study: There were differences between the pre - and post.- primary groups as regards the quantity and quality of nurse - patient and nurse - family interaction. The frequency of the nurse-patient and nurse-family interactions increased after the introduction of primary nursing into the model ward. There were shorter mean nurse-patient interaction times in the postprimary nursing period but the mean interaction times in nurse-family contacts were longer. It is worthy to note that the emphasis may not necessarily be on how long the interactions last but on the level of involvement of the family and which nursing activities are involved in such interactions.

There was a trend toward improvement in the level of patient and family involvement in nurse-patient and nurse-family interactions after the introduction of primary nursing. Even in interactions that were initiated by nurses, the level of patient and family

involvement improved significantly after, in contrast to before, the introduction of primary nursing into the model ward. Results also demonstrate an increase in the number of nurse-patient and nurse-family interactions in which supportive nursing activities were involved.

Summary of conclusions

- A higher quality of nursing care appeared to be associated with primary nursing than functional nursing in the model ward.
- The greatest improvements in quality of nursing care when practising primary nursing in the model ward was in the areas that emphasise the individual needs of the patient - general and individual psychosocial care.
- The smallest improvements in quality of nursing care seemed to be in the areas of routine technical nursing care - physical care.
- There appeared to be higher levels of patient and family satisfaction with nursing care when primary nursing was practised in the model ward.
- The greatest level of patient satisfaction with care seemed to be in 'Technical-Professional' aspects of nursing care.
- The lowest level of patient satisfaction with care appeared to be in "Educational-Relationship' aspects of care.
- The greatest level of family satisfaction with care was in the "Educational-Relationship' area while the lowest level was in the "Technical - Professional' area of care.
- There was a linear relationship between patients' and families' level of satisfaction with care.
- Families in the preprimary nursing period obtained information from nurses haphazardly, they were not involved in the care and nurses appeared to be only interested in the routine technical aspects of care which they rendered to patients.
- There were more nurse-patient and nurse-family interactions with the practice of primary nursing in the model ward.
- There were shorter nurse-patient interactions but longer nurse-family interactions.

- There was a trend for a greater number of nurse-patient and nurse-family interactions in which patients and families were actively involved during primary nursing practice.
- There was a trend toward a greater proportion of nurse-patient and nurse-family interactions which involved supportive nursing activities with primary nursing practice in the model ward.

8.3 Limits to the Research

This study was originally planned for the University of Nigeria Teaching Hospital, Enugu (UNTH). All necessary preparations were carried out. These include:

* Written information sent to the Chief Medical Director and the Director of Nursing Services of the hospital five months before field work.
* Selection of a research partner - a nursing practitioner at UNTH- three months before field work.
* Selection of primary nursing co-ordinator and mailing of materials on primary nursing to her. This took place three months before field work.

The University of Nigeria Teaching Hospital whose Directors had been informed about the proposed change could not be used for the study because the medical practitioners were on strike. The hospital only offered skeletal services at the Emergency department. The researcher viewed this setting as non-conducive for the study at the time because there were not enough patients to be used for the study and she felt she needed to introduce primary nursing into a setting with its normal make-up; where all constraints and all aspects of the setting would be reflected. She thought that having to introduce primary nursing in a setting that normally has doctors but this time had none would mean introducing the change into a health setting where the judgement of the doctors' reaction to the change could not be made. This changed situation, she thought would not give a true picture of the change. Therefore she decided to move over to another research site, where the preparation of those involved had to be done in a haste to meet up with the time limit for the project.

This study only embraces preliminary evaluation considering the time and finances available for it. The study describes the impact of primary nursing on the family system and the initial changes arising from the introduction of primary nursing. However, it points to further outcomes expected when the change has had enough time to take full effect. The study being an action research, is limited primarily in its situational, in-depth, nature, precluding generalisation of results to other contexts.

The study, though limited to only one hospital - St Luke's Specialist Hospital, Anua, and indeed only to one ward in that hospital is expected to yield outcomes that will be of benefit to other hospitals in Nigeria. It is hoped that it will be possible to extend this study from the model site to other hospitals in due course. Since it is a specialist hospital and has a complex structure of being run by both the Government and the Missionaries, it is envisaged that if primary nursing is successfully introduced into this hospital, then its introduction into less complex settings like primary and secondary health care institutions run independently by the Government or other private owners, will be relatively straight forward.

Some disruptions in the change programme were faced and these include:

(1) Strike action by nurses and doctors.

(2) The transfer of the first primary nursing co-ordinator from the hospital.

8.4. Recommendations

Clearly to enable evaluation of the benefits of primary nursing, further research is required which will enable comparisons between primary nursing and other modes of nursing organisation. Although much work has been done on primary nursing (Giovannetti 1986, MacGuire 1989) only a handful of primary nursing papers are research based (Giovannetti 1986). This present study emphasises the role of the family in the care of its sick members in a primary nursing setting. Replications of this study are required to help the spread of family-centred nursing care into other hospitals.

Because of the likely barrier which innovation in developing countries could present to change agents, cost effectiveness measures of primary nursing and studies on specific factors that will make primary nursing innovation in other developing countries successful, are recommended. Also continuity measures, outcomes for nursing staff and other health care practitioners are necessary variables for future evaluative studies of primary nursing.

Since the vast majority of current literature on primary nursing originates from America, Canada (Malkin 1993) and Britain, the application of literature from a nursing culture which may hold different values from Nigeria and other developing countries, should be carried out with caution. More long-term studies of primary nursing are required. Because of the suggestive results which emanated from this study on the effect of family presence on patient satisfaction further research should be done to ascertain if there is any convincing association between presence of the family at patients' bedside while the patient is under care and the level of patient satisfaction with nursing care.

In the present study, measurement was not based on whether patients did receive primary nursing during the observation period. A careful manipulation check should be carried out to measure only interactions between primary nurses and their primary patients. Future research could base its manipulation checks on more specific variables such as whether primary nurses actually performed specific functions or by evaluating the stability of the patients' assignment to a primary nurse and associate nurses.

Although the main focus of the study was on the family, some data were collected from the nurses. As the providers of care to the families under study, more data could have been collected from the nurses, e.g. their perception of the care given to families, their satisfaction etc. Future studies should address these areas.

8.5. Critique of the study

> All research studies have strong and weak points ... the purpose of a research critique is to assess the strengths as well as the weaknesses of a research.
>
> (Nieswiadomy 1993: p 319)

This action research study is the first in Nigeria and it was aimed at introducing and evaluating primary nursing as a mode of promoting family-centred care. Documentary evidence exists to show that research of this sort makes no claim to generalisability. A feature of any research undertaken in the clinical area presents the difficulty of controlling for extraneous variables. This study is not exempted from such difficulties and results are limited in terms of generalisation beyond the study ward. This points to the need to be cautious when making reference to the findings from this study.

Havelock and Humberman (1977) have identified six factors which militate against successful implementation of innovation in developing countries. These include, underestimating the process; personality conflict and lack of personal motivation; underdevelopment (inadequate resources and capacities); financial problems; opposition from key groups; poor social relations.

It was observed from this study that financial problems, and inadequate resources were not really threatening because according to Marram (1976) primary nursing can be implemented without increasing operating expenses. It was clear to the practitioners from the outset that introduction of primary nursing did not mean provision of unavailable resources. Equally since the researcher took time to plan the change the problems of personality conflict, poor social relations and opposition from key groups, were overcome to a certain extent.

The 'outsider' model of action research used in this study was more experimental than a typical action research where the researcher spends more time with the change participants solving problems as they arise in the change site. The disadvantages of this

model of action research have been enumerated by Titchen and Binnie (1993c). The use of a research partner in the present study was aimed at combating these disadvantages. They include:

(1) Differences in the ways the practitioner and the researcher attempt to reduce uncertainty,

(2) The 'outsider' (researcher) and the client system may have different goals and the ideas of what they consider important to the study may differ also. This may result in tension which is greater if the 'outsider' is taking a higher degree, and is interested in a particular area of study, and

(3) The researcher, has no legitimate authority and only has limited power to influence what is happening in the change situation.

Sample: The main sample of the 'introduction' study were all nursing staff and all patients and families in the model ward. For the evaluation study, 10 patients and 8 family members in the pre - and 8 patients and 6 family members in the post - primary nursing periods were used. Although the same set of nursing staff rendered care to patients before and after the practice of primary nursing in the model ward, it is assumed that the competencies of these nurses in the second period of the study might have changed considerably. One weakness of the study is the non-measurement of the competencies of nurses at the two periods. Shukla (1981) demonstrated in her study that nurse competencies made a greater contribution to quality of care than the organisational approach, although the organisational approach did enhance quality. On the whole, the role of nurses in the evaluation of the change was not very prominent in this study.

Patients and family members in the 2 groups were not comparable on certain characteristics, e.g. sex, age, length of stay, diagnosis, regularity of visit of family member, relationship of family member to patient. The explanations given in the study

do seem to give general conclusions based on data analysis but no categorical truth can be claimed. The two study groups also had different sample sizes.

Data collection: The study adopted both qualitative and quantitative approaches, using multi-methods to collect data. It used observation, interview, self-report questionnaires and the review of records. Standardised instruments were used to elicit information. QUALPACS was developed and used mostly in America. Although a few British studies have used this tool, there exists an argument on the cultural differences in the use of this instrument in a country outside the original where the instrument had been tested. The use of QUALPACS to evaluate quality of care in Nigeria without any form of revision of items may create doubts in the minds of people as to whether the tool really fits into the culture of the country where the study was undertaken. But it is unlikely that this had any effect on the data as the tool was used by trained assessors to score quality of care in the model ward before and after the introduction of primary nursing. It was used to make comparisons. Repeated trials and practical sessions were conducted with research assistants on the use of QUALPACS and this is believed to have overcome any likely problem in this perspective.

Another important issue about QUALPACS is the fact that familiarity of assessors on the use of the instrument may have led to improved documentation in the second period, likely to influence scores across the two groups in the study. Additionally, since the use of QUALPACS also involves review of records leading to some kind of retrospective audit, the scores may have reflected effective recording in nursing notes and patients' case notes and not improvement in the quality of care.

The Riser satisfaction instrument has been criticised for its insensitivity to subtle differences in a satisfied group of patients and a consequent lack of variability of scores. Although modified, there might still exist the problem of cross-cultural unsuitability. The patient and family satisfaction instruments employ Likert type questions, but an alternative design of questionnaire making use of open-ended

questions would have yielded a richer source of data. It was the realisation of the fact that the Likert type response scale can limit the ways in which data are reported, that made the researcher adopt a follow up interview.

In this study, the interview was conducted to give backing to the data obtained from the questionnaire. Advantages and disadvantages of interview are highlighted in chapter five. Although Powney and Watts (1987) observe that research interviews are a relatively non-problematic means of gathering information, problems of fear of absolute frankness was obvious in families' responses. A typical example is where a family that found nursing care and information in the preprimary nursing period inadequate still stated that they were satisfied with such care. It may have been difficult to get the true opinions from respondents although they were promised anonymity. A way around this problem was to select interviewers who did not work in the hospital so that families will trust that their responses would not affect their care in any way.

The study involved long observation/interview hours - 6 hours in the morning and 6 hours in the evening care periods. This could have caused fatigue to the assessors/interviewers. Measures were taken to prevent fatigue of any sort; drinks were served at frequent intervals during the data collection exercise and they were asked to report any symptom of tiredness or exhaustion to the researcher or research partner who could continue the assessment. Since the study was not intended to provide any comparison between the two care periods (morning and evening) and the same periods of observation and interview were applicable in the two study eras - the pre - and post - primary nursing eras, this problem may have had only a little or no effect on the present study.

Extensive reliability tests of the instruments used for data collection were conducted. Clear presentation of research results was carried out. Precise conclusions and recommendations are presented.

8.6. Overview of the project

It was obvious at the beginning of the project that the Nigerian extended family system mandates family members to be involved in the care rendered to their sick members by the health professionals. What was less obvious was exactly how nursing care could be organised to enhance participation of the family in the care of its hospitalised members in Nigerian hospitals. It became even more complicated when the adoption of the nursing process - a mode of scientific problem solving used in nursing - had presented a pressing problem and where mounting reports had been given from the press (Cole 1992) and from the public about poor quality of nursing care in tropical hospitals (Nigerian hospitals inclusive). The project was designed to resolve the problems already mentioned above by the introduction of primary nursing. This project took 36 months to complete as shown in the time table of the project presented below.

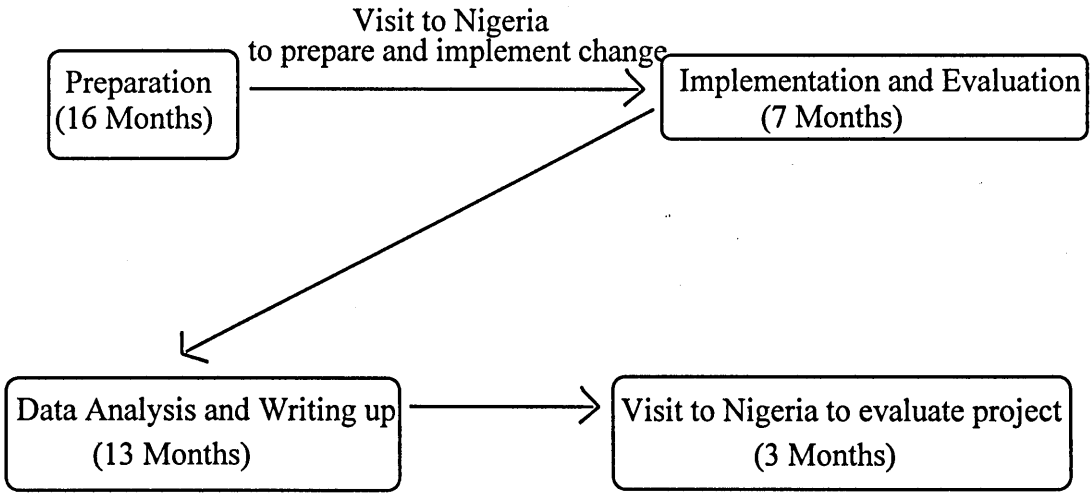

Fig 8.1. The time table of the project

Literature review

There is a growing literature on the introduction of primary nursing in many countries. This trend may be viewed as an attempt to return to the fundamental professional

relationship between the patient and the nurse (MacGuire 1989a). In the present study, a review literature which reported pertinent empirical work was undertaken and was organised around the major study variables.

The results of the primary nursing studies are not consistent as far as its effect on patient satisfaction, quality of care and interactive processes are concerned. There are varying degrees of support for primary nursing. Some of the studies reviewed showed significant support for primary nursing, while others did not indicate any significant differences between primary nursing practice and other modes of organising nursing care delivery on the variables measured. Other studies found other nursing assignment patterns having more impact than primary nursing practice.

Several investigators suggested that the introduction of primary nursing was accompanied by renewed nursing interest and attention to the philosophy of individualised patient care (Armitage et al. 1991, Bond et al 1990a, 1990b and Reed 1988); a higher level of responsibility for patient care (Bond et al 1990a, McMahon 1990a, Clark and Zornow 1989); increased collaborative communication (Perala and Hentinen 1989; Blenkarn et al 1988); improvement in the standards of care (Culpepper et al 1986, Manley 1990, Pearson et al 1989, Armitage et al 1991) and improvement in patients' involvement in care (Hamera and O'Connell 1981).

However the disadvantages of primary nursing also emerged from some studies: Nurses reported more paper work and inconveniences in unit management (Perala and Hentinen 1989); lack of privacy for patients (Webb 1981); over-involvement with one particular patient resulting in an unequal distribution of care within a nurse's caseload (May 1991) and an untold effect on patients' autonomy. Giovannetti (1980) found that the level of patient satisfaction with care decreased with primary nursing practice. In McPhail et al.'s (1990) study, a majority of nurses expressed preference for team nursing and these authors concluded from their findings that there was no advantage in introducing primary nursing.

Some conceptual and methodological issues have been identified in the literature to demonstrate the efficacy of primary nursing. The most troublesome of these issues was in the area of operationalising the independent variable. There is absence of an operational definition of primary nursing in all the studies reviewed. The concepts of accountability, power, authority and responsibility which were used in many studies to describe primary nursing were not described in measurable terms. The operational definition of alternative methods of organising nursing care were not given either.

The major focus of studies on primary nursing has been on the overall process, with little attention given to what nurses actually do. This is, how do nursing activities differ according to the nursing assignment pattern on the unit? This problem results from lack of operational definition of primary nursing. Many practice differences exist within methods which claim to be primary nursing. These variables account for the fact that frequently no difference in the dependent variable was found between assignment patterns. Moreover relatively little has been done to measure the effect of primary nursing on the outcomes of nursing care or the conditions under which this mode is most effective. Staffing variables have been addressed generally in regard to definition and implementation of primary nursing without consideration for the care requirements of the population. This therefore leads one to ask if primary nursing can be used for all patient groups in all settings.

The need to examine the scope of primary nursing practice has to be addressed. It is increasingly assumed that primary nursing can be used by all nurses for all patients in all settings. Munson and Clinton (1979) and Sliefert (1986) offer convincing explanation to show that the consequences of primary nursing are appropriate only with patients with a unique set of needs and care requirements. Other investigators also have asserted that given a diverse group of patients with differing requirements for care, it is unlikely that there is one best way to organise the delivery of nursing care (Anderson and Choi 1980, Young et al. 1980).

Outcome measures related specifically to primary nursing care in particular and nursing care as a whole have been seen to be notoriously difficult to establish. Many pieces of researche measured patient satisfaction, quality of care, cost of care and a few measures nurse-patient interactive process. Although there is great interest in what affects patient satisfaction, there are a number of methodological issues (Sliefert 1986, Naylor, Munro and Brooten 1991). Most researchers have used global measures that could be affected by a variety of factors. Some have broken patient satisfaction down into satisfaction with various aspects of care. Others have used measures with inpatients which were originally designed for out patient settings. Generally speaking, measures have not demonstrated adequate sensitivity to tap differences in patient perceptions, because satisfaction has different meanings to different people and the same person in different circumstances. The studies reviewed show a range of conceptualisations and there is general lack of rigour in satisfaction measurement. Research methods are often flawed by using inappropriate measures.

Some theoretical and methodological problems found in patient satisfaction measures include:

- Problems of measurement, analysis and interpretation.
- Absence of true experimental design.
- Difficulty in finding valid, reliable and sensitive instruments.
- Patient satisfaction not a unitary phenomenon and is consequently less easily defined.
- Patients' desire to please and fear of appearing ungrateful.
- Whether or not a hierarchy of satisfiers exist and can be identified.
- Use of single-question measures to assess a multi-dimensional phenomenon.

The evaluation of the quality of care has also presented some methodological issues. Since in most cases, indicators of patient satisfaction are "emerging as a dominant and

critical outcome of measure for quality of care" (Strassen 1988: p 5), the problems mentioned above are also commonplace. Additionally there are measurement problems resulting from subjective processes of evaluating care. A lack of theory seems to be a frequent difficulty in interaction analysis.

Findings from research on primary nursing show a lack of clarity of the theoretical support or basis for primary nursing. This makes the use experimental research methods in evaluating the outcomes of primary nursing debatable. Instrumentation and research design presented some flaws. In most studies, the instruments used to measure criterion variables lacked adequate reliability and validity assessment. With few exceptions, no reference was made to the psychometric attributes the measurements. Where standard measures were used, investigators appeared to assume that previously established reliability and validity estimates were transferable.

Interestingly, many studies used action research strategy (Titchen and Binnie 1994, Smith 1986) to introduce primary nursing and evaluate its impact on patients and nurses under study. The involvement of the patients and nurses was noted in these studies. The use of triangulation was a feature of a great number of studies (Thomas 1992, Wilson and Dawson 1989). Triangulation was seen in many forms. Data triangulation (collection of data at different times yielding both quantitative and qualitative information); method triangulation (the use of more than one method of research e.g. action research in conjunction with quasi-experimental research); researcher triangulation (involvement of more than one researcher in the study); and subject triangulation (using more than one set of subjects).

The impact of an organisational change such as the adoption of primary nursing is difficult to measure, control and thus evaluate in real - world settings. The empirically based studies which have attempted to make comparisons between primary and non-primary nursing units have used single, highly selected units in one hospital. Since these units may represent extreme cases (e.g. pure forms of one method of nursing care

organisation), the likelihood that differences between units will be observed is greatly enhanced. By comparing primary and non-primary nursing methods using several units at two different hospitals, one increases the possibility that variations in the actual implementation of each method (e.g. use of primary nursing on day shifts but not on night shifts) may serve to diminish whatever differences exist between the two types of nursing care arrangements. This may occur despite efforts in the research design to control for extraneous effects.

There is no agreed period across the studies as to how long the practice of primary nursing should be in operation before evaluative processes can be carried out to yield results which denote the actual impact of primary nursing. The periods shown in the literature ranges from one month to one year.

Overall the amount of work that has been reported concerning the organisation of nursing care is considerable. However, the lack of clear definitions of nursing assignment patterns and a description of what nurses actually so when they practice nursing, the ambiguity associated with the theoretical basis of primary nursing, and the methodological issues suggested the need for further research on primary nursing.

Also there is limited literature on the family as a focus of care in primary nursing practice. No evidence existed to show the practice of primary nursing in Nigeria. This study was therefore a culmination of the above mentioned factors and the need to address the particular problems of the Nigerian Nursing and Family Systems. A focus of nursing care on the family is very important in Nigeria and is increasingly becoming an area of emphasis in most nursing models e.g. the nursing process.

What the present study borrowed from other studies

The conceptual framework for this study was based in King's (1981, 1983) model of the family which clarified the main variables of the study and illustrated the expected relationship between them. The choice of an appropriate research design and methods

used in the present study was based on the suggestions from other primary nursing studies. Since specified knowledge was required in the promotion of family-centred nursing care in Nigeria, the action research strategy was adopted in this study. An 'outsider' model of change required the use of an 'insider' in the organisation as a partner in the research. However, to reduce the Hawthorne effect to a greater extent, the nurses giving care were less involved in the data collection. There was marked involvement of the client in determining the need for change, planning and implementing the change.

The programme was designed by the writer. This involved selecting and testing data collection tools; preparring, planning for and implementing the change. The research parrtner was briefed by the researcher. The researcher masterminded the whole process of change - preparing, planning for, implementing and evaluating the change. Research assistants were carefully selected and trained for data collection by the researcher, who also acted as a supervisor during the data collection exercises. The researcher also collected data on some aspects of the study e.g. focus of care in the prechange period. Data analysis was the responsibility of the researcher.

Appropriate existing instruments were used for data collection e.g. QUALPACS. Others were modified as appropriate to suit the client group. These instruments were assessed for reliability and validity. The practicality of the instruments were ascertained. Like the works of Giovannetti (1980) and Hamera and O'Connell (1981), this study measured what the nurses working on the primary nursing unit (model ward) actually did. In summary, the strengths, weaknesses and constraints of other studies were studied carefully and influenced very strongly the design of the present study.

Strengths of the study

- Consistent instruments were used for data collection.
- Review of carefully selected related literature and conceptual framework.

- Report of the structure, process and outcome of the change.
- Systematic planning and execution of the change.
- Adoption of a bottom-up strategy of change by setting up the Primary Nursing Group (PNG).
- Involvement of the patients and families, nurses and others in establishing the need for change.
- Use of triangulation.
- Use of an 'insider' to counter the effects of the 'outsider' model of action research.
- Ability to gain collaboration with the patients, families and nurses. The nursing process touched on nursing professionalism raising the interest of the Nursing and Midwifery Council of Nigeria. Poor quality of care affected the general public, nurses and the nursing profession. Family-centredness appealed to the extended family system which is a strong force in Nigeria.
- Availability of materials on primary nursing (e.g. Archibong 1993).

Novelty features of the study

- This project is the first of its kind in Nigeria.
- The extended family system was the focus of the primary nursing practice in the present study.

Problems identified from the study

- Small sample size
- Unequal sizes of the patients and families in the two study periods- Unfortunately there were too few eligible patients in the second study period to give equal numbers in both groups.
- Possible Hawthorne and practice effects especially in the post implementation phase.
- Findings cannot be generalised to other situations or settings.

- Short period of practice before post change evaluation.
- Lack of control over extraneous variables.
- Complexity of the type of research in a real-life situation.
- Noncomparability of nurse competencies across the two periods of change because the nurses in the postchange period had undergone the Primary Nursing Orientation Course which may have enhanced their skills..
- Assessors were not blind to the experiment.

Implications of present study to researchers who wish to replicate study

- The conceptual framework and research strategy on the whole should be retained.
- QUALPACS could be used in the measurement of quality of care.
- Benefit would be gained by expanding and redefining the current content dimensions of the Modified Riser Satisfaction tool. Open-ended questions could be added to the explain respondents answers to closed ended questions.
- More qualitative data should be collected on patient satisfaction.
- Precision of the definition and description of nursing organisational patterns needs to be included in future research.
- The number of study subjects should be increased and same size of patients and families should participate in the two study periods if possible.
- More time should be allowed for the change to be in operation before post change data collection is conducted.

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APPENDICES

Appendix I

Scoring sheet for the selection of the model ward for primary nursing practice in Nigeria.

Hospital Name _____

Ward Name: _____

Staffing ratio (nurses:patients):

(3) 1:1 - 1:5 ( )

(2) 1:6 - 1:10 ( )

(1) 11 and above ( )

Leader position power

(3) Strong ( )

(2) Moderate ( )

(1) Weak ( )

Leader involvement in ward activities:

(2) Active ( )

(1) Passive ( )

Staff turn over in the last 12 months:

(3) 1-2 (Low) ( )

(2) 2-4 (Moderate) ( )

(1) Above 4 (High) ( )

Unit activity

(a) How many patients have care plans?

(3) All (High) ( )

(2) Only very ill ones(Moderate) ( )

(1) None (Low) ( )

Staff commitment to nursing change programmes

(a) How many change programmes sustained in the last 12 months:

(3) Above 3 (High) ( )

(2) 1-3 (Moderate) ( )

(1) None (Low) ( )

(b) What percentage of staff would want to utilise primary nursing?

(3) 68-100 ( )

(2) 34-67 ( )

(1) 0-33 ( )

Appendix II

Satisfaction interview schedule

Duration of stay in the ward.

Relationship of family member being interviewed to the patient.

Regularity of visit of family member.

Information and Explanation:

(1) How information is obtained from nurses in the ward generally; does the nurse wait to be asked for information or does he or she give information to patient or through family member or other patients.

(2) Do nurses give prior information or explanation on any change or necessity of treatment programme for patient. For example, patient's progress, diet, exercise, etc.

(3) Availability of the nurse when patient or family wishes to talk to him/her.

(4) Which nurse is usually approached when patient or family is in need and why.

(5) Which nurse is usually asked for more information and why.

(6) Time spent by nurses to discuss with patient and family.

Individuality of care

(1) Level of participation in planning and implementing nursing care by patient and family.

(2) Satisfaction or dissatisfaction with the mode of provision of nursing care.

(3) Satisfaction or dissatisfaction with the way patient's/family's needs have been catered for.

(4) How well expectations have been met and what they are.

(5) Most striking thing about the nursing care of the patient.

(6) Least striking thing about nursing care.

(7) Patient's perception of the his/her individuality in care and the individuality of family. Is the patient treated as a unique person or treated as any other patient or is the family treated as any other family.

(8) Nurses concern about patient's home life / work / children and other issues outside illness situation.

(9) Interest shown by nurses concerning effects of illness on family.

(10) Organisation of nursing care; is it around the patient and family or around nursing routines.

(11) Any one nurse who is patient's particular nurse or a group of nurses. Who is the nurse, would the patient/family have liked to have another nurse(s).

Appendix III

QUALPACS With cues for learning process.

QUALITY PATIENT CARE SCALE

INFORMATION FACE SHEET

Fill in for each session

WARD .....

Name _____ Type _____

Number of rooms _____ Number of beds _____

Number of patients _____

Number of patients

Dependency level of patients being assessed

Dependency levels

Date _____ Rater _____

Time of day _____ am/pm

Day of Week _____

Additional notes or questions

QUALITY PATIENT CARE SCALE

STAFF / INFORMATION FACE SHEET

STAFF ON DUTY

Grade of staff	Number
Chief Nursing Officer	
Principal Nursing Officer	
Senior Nursing Officer	
Nursing Officer I	
Nursing Officer II	
Student Nurse	
Ward Orderly	
Non-nursing staff by number	
Ward Clerk	
Domestic	
Other (State who)	
Other Information:	

PATIENT INFORMATION

PATIENT	A	B	C	D
Age :				
Sex				
Room (type)				
Date of Admission				
Diagnosis on admission				
Current diagnosis				
Condition of patient				

QUALITY PATIENT CARE SCALE

Date _____ Rater _____

INTERACTIONS RECORD: AM/PM

NUMBER:

TIME:

PSYCHOSOCIAL: INDIVIDUAL

Actions directed towards meeting pschosocial needs of individual patients.

1. Patient receives nurse's full attention. *D

a. Patient is appropriately responded to, verbally and non-verbally, without being asked to repeat phrases.

b. Staff assumes positions that will aid in observation and communication with patient.

c. Conversation of staff is restricted to patient who is receiving care.

d. Patient is looked at and talked to as he/she is being fed.

e. Questions are posed which encourage patient to express feelings.

f. Evidence is given by staff of anticipation of projected patients needs.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

2. Patient is given an opportunity to explain his/her feelings. *D

a. Facial expression of staff indicates interest in and understanding of patient.

b. Patient is given time to talk.

c. Patient is allowed to complete sentence before staff speaks or moves away from patient.

d. Conversation is encouraged by staff using brief comments or leading questions to let patient know they are listening and interested.

e. Conversation is terminated in such a manner that patient understands reason for termination, leaving patient with a feeling of satisfaction about discussion. (Patient's facial expression indicates this satisfaction).

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

3. Patient is approached in such a kind, gentle and friendly manner. *D

a. Staff speak clearly, in a soft and pleasant tone.

b. Patient is called by name, and informed of name of nurse by distinct enunciation.

c. Crying patients (all ages) are shown patience and understanding (verbally and non-verbally).

d. Patients are approached with a smile and encouraging word.

e. Patient is given opportunity to initiate verbalisation of needs.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

4. Patient's inappropriate behaviour is responded to in a therapeutic manner. *D

a. Withdrawn patient is helped to consider various means for involvement or interactions with others.

b. Attention of adolescent who is teasing others and interfering with activities of others is redirected.

c. Patient who refuses examination or treatment is helped to think through various facets and alternatives in the situation.

d. Expressions of hostility are accepted; changes that can be made are made and explanations of why some things cannot be changed are given; indications are given to the patient that the nurse is interested in knowing the patient's feelings.

e. Staff communicates, in acceptable manner, dislike of abusive or provoking language or behaviour.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

5. Appropriate action is taken in response to anticipated or manifest patient's anxiety or distress. *D

a. Leading questions are asked to determine what the patient knows about pending therapy.

b. The labouring mother is encouraged to express her thoughts and feelings about impending delivery, her own safety, and the health of her baby.

c. Time is spent with patient or arrangement is made for someone else to stay with an anxious patient.

d. Physical indicators of anxiety and distress are noted, such as wringing of hands, diaphoresis, withdrawal, etc.

e. Patient's repeated reference to a topic is noted, and is encouraged to discuss it.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

6. Patient receives explanation and verbal reassurance when needed. *D/+I

a. Components and purpose of treatments or nursing care action are explained as appropriate.

b. Attempts are made to describe kind of pain or discomfort patient may anticipate, including estimate of duration of discomfort and what will be done, and what patient might do to alleviate pain or distress.

c. Patient is helped to explore and understand why he feels about or behaves as he does toward other persons, toward himself or toward his illness.

d. Comments are made about patient's action to remind and reassure him/her of signs of movement toward wellness.

e. Patient is informed of when staff will leave and when they will return.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

7. Patient receives attention from nurse with neither becoming involved in a non-therapeutic way. *D

a. Nurse-patient relationship is maintained by focusing on patient's interests.

b. Child's need for affection and closeness are provided for, but child is helped to remember parents and siblings.

c. Appropriate terms of address are utilised by both nurse and patient rather than inappropriate endearing terms.

d. Monopoly of time of either patient or nurse is avoided.

e. Patient considering alternative actions is listened to and encouraged, but allowed to make own decisions; staff is neither authoritarian or patronising.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

8. Patient is given consideration as a member of the family. *D/+I

a. Care and treatment activities are provided at times that will least interfere with visiting or friends.

b. Family is encouraged to participate in care of patient; mother is encouraged to feed child.

c. Patient is assisted to maintain communication with friends and colleagues - comfortable setting for visitors, assistance with telephoning, positioning and materials for letter writing, prompt mail delivery.

d. Rules are adjusted to meet special needs of patient or family; e.g.. underage child allowed to visit parent.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

9. Patient receives attention for his spiritual needs. *D/+I

a. Patient's religious beliefs and practices are respected.

b. Religious articles are handled with respect.

c. Pastor is promptly called when patient expresses desire to see him, or nurse volunteers to call pastor.

d. Assistance is offered and patient is encouraged to attend the services of his faith available to him (within the limits of his physical ability to do so).

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

10. The rejecting or demanding patient continues to receive acceptance. *D/+I

a. Patient who refuses to talk is visited frequently by the nurse who displays interest and gives assurance of "being there".

b. Willingness to understand the patient's point of view is conveyed in relation to refused activity or treatment.

c. Patient who turns away or shouts "Go away" is remained with, spoken to quietly and reassuringly, and helped with resolution of need to reject attention offered.

d. Attempts are made to help patient clarify his understanding of the rationale for nurse action or treatments he/she proposes.

e. Call light is answered promptly and without hostility, despite frequency of demands.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

11. Patient receives care that communicates worth and dignity of man. *D

a. Patient is cared for with kindness and helpfulness.

b. Patient is encouraged to make choices about daily care and allowed time to make decisions and to respond.

c. Requests and needs of hopelessly ill or dying patient are met with the same interest as that shown other patients.

d. Means and opportunities for communication are provided and utilised within communication limitations of patient-speech loss or defect, deafness, limited language skills.

e. Physical movement of patient is managed so that minimal strain is inflicted.

f. Patient with permanent body defect is cared for in the same way as other patients.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

12. The healthy aspects of the patient personality are utilised. *D/+I

a. Patient receives guidance in resolving a problem to decrease frustration of indecision.

b. Opportunities are provided for patient to receive satisfaction through contributing to others; e.g. having child in wheel chair take toy to child confined to bed.

c. Patient's abilities are pointed out, while focus on his disabilities is avoided.

d. Ways are provided and the patient is encouraged to enlarge his knowledge in areas that are of interest to him.

e. The patient's sense of humour is responded to in an appropriate manner.

f. Conversation is directed into optimistic vein; dwelling on pessimistic outlook is subtly curbed.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

13. An atmosphere of trust, acceptance and respect is created rather than one of power, prestige and authority. *D/+I

a. Patient is trusted in as many ways as possible; he is allowed to perform those care activities within his capacity.

b. Patient is allowed to express his opinions, and respect for his opinions is reflected in plans and activities of care.

c. Withholding ordered treatment or necessary care is not used to solicit patient co-operation.

d. Patient's conversation or activities are not needlessly disrupted.

e. Inappropriate comments or actions made by the patient are quietly and briefly pointed out to him.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

14. Appropriate topic for conversation are chosen. *D

a. Topics of known interest to patient are introduced; particular sport, hobby, television show, neighbourhood activity, etc.

b. Patient is encouraged to talk about personal interests and concern, e.g. children, family, what family is probably doing at home, etc.

c. Conversation is guided to neutral or positive subject if argument develops or seem to be developing.

d. Discussions realistic to plans for and feelings about the future are encouraged, whether expectation be complete recovery, living with limitations or death.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

15. The unconscious or non-oriented patient is cared for with the same respectful manner as the conscious patient. *D (Applies as well to lethargic, sedated and non-verbal patient).

a. Help is sought in moving the patient and movement is performed in a safe, gentle manner.

b. Conversation of staff is focused on matters about the patient and his immediate care; jocularity is avoided.

c. Patient is referred to by name and is spoken to in a well-modulated tone; discussion of patient's condition or prognosis is avoided in patient's presence.

d. Disoriented patient is informed about anticipated treatments, instructions are offered about what will be expected of him, and interest in helping the patient to understand is evidenced.

e. For the patient anticipating anaesthesia or other induced unconsciousness, anxiety regarding being unconscious is recognised and discussed. Patient is given support regarding confidentiality of his behaviour and conversation during period of unconsciousness.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

PSYCHOSOCIAL: GROUP

Care received reflects recognition of the patient's psychosocial needs as a member of a group.

16. Patient as member of a group receives warmth, interest and attention from staff. *D

a. Conversation of group members is listened to and comments are made that promote patient's continued interest.

b. Each member of the group is recognised and acknowledged by the staff.

c. Patients receive appropriate information about the changes in group structure, e.g. one of the ward patient to remain in I.C.U. overnight following surgery.

d. New patients are introduced to the group by staff.

e. When more than one staff member is working with patient, the patient is given recognition as a part of that group.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

17. Patient receives the help necessary to accept limits on his behaviour that are essential to group welfare. *D

a. Reasons for limitations that relate to "regulations" are identified, e.g. no smoking with oxygen in the room.

b. Group members receive necessary explanation and guidance regarding group aims.

c. Groups of adolescents are allowed to plan games that include those with physical limitations, without placing undue attention on the other.

d. Hostile expressions relating to limitations are accepted, but staff remains firm and consistent in maintaining these when necessary.

e. Reason for exclusion of an individual from a group is explained without embarrassment to the individual or group.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

18. Patient receives encouragement to participate in or to plan for the group daily activities. *D

a. Patient is helped to plan activities and time schedules, such as bathroom privileges.

b. Patient is encouraged to make plans helping others in the group; e.g. when to take the paralysed patient to sunporch in a wheelchair.

c. Patient's suggestions and assistance are sought in making changes in physical setting - furniture arrangement, room assignments, etc.

d. Patient is helped to make arrangements for some social activities, e.g. sharing of meals by three or four patients.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

19. The member of the group is provided with the opportunity to assume responsibility according to his capacity. *D

a. Mother with one or more children is given the opportunity to offer suggestions to "new" mothers.

b. Aggressive patient is encouraged to serve as member of committee providing support to "chairman", but not take over chairman's duties.

c. Patient is provided with schedule for his examinations or treatment and it is suggested that he assumes responsibility for being at the right place at the right time.

d. Patient is allowed to initiate preparations for meals, visits, or bed time without being reminded each time that it is time to do these things.

e. The ambulatory patient is permitted to feed other patients in the room.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

20. Staff proposals for patient activities appropriately reflect interests and needs of the group members. *D

a. Involvement of each patient in group activities is noted and subtle modifications suggested to ensure the appropriate involvement of all; e.g. proposing that the child with injured knee keeps score for volley ball games.

b. Ways of dividing group into small common interest groups are suggested; checkers, pinochle, jig-saw puzzles, playing with dolls, building with blocks, etc.

c. New diabetic is guided in discussing with others the disease and its meaning to them.

d. New mother is encouraged to attend infant bath demonstrations.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

21. Patient is helped to vent his emotion in a socially acceptable way within the group. *D

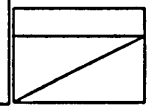
a. Group is helped to establish guidelines and discussion of emotion-laden issues is encouraged, e.g. children discuss experiences and feelings about schools and teachers or patients "debate" merits of various sides of political issues.

b. New mother is given opportunity to discuss her fears and hopes with other mothers, staff, other parents, etc.

c. Hostility is recognised and activities offered that demand physical strength, energy, and movement, e.g. a round or two with punching bag, volleyball, or dodge ball.

d. Groups confined to the hospital for long periods of time (e.g. TB patients) are guided in discussing their feelings about isolation and restriction of physical activity and helped to devise activities appropriate to the limitations imposed, e.g. developing a patient government.

e. Patients who have suffered a change in body image (amputation of lower limb, mastectomy, colostomy) are allowed to grieve without being forced to participate in activities before they are ready.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores
							

22. Praise and recognition are given for achievement according to individual needs and with respect for others in the group. *D

a. Staff move quickly to next activity when "braggart" has scored point; patient is helped to recognise his accomplishment in relation to his abilities and those of others; he is guided to recognise achievements of others.

b. Staff discuss and help patient recognise relationship of small accomplishment to potential for "next-more difficult-step", e.g. Patient able to hold self up off bed for 30 seconds in preparation for crutch walking, mastectomy patient able to raise affected arm above head.

c. Child is praised for his self control during an examination.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

23. The rights and integrity of the group member are protected within the group structure. *D

a. Conversations about death are redirected by staff if one of the members is displaying anxiety.

b. The group members or patients are informed of the problems of the aphasic patient, e.g. he can understand conversation but cannot contribute verbally.

c. The patient who is unable to eat without drooling is given help with feeding.

d. Hesitant patients are encouraged to join activities; less adept patients are assisted without the performance actually being done for them.

e. Provision is made for maintaining confidentiality when personal matters of the patient are involved.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

PHYSICAL

Actions directed towards meeting physical needs of patients.

24. Nursing procedures are adapted to meet needs of individual patients for treatment. *D

a. Sufficient time is allowed following patient's smoking, eating or drinking when taking an oral temperature.

b. Equipment and materials are arranged on the side of the bed and in a convenient position for left-handed patient to do his own tracheal suction.

c. General morning care of arthritic patient is left until last so no one will feel pressure of time and movements can be made slowly.

d. Colostomy irrigation is done at the time the patient states would be most convenient for him at home.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

25. Patient's daily hygiene needs for cleanliness and acceptable appearance are met. *D

a. Staff offer to comb hair of patient unable to do so for physical or mental reasons, e.g. cardiac patient, patient with upper extremity injury, patient in state of emotional shock following loss of loved ones, regressed patient.

b. Disturbed patient is helped to shower, shave, and select clean clothing or items of attire that go together.

c. Bedside environment is made neat and orderly, soiled gowns are changed P.R.N.

d. Assistance is offered with oral hygiene, e.g. brush is prepared and basin held for patient with upper extremity cast. dentures brushed under running water for patient unable to do this himself, child is taught proper brushing technique.

e. Body, dressing and air deodorisers are provided as indicated.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

26. Nursing procedures are utilised as media for communication and interaction with patients. *D

a. Withdrawn patient is encouraged to talk of self, interests and family while receiving direct nursing care.

b. During each contact, staff encourage and allow time for the patient unable to speak (aphasic, tracheotomised, etc.) to write message; they allow time to respond to each message in an unhurried manner.

c. Paraplegic patient is encouraged to discuss his progress in physiotherapy while nurse makes his unoccupied bed.

d. Mother is helped to listen to heart beat of her unborn child and encouraged to talk about the baby and its meaning to her.

e. Patient is encouraged to assist, even in a small way, with particularly painful treatment, e.g. burn dressing, repeated intramuscular injection.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

27. Physical symptoms and physical changes are identified and appropriate action taken. *D

a. Cyanosis is noted; staff check for bleeding, oxygen flow, position in relation to breathing.

b. Mottled tissues over bony prominence are noted; frequency of turning patient is increased and ways provided to keep pressure from area.

c. Languor and shallow breathing of small child is noted and appropriate action taken.

d. Undesirable weight loss is noted in elderly clinic patient; patient is questioned about changes in eating habits, living conditions, appetite.

e. The fundus of the uterus is massaged to evaluate the possibility of post partum haemorrhage.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

28. Physical distress evidenced by the patient is responded to quickly and appropriately. *D

a. Patient is moved up in bed and pillows are adjusted to provide a comfortable position and good body alignment.

b. Patient's complain of pain or burning at site of infusion prompts investigation for infiltration and possible removal of needle.

c. Signs of pain - restlessness, perspiration, facial contortion - are noted and action is taken to alleviate it; e.g. change in position, medication, fresh dressing.

d. Excoriated buttocks of baby are noted and diapers changed frequently to keep baby clean and dry, and soothing powder applied.

e. Patient with respiratory tract secretions is either helped to deep breathe and cough or is suctioned.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

29. Patient is encouraged to observe appropriate rest and exercise. *D/+I

a. Patient is helped to understand the role of rest in his treatment, e.g. cardiac, thrombophlebitis, hepatitis, chorea.

b. Patient is helped to understand the role of exercise in the treatment of his illness, e.g. post surgical, paralysis, traction or cast immobilisation.

c. Elderly patient is assisted out of bed; patient is encouraged to stand and to help self. Patient is given time to do for himself, but necessary assistance and protection is offered.

d. Patient is helped to plan ways to save movement and steps in accomplishing tasks of daily care.

e. New activities are suggested to patient; reading or light handicrafts for rest; playing pool or ping pong exercise.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

30. Patient is encouraged to take adequate diet. *D/+I

a. Eating habits are discussed with patient to learn cultural and social habits as well as food likes and dislikes.

b. Patient is helped to know what constitutes an adequate diet.

c. Interest is displayed in attractiveness of patient's tray and in appropriateness of food served; assistance is promptly given in making dietary corrections.

d. Pleasant atmosphere is provided for mealtime, company - other patients, volunteers, visitors - is provided wherever possible.

e. Special dietary needs or increased requirements of certain dietary constituents are discussed, and appropriate foods on tray are pointed out to patient.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

31. Action is taken to meet the patient's needs for adequate hydration and elimination. *D/+I

a. Elimination patterns are identified and steps are taken to promote adequate elimination, e.g. laxatives, proper diet, exercise.

b. Patient over anxious about elimination is given opportunity to discuss concerns and is provided information to enhance understanding.

c. Fluids are encouraged in the dehydrated patient or the patient losing large amounts of fluids e.g. diaphoresis with elevated temperature.

d. Intake and output is measured accurately, e.g. Naso gastric drainage, Foley catheter, wound drains, post-partal bleeding.

e. Diarrhoea in the infant is reported promptly and measures taken to alleviate the problem.

f. Measures are initiated to prevent elimination problems or problems of limited intake whenever there is psychomotor retardation, as in the depressed patient.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

32. Behavioural and physiologic changes due to medication are observed and appropriate action taken. *D/+I

a. Skin reactions of patients are reported and drugs are withheld as necessary.

b. Disturbances in orientation are recorded and reported.

c. Anorexia is noted and reported in a patient on a digitalic preparation.

d. Relaxation and amount of sleep in response to sedative is noted and reported.

e. The effect of a mucolytic agent administered during an I.P.P.B. treatment is noted; expectoration, productivity quality of cough.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

33. Expectations of patient's behaviour are adjusted and acted upon according to the effect the medication has on the patient. *D/+I

a. Drowsiness and retarded psychomotor activity are accepted by supporting the patient when he points out that he is unable to participate in active discussions or sports.

b. For the tremulous patient, projects are selected that require little co-ordination.

c. Patient who has postural hypotension as a result of drug therapy is allowed to ambulate slowly without pressure to hurry; notation is made in nursing care kardex.

d. Staff allow tranquillised patient or sedated patient ample time to respond to questions.

e. Photosensitivity is observed and patient is not expected to participate in outside activities for extended periods of time.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

34. Medical asepsis is carried out in relation to patient's personal hygiene and immediate environment. *D

a. Staff wash hands as necessary, e.g. on completing care of one patient and before moving to another, before beginning "clean" procedure, following any obvious contamination.

b. Floor is recognised as grossly contaminated area, e.g. items picked up from floor are cleaned or replaced, hands are washed after picking up something from the floor, staff avoid placing supplies on the floor.

c. In giving a bath, motion proceeds from the clean to unclean areas.

d. All equipment used by or for patient is clean; tub, sitz bath, I.P.P.B. etc., used by more than one patient are cleansed well between uses; wheelchair, hoyer lift, and acurls for transporting supplies and equipment to patient are clean.

e. Soiled linen and dressings are changed promptly to prevent infection or skin breakdown to the patient.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

35. Medical and surgical asepsis are carried out during treatments and special procedures. *D/+I

a. Dressings are handled so that surface that will cover surrounding area remains sterile.

b. Site for injection of medication is cleansed properly prior to administration of drug.

c. Irrigations are done without contamination.

d. Cross-contamination is avoided, e.g. gloves are changed between dressings for each stump of the patient with bilateral amputation.

e. Breaks in techniques are recognised and steps are taken to correct them; e.g. contaminated catheter is replaced with sterile catheter, gloves are changed if tear occurs.

f. Staff make appropriate judgement as to when medical or surgical asepsis is called for in treatment.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

36. Environment is maintained that gives the patient a feeling of being safe and secure. *D

a. Assistance of a sufficient number of persons is obtained if a patient is to be lifted.

b. Side rails are provided per request by patient; the necessity for side rails is explained.

c. Placement of various cords and tubing is noted; patient is informed of their presence and, as necessary, instructed about movement.

d. Reasons for "no smoking" signs in presence of oxygen administration are discussed with the patient and visitors.

e. Patient's allergies are known and measures taken to prevent exposure to allergies, e.g. feathers, eggs, bleach, etc.

f. Patient is properly secured when on stryker frame, circle bed, or some type of similar equipment.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

37. Safety measures are carried out to prevent patient from harming himself or others. *D

a. Threats made by patient to harm himself or others are reported and precautions taken as indicated.

b. Patient whose behaviour indicates impulsiveness and confusion is protected by the continuous presence of staff or the appropriate use of equipment, e.g. side rails and body restraints.

c. Staff ask for assistance when needed to provide safety for the patient himself and/or personnel.

d. Patient is given adequate instructions in use of self-operated, particularly powered equipment - wheelchair, hi-low bed, water temperature controls, etc. - so that he knows safe handling, capabilities, and dangers.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

38. Established techniques for safe administration of medications and parenteral fluids are carried out. *D

a. IV and tube feedings with medications added are labelled appropriately.

b. Those medications left at bedside are properly labelled; they are left only when it is advisable and feasible for the patient to administer to himself and only following adequate instructions to the patient.

c. Patient is addressed by name and asked to state name, or the identaband or bed tag is checked, before medication is given. Nurse remains with the patient until medication is taken.

d. Medication tray is not left unattended where it could be a danger to one or more patients.

e. IV flow rate and site are checked to assure appropriate administration.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

GENERAL

Actions that may be directed toward meeting either psychosocial or physical needs of the patient, or both at the same time.

39. Patient receives instruction as necessary. *D

a. Mother is guided as she picks up baby, staff demonstrate and have mother demonstrate holding for burping and bathing.

b. Uses of signal cord and intercom are demonstrated to newly admitted patient.

c. Medications patient will be taking at home are discussed, nurse ensures that he knows identity of each, purpose for which it is being prescribed, dosage and schedule for taking each and expected effects of the medication.

d. Cardiac patients are given examples of how to conserve energy at home; e.g. arrangement of cooking utensils in the kitchen.

e. Pre - and post - operative instruction is provided.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

40. Patient and family are involved in planning for care and treatment. *D/+I

a. When giving instructions to patient, nurse involves family member if he is visiting, not only asking him to remain in room, but actually including him in decision.

b. Arrangements are made to have family member participate in treatment, eventually doing entire treatment if it is one patient will not be able to do for himself at home.

c. Plans are made with patient and family members to carry out procedures at time when they can participate; details of care needed at home are planned with patient and family members.

d. Patient is helped to communicate with family about needs for items and procedures of care after discharge; e.g. wife to know diet, husband to know of work-saving methods and devices, parents to anticipate teasing of child by other children and ways to help child cope.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

41. Patient's sensitivities and right to privacy are protected. *D

a. Sheets or towels are used as drapes to avoid unnecessary exposure of body.

b. Curtain are drawn around bed for procedures of physical care.

c. Arrangements are made to have patient taken to room where interview (social worker, psychologist, homemaker) can be done in private.

d. Sensitivities of maturing child and teenager are protected.

e. Dentures are promptly replaced after cleansing or after surgery for patient who are sensitive about being without them.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

42. Patient is helped to accept dependence/independence as appropriate to his condition. *D

a. Role of rest in treatment of disease is discussed, patient is reassured of gradual progress toward resumption of responsibility of doing for himself.

b. Patient undergoing surgery is helped to understand the purpose of early ambulation and exercises in the post-operative period, e.g. out of bed to bath room instead of urinal or bedpan.

c. Mother is encouraged to hold infant and offer bottle during early post-partal period.

d. Patient with disability of musculoskeletal system is helped to understand disease process, rationale for treatments, and probable outcome.

e. For a patient wishing to continue dependence, the rationale for increasing independence is explained; the staff display empathy and private support and encouragement as the patient performs required activities for movement toward independence, e.g. a patient (any age) with an upper extremity or chest injury is supported and encouraged to wash his face, brush his teeth, do his hair, and feed himself.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

43. Patient is given freedom of choice in activities of daily living whenever possible and within patient's abilities to make the choice. *D

a. Determination is made of whether patient is "early" or late riser, plans are made with him about timing of needed care.

b. Patient is allowed morning or evening shower or bath, depending on custom and preference.

c. Patient is assisted to arrange for type of clothing he prefers to wear.

d. Requests are granted involving changes in daily routines that can be made without major disruptions in ward plans.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

44. Patient is encouraged to take part in activities of daily living that will stimulate him for positive psychological growth and movement toward physical independence. *D/+I

a. "Early" riser is encouraged to assist with serving morning coffee, where AM. coffee is a practice.

b. Stroke patient is encouraged to shave himself; electric razor is provided if he indicates.

c. Patient is invited to help care for flowers - his own and those of others.

d. Child is helped and encouraged to brush his teeth regularly.

e. Patient's effort and successes are recognised.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

45. Activities are adapted to physical and mental capabilities of patient. *D/+I

a. Hard of hearing patient is provided with an earphone to facilitate listening to his radio or TV.

b. Confused patient is guided through steps of preparation for visit to therapist: reminds patient, one step at a time, about washing face and hands, brushing teeth, combing hair, dressing, storing night clothing, etc.

c. Time is allowed for small child, or slow or hesitant patient to do things.

d. Assistance is provided to patient before he reaches point of frustration at inability to perform task.

e. Long term diabetic patient is allowed to administer own insulin while hospitalised.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

46. Nursing care is adapted to patient level and pace of development. *D

a. Child is allowed to perform tasks of which he is capable and is provided with challenging tasks within his ability to learn and perform them.

b. "Contests" related to learning new tasks are avoided when patients would experience frustration and feelings of inadequacy.

c. Instructions and performances of tasks to be learned are repeated as often as necessary.

d. Patient is helped to rethink a problem and decide whether to pursue a path different from one selected earlier.

e. A doll is used to illustrate the care a child scheduled for surgery will receive.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

47. Diversional and/or treatment activities are made available to the patient according to his capabilities and needs. *D

a. Stories are read to a small child.

b. Rubber ball is provided for stroke patient for hand exercise.

c. Older patient is taken to day room and time spent with him; he is encouraged to visit or share activity; needlework, cards, programme on TV., etc.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

48. Patient with slow or unskilled performance is accepted and encouraged. *D

a. Gentle persuasion is used to keep regressed patient moving in the process of morning toilet and dressing.

b. Time is provided for the aphasic patient to speak.

c. A child with cerebral palsy is encouraged to learn to feed himself.

d. A dyspneic patient is allowed time "to catch his breath" when moving in bed or ambulating.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

49. Nursing care goals are established and activities performed which recognise and support the therapist's plan of care. *D/+I

a. Arthritic patient receives encouragement and direction from nursing personnel in doing ordered hand exercises.

b. New mother is assisted with breast feeding; e.g. proper cleansing of breast prior to feeding, proper positioning, etc.

c. Child's tray is removed after thirty minutes, regardless of amount of food eaten, when purpose is to assist child to establish good eating habits and not to play with food.

d. Toileting schedule is planned with paraplegic patient, with a view to achieving independence from indwelling catheter.

e. Patient with a decubitus ulcer is helped to plan a menu high in protein and encouraged to eat.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

50. Interaction with the patient is within framework of the therapeutic plan. *D

a. Disoriented patient is helped to reorient himself by having really pointed out to him when confused.

b. Patient with myocardial infarction is reassured that it is not too much bother to feed him.

c. Patient learning to use crutches is reassured that the nurse will remain near and will support him if needed, but is encouraged to walk with support of crutches.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

51. Close observation of the patient is carried out with minimal disturbance. *D

a. Quiet is maintained as staff move into and out of room for frequent checking; IV, oxygen flow, urine output, etc.

b. Bed clothing is arranged that it can easily be lifted to check on extremity.

c. Staff approach and stand quietly beside group engaged in game or conversation without interrupting or distracting attention of members of group.

d. Room of patient with suicidal tendencies is checked for harmful objects during daily cleaning.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

52. Response to the patient is appropriate in emergency situations. *D

a. Staff wait until help is available to move patient who has fallen from bed.

b. Patient who has assumed posture to suit words of threatening to strike nurse is spoken to quietly.

c. Staff remain with child having asthmatic attack and summon available help.

d. Staff stay with a convulsing patient for observation and to provide protection from injury.

e. Intravenous glucose is immediately prepared for the diabetic patient in severe insulin shock.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

53 Resources within the milieu are utilised to provide the patient with opportunities for problem solving. *D

a. Patient is encouraged to suggest ways to accomplish "routine" tasks despite limitations due to incapacitated or absent body feature. He is helped to plan placement of articles as he will use them in hospital and at home or work.

b. Patient is helped to consider alternatives in relation to choice of diversional activity.

c. Child is helped to select the most appropriate toy for the situation; e.g., kind of toy that can be used in bed, one that allows for solitary play or one that allows others to join in play.

d. Patient is asked to propose furniture arrangement that will provide for best use of day an artificial lighting and for least distressful light glares.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

COMMUNICATION

Communication on behalf of the patient.

54. Ideas, facts, feelings and concepts about the patient are communicated clearly in speech to medical and paramedical personnel. *D

a. Feelings and thoughts expressed are neither mumbled nor highly emotional.

b. Complete description of patient's behaviour is given without excessive repetition and using good sequence.

c. Reports of observations are factual and clearly stated leading to meaningful conclusions.

d. Questions are used to help aides report and describe patient's condition and to ascertain that aides have understood plan of care.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

55. Family is provided with the opportunity for reciprocal communication with the nursing staff. *D/I

a. Explanations regarding treatment and therapy that the patient is receiving are clearly stated and in understandable terms.

b. Fears and concerns of the family are responded to in a manner which promotes an understanding and acceptance of their role in meeting the patient's needs, e.g. mother stays overnight in room with child who has had a tonsillectomy.

c. Family is kept informed of changes in patient's condition, e.g. the expectant father is given frequent reports on his wife's progress during labour.

d. Family is used as a resource for additional information about the patient to develop a relevant plan of care, e.g. daily activities, occupation, habit patterns.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

56. Ideas, facts and concepts about the patient are clearly communicated in charting. +I

a. Precise and specific observations are recorded; few generalising clichés are used, e.g. comatose, disoriented.

b. Possible interpretation of reasons for patient's behaviour is recorded.

c. Sentence structure is clear and grammatically correct; excessive use of abbreviations is avoided.

d. All pertinent facts or observations in a situation are included.

e. Written communication is legible; legal abbreviations are used.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

57. Well-developed nursing care plans are established and incorporated into nursing assignments. +I

a. Immediate and long-range objectives of care are included; changed as patient needs change, also dated.

b. Information is included about patient's likes and dislikes.

c. Suggestions for modification of procedures that make care easier or more effective for patient are included.

d. Plan for implementation of progressive care is included relating to anticipated future needs of patient; e.g. "plan to teach colon irrigation beginning tomorrow".

e. Written assignments or worksheets reflect the objectives of the plan of care.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

58. Pertinent incidents of the patient's behaviour during interaction with staff are accurately reported. *D/+I

a. Nurse reports that patient refused to take IM injection, with claim that she hurt him the last time she gave.

b. Nurse reports patient's refusal to sit up in chair because patient states he was left up too long yesterday.

c. Patient's response during or after interaction with staff, e.g. patient withdrew from group discussion after being reprimanded in front of group by nurse for telling a vulgar story.

d. After instruction for giving self-injection, nurse charts patient's response to his initial self-injection.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

59. Staff participates in conferences concerning patient care. *D

a. Staff volunteer observations they have made; e.g. in team reports.

b. Pertinent information is given to the staff about a particular patient's disease condition and recommended treatment.

c. Staff offer proposals of approaches to care of particular patient.

d. Nurse asks questions that will elicit information or ideas from other workers.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

60. Effective communication and good relationships with other disciplines within the hospital are established for the patient's benefit. +I/*D

a. Physical therapist is consulted to seek suggestions of what nursing staff might do to enhance patient's treatment.

b. Social worker is called for a patient who might benefit from help, e.g. payment of rent while in hospital, care of children during hospital stay.

c. X-ray or lab. is notified promptly to clarify orders for preparation of patient or when patient will be delayed or unable to keep appointment.

d. Physician is notified of all pertinent information about; verbal reports, printed notes on front of chart, paging or telephoning, etc.

e. Occupational therapy consultation is requested for patient with severely injured hand.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

61. Patient's needs are met through the use of referrals, both to departments in the hospital and to other community agencies. +I/*D

a. VNA referral is made for new mother with first baby who is new to city and has no family or friends who can assist with teaching care of new baby.

b. Social worker is consulted about referral to visiting housekeeper for elderly patient who lives alone.

c. Local school system is called to arrange for home teaching for adolescent patient.

d. Adequate information regarding post-discharge clinic appointments is given to the patient, e.g. location of clinic within hospital, time and date of appointment.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

PROFESSIONAL IMPLICATIONS

Care given to patients reflects initiative and responsibility indicative of professional expectations.

62. Decisions that are made by staff reflect knowledge of facts and good judgement. *D/+I

a. Room assignment of patient whose baby died during delivery is changed to avoid placing her in a room with mother with day-old baby.

b. PRN analgesic and PRN hypnotic are administered at bedtime to second day post-operative patient with spinal fusion.

c. IV. fluid is promptly slowed when post-operative patient manifests increased difficulty with breathing.

d. Emphysema patient is fed six small servings a day.

e. Joking references made by patient about "jumping out of window" are responded to with increased periods of observation and by obtaining available information - doctor, chart, etc. - for adequate evaluation of behaviour.

f. Nurse aide seeks help when in doubt.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

63. Evidence (spoken, behavioural, recorded) is given by staff of insight into deeper problems and needs of patient. *D/+I

a. Patient who lost first two children at birth is not left alone any more than necessary, and nurses share her experience with her.

b. Staff attempt to help adolescent with severe acne to recognise and utilise assets and abilities to contribute to interest and happiness of others, thereby enhancing confidence and satisfaction in his own worth.

c. Staff provide support to dying patient by listening to his fears and by avoiding unrealistic clichés such as "you will be up and around in no time".

d. Staff discuss possible approaches to be used with the patient who has just sustained a change in body image, e.g. hysterectomy, mastectomy, amputation, hemiplegia, etc.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

64. Changes in care plans reflect continuous evaluation of results of nursing care. *D/+I

a. Suggestion is made that wound be dressed after wife's visit since changing the patient's dressing before her visit focuses his attention on the wound to the extent that he discusses little else.

b. Referrals for home visits are made for the amputee patient when it is discovered that his recent return to dependency upon the staff is the result of his fears about his adequacy in the home situation.

c. Passive exercises to the paralysed hand of the C.V.A. patient have resulted in prevention of contractures and plans are made to continue them.

d. Suggestions or criticisms made by patient and family are utilised constructively in planning and evaluating care.

e. Change is suggested in types of foods since patient is not eating present diet and complains that it is "baby" food.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

65. Staff are reliable; follow through with responsibility for patient's care. *D/+I

a. Staff ask for help in doubtful situations, rather than making errors.

b. Staff report when work is not completed.

c. Nurse views situation herself rather than depending on reports alone, e.g. visits patient on report of bleeding, checks condition of very ill patients in preparation of change-of-shift report.

d. Assignments and work accomplished are periodically reviewed to replan, establish priorities and fulfil responsibilities.

e. Staff follows through on commitments they have made, e.g. return to patient's room at time stated, perform treatment when scheduled.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

66. Assigned staff keep informed of the patient's condition and whereabouts. *D

a. All assigned patients are visited to ascertain their condition before day's task are begun.

b. Patient's whereabouts are known along with reasons for his being off the unit away from bedside unit and when he is expected to return.

c. Current condition of patient is known as well as changes in past 24 hours, and plans of care are reported to staff of succeeding tour of duty.

d. If indicated, patient is accompanied by staff when leaving unit for tests or conferences.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

67. Care given the patient reflects flexibility in rules and regulations as indicated by individual patient needs. *D/+I

a. Adjustments in visiting hours are made in accord with patient's condition and special needs of his family.

b. Room change is provided as soon as possible for non-ambulatory patient who smokes when he is assigned to room where oxygen is in use.

c. Patient who is on a regular diet but not eating well is allowed to have family bring in favourite foods.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

68. Organisation and management of nursing activities reflect consideration of patient needs. *D/+I

a. Patient's likes and dislikes are considered when planning meals.

b. Patient's wish to be left alone when planning nursing care is respected.

Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean scores

Appendix IV

QUALPACS Without cues.

QUALITY PATIENT CARE SCALE

INFORMATION FACE SHEET

Fill in for each session

WARD .....

Name _____ Type _____

Number of rooms _____ Number of beds _____

Number of patients _____

Number of patients

Dependency level of patients being assessed

Dependency levels

Date _____ Rater _____

Time of day _____ am/pm

Day of Week _____

Additional notes or questions

QUALITY PATIENT CARE SCALE

STAFF / INFORMATION FACE SHEET

STAFF ON DUTY

Grade of staff	Number
Chief Nursing Officer	
Principal Nursing Officer	
Senior Nursing Officer	
Nursing Officer I	
Nursing Officer II	
Student Nurse	
Ward Orderly	
Non-nursing staff by number	
Ward Clerk	
Domestic	
Other (State who)	
Other Information:	

PATIENT INFORMATION

PATIENT	A	B	C	D
Age :				
Sex				
Room (type)				
Date of Admission				
Diagnosis on admission				
Current diagnosis				
Condition of patient				

QUALITY PATIENT CARE SCALE

Date _____ Rater _____

INTERACTIONS RECORD: AM/PM

NUMBER:

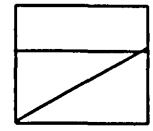
TIME:

PSYCHOSOCIAL: INDIVIDUAL

Actions directed towards meeting pschosocial needs of individual patients.

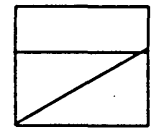
1. Patient receives nurse's full attention. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

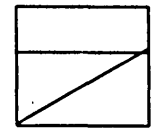
2. Patient is given an opportunity to explain his/her feelings. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

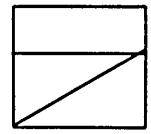
3. Patient is approached in such a kind, gentle and friendly manner. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

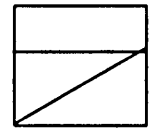
4. Patient's inappropriate behaviour is responded to in a therapeutic manner. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

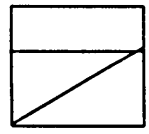
5. Appropriate action is taken in response to anticipated or manifest patient's anxiety or distress. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

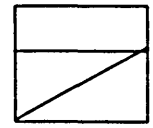
6. Patient receives explanation and verbal reassurance when needed. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

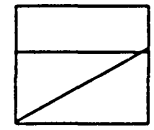
7. Patient receives attention from nurse with neither becoming involved in a non-therapeutic way. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

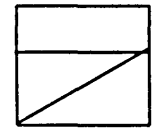
8. Patient is given consideration as a member of the family. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

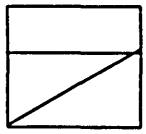
9. Patient receives attention for his spiritual needs. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

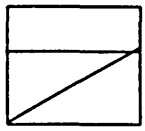
10. The rejecting or demanding patient continues to receive acceptance. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

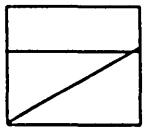
11. Patient receives care that communicates worth and dignity of man. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

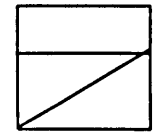
12. The healthy aspects of the patient personality are utilised. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

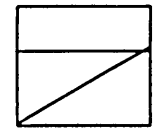
13. An atmosphere of trust, acceptance and respect is created rather than one of power, prestige and authority. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

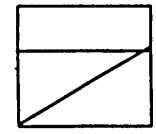
14. Appropriate topic for conversation are chosen. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

15. The unconscious or non-oriented patient is cared for with the same respectful manner as the conscious patient. *D (Applies as well to lethargic, sedated and non-verbal patient).

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

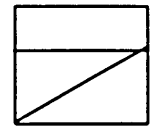
Mean score 

PSYCHOSOCIAL: GROUP

Care received reflects recognition of the patient's psychosocial needs as a member of a group.

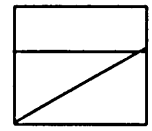
16. Patient as member of a group receives warmth, interest and attention from staff. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

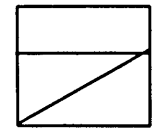
17. Patient receives the help necessary to accept limits on his behaviour that are essential to group welfare. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

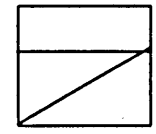
18. Patient receives encouragement to participate in or to plan for the group daily activities. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

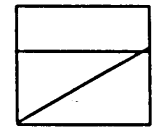
19. The member of the group is provided with the opportunity to assume responsibility according to his capacity. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

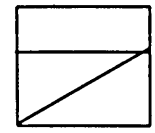
20. Staff proposals for patient activities appropriately reflect interests and needs of the group members. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

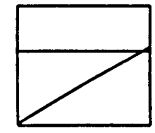
21. Patient is helped to vent his emotion in a socially acceptable way within the group. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

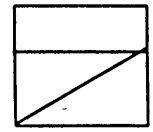
22. Praise and recognition are given for achievement according to individual needs and with respect for others in the group. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

23. The rights and integrity of the group member are protected within the group structure. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

PHYSICAL

Actions directed towards meeting physical needs of patients.

24. Nursing procedures are adapted to meet needs of individual patients for treatment. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score

25. Patient's daily hygiene needs for cleanliness and acceptable appearance are met. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score

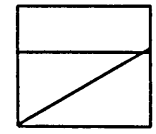
26. Nursing procedures are utilised as media for communication and interaction with patients. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score

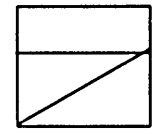
27. Physical symptoms and physical changes are identified and appropriate action taken. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

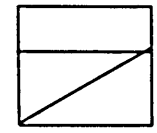
28. Physical distress evidenced by the patient is responded to quickly and appropriately. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

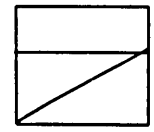
29. Patient is encouraged to observe appropriate rest and exercise. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

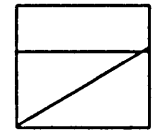
30. Patient is encouraged to take adequate diet. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

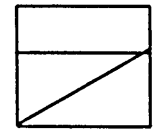
31. Action is taken to meet the patient's needs for adequate hydration and elimination. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

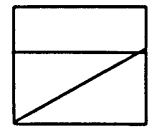
32. Behavioural and physiologic changes due to medication are observed and appropriate action taken. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

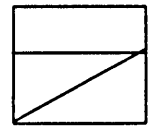
33. Expectations of patient's behaviour are adjusted and acted upon according to the effect the medication has on the patient. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

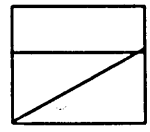
34. Medical asepsis is carried out in relation to patient's personal hygiene and immediate environment. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

35. Medical and surgical asepsis are carried out during treatments and special procedures. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

36. Environment is maintained that gives the patient a feeling of being safe and secure. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score

37. Safety measures are carried out to prevent patient from harming himself or others. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score

38. Established techniques for safe administration of medications and parenteral fluids are carried out. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

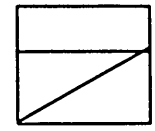
Mean score

GENERAL

Actions that may be directed toward meeting either psychosocial or physical needs of the patient, or both at the same time.

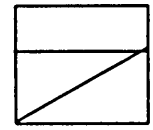
39. Patient receives instruction as necessary. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

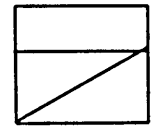
40. Patient and family are involved in planning for care and treatment. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

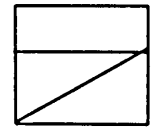
41. Patient's sensitivities and right to privacy are protected. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

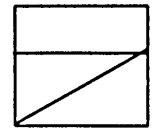
42. Patient is helped to accept dependence/independence as appropriate to his condition. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

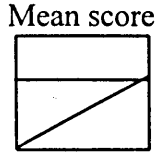
43. Patient is given freedom of choice in activities of daily living whenever possible and within patient's abilities to make the choice. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

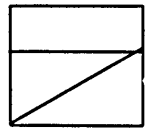
44. Patient is encouraged to take part in activities of daily living that will stimulate him for positive psychological growth and movement toward physical independence. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

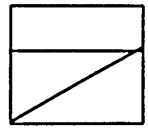
45. Activities are adapted to physical and mental capabilities of patient. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

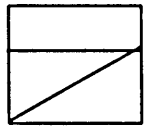
46. Nursing care is adapted to patient level and pace of development. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

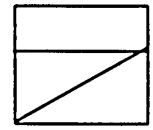
47. Diversional and/or treatment activities are made available to the patient according to his capabilities and needs. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

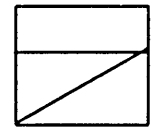
48. Patient with slow or unskilled performance is accepted and encouraged. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

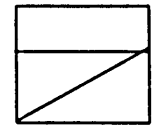
49. Nursing care goals are established and activities performed which recognise and support the therapist's plan of care. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

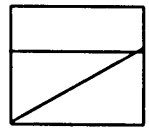
50. Interaction with the patient is within framework of the therapeutic plan. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

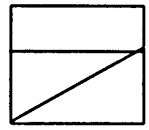
51. Close observation of the patient is carried out with minimal disturbance. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

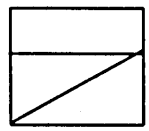
52. Response to the patient is appropriate in emergency situations. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

53 Resources within the milieu are utilised to provide the patient with opportunities for problem solving. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

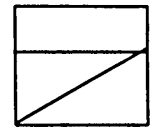
Mean score 

COMMUNICATION

Communication on behalf of the patient.

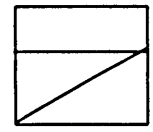
54. Ideas, facts, feelings and concepts about the patient are communicated clearly in speech to medical and paramedical personnel. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

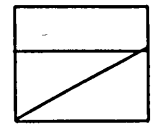
55. Family is provided with the opportunity for reciprocal communication with the nursing staff. *D/I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

56. Ideas, facts and concepts about the patient are clearly communicated in charting. +I

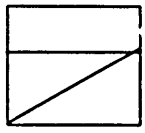
	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

57. Well-developed nursing care plans are established and incorporated into nursing assignments. +I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

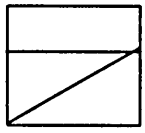
Mean score



58. Pertinent incidents of the patient's behaviour during interaction with staff are accurately reported. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

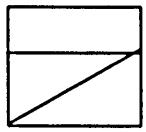
Mean score



59. Staff participates in conferences concerning patient care. *D

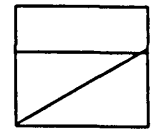
	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score



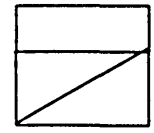
60. Effective communication and good relationships with other disciplines within the hospital are established for the patient's benefit. +I/*D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

61. Patient's needs are met through the use of referrals, both to departments in the hospital and to other community agencies. +I/*D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

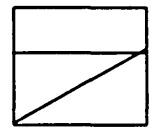
Mean score 

PROFESSIONAL IMPLICATIONS

Care given to patients reflects initiative and responsibility indicative of professional expectations.

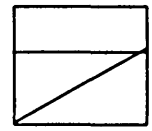
62. Decisions that are made by staff reflect knowledge of facts and good judgement. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score 

63. Evidence (spoken, behavioural, recorded) is given by staff of insight into deeper problems and needs of patient. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

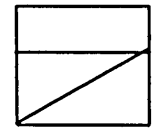
Mean score 

64. Changes in care plans reflect continuous evaluation of results of nursing care.

***D/+I**

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

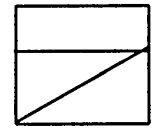
Mean score



65. Staff are reliable; follow through with responsibility for patient's care. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

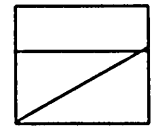
Mean score



66. Assigned staff keep informed of the patient's condition and whereabouts. *D

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

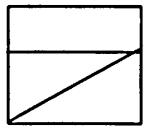
Mean score



67. Care given the patient reflects flexibility in rules and regulations as indicated by individual patient needs. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

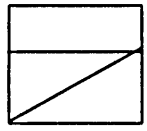
Mean score



68. Organisation and management of nursing activities reflect consideration of patient needs. *D/+I

	1	2	3	4	5	6	7	8	9	10
Best care										
Between										
Average care										
Between										
Poorest care										
Not applicable										
Not observed										

Mean score



Appendix V

Nurse-patient Interaction Sheet.

Code number: _____

Shift: _____

Sub-heads		**Episodes of Interaction**					
		1	2	3	4	5	6
Time Started		( )	( )	( )	( )	( )	( )
Time finished		( )	( )	( )	( )	( )	( )
Cadre of first nurse to interact with patient.							
1	Chief nursing officer	( )	( )	( )	( )	( )	( )
2	Principal nursing officer	( )	( )	( )	( )	( )	( )
3	Senior nursing officer	( )	( )	( )	( )	( )	( )
4	Nursing officer I	( )	( )	( )	( )	( )	( )
5	Nursing officer II	( )	( )	( )	( )	( )	( )
6	Student nurse	( )	( )	( )	( )	( )	( )
7	Ward orderly	( )	( )	( )	( )	( )	( )
Initiator of interaction							
1	Nurse	( )	( )	( )	( )	( )	( )
2	Patient	( )	( )	( )	( )	( )	( )
3	Family member	( )	( )	( )	( )	( )	( )
4	Other health care practitioners	( )	( )	( )	( )	( )	( )
Nursing activities involved in interaction							
1	**Clinical**	( )	( )	( )	( )	( )	( )
	Nurse performs oral toilet on patient.						
	Nurse informs patient of some impending procedure.						
	Nurse fills in patient's charts.						
	Patient reports something to the nurse.						
	Nurse baths patient.						

2	**Nursing care planning**	( )	( )	( )	( )	( )	( )
	Nurse assesses patient.						
	Nurse draws up care plan with patient.						
	Nurse ascertains that all care has been given to patient.						
	Nurse evaluates patient.						
3	**Information**	( )	( )	( )	( )	( )	( )
	Nurse seeks information from patient.						
	Nurse gives information to patient.						
	Patient asks nurse for information.						
	Patients asks nurse for help and/or advice.						
4	**Education**	( )	( )	( )	( )	( )	( )
	Nurse teaches patient something.						
	Nurse gives patient advice.						
	Nurse gives patient some clinical						
	knowledge about his/her health						
	condition and treatment.						
5	**Verbal**	( )	( )	( )	( )	( )	( )
	Nurse chats with patient.						
	Patient chats with nurse.						
6	**Emotional Support**	( )	( )	( )	( )	( )	( )
	Nurse comforts patient if distressed,						
	in fear or give any other						
	psychological assistance.						
7	**Equipment**	( )	( )	( )	( )	( )	( )
	Nurse gives something to patient.						
	Patient asks for something e.g. bedpan,						
	drinking water.						
	Patient gives something to the nurse.						
8	**Maintenance of**						
	environment	( )	( )	( )	( )	( )	( )

Nurse makes bed for patient.

Nurse provides side rails for patient.

9	**Writing**	( )	( )	( )	( )	( )	( )
	Nurse writes on patient's chart.						
	Nurse reads patient's charts.						
10	**Treatments - .**	( )	( )	( )	( )	( )	( )
	Patient is given prescribed drugs.						
	Nurse carries out physiotherapeutic						
	order for patient.						
	Nurse assists physician in doing						
	procedure for patient.						
	Nurse assists the physician to carry						
	out therapeutic and diagnostic procedure on patient.						
11	**Medication.**	( )	( )	( )	( )	( )	( )
	Nurse gives drugs to patient						
	Nurse reads patient medication chart.						
	Nurse charts medication.						
	Nurse puts tablet in patient's mouth.						
	Nurse pours water into patient's cup so						
	that he/she can take tablets.						
	Nurse gives patient injection.						
	Nurse turns patient for injection.						
12	**Observation**	( )	( )	( )	( )	( )	( )
	Physical examination is carried						
	out on patient.						
	Patient is weighed.						
	Nurse charts observation.						

Level of involvement of patient

1	Passive.	( )	( )	( )	( )	( )	( )
	Nurse-initiated interaction.						

Other health team members-initiated interaction.

Patient is quiet all through interaction.

2	Active.	( )	( )	( )	( )	( )	( )

Patient-initiated interaction.

Family-initiated interaction..

Patient makes suggestions during discussion..

Family makes suggestions during discussion.

Other nurses that have interacted with Patient

1	None.	( )	( )	( )	( )	( )	( )
2	1-2	( )	( )	( )	( )	( )	( )
3	3-4	( )	( )	( )	( )	( )	( )
4	5-6	( )	( )	( )	( )	( )	( )
5	Above 7.	( )	( )	( )	( )	( )	( )

Appendix VI

Nurse-family Interaction Sheet.

Code number: _____

Shift: _____

Sub-heads		**Episodes of Interaction**					
		1	**2**	**3**	**4**	**5**	**6**
Time Started		( )	( )	( )	( )	( )	( )
Time finished		( )	( )	( )	( )	( )	( )
Cadre of first nurse to interact with family							
1	Chief nursing officer	( )	( )	( )	( )	( )	( )
2	Principal nursing officer	( )	( )	( )	( )	( )	( )
3	Senior nursing officer	( )	( )	( )	( )	( )	( )
4	Nursing officer I	( )	( )	( )	( )	( )	( )
5	Nursing officer II	( )	( )	( )	( )	( )	( )
6	Student nurse	( )	( )	( )	( )	( )	( )
7	Ward orderly	( )	( )	( )	( )	( )	( )
Initiator of interaction							
1	Nurse	( )	( )	( )	( )	( )	( )
2	Patient	( )	( )	( )	( )	( )	( )
3	Family member	( )	( )	( )	( )	( )	( )
4	Other health care practitioners	( )	( )	( )	( )	( )	( )
Nursing activities involved in interaction							
1	**Nursing care planning**	( )	( )	( )	( )	( )	( )
	Nurse involves family member in drawing up care plan.						
2	**Information**	( )	( )	( )	( )	( )	( )
	Nurse seeks information from family member.						
	Nurse gives information to family member.						

Family member asks nurse for information.

Family member asks nurse for help and/or advice.

3	**Education**	( )	( )	( )	( )	( )	( )
	Nurse teaches family member something.						
	Nurse gives family member advice on patient's diet.						
	Nurse gives family member some clinical knowledge about his/her patient's health condition and treatment.						
	Family member is taught how to manage patient at home when discharged.						
4	**Verbal**	( )	( )	( )	( )	( )	( )
	Nurse chats with family member.						
	Family member chats with nurse.						
5	**Emotional Support**	( )	( )	( )	( )	( )	( )
	Nurse comforts family member if distressed, in fear or give any other psychological assistance.						
6	**Equipment**	( )	( )	( )	( )	( )	( )
	Nurse gives something to family member.						
	Family member asks for something e.g. drug list, etc.						
	Family member gives something to the nurse, e.g. drugs purchased for patient.						

Level of involvement of family

1	Passive.	( )	( )	( )	( )	( )	( )
	Nurse-initiated interaction.						
	Other health team members-initiated interaction.						
	Patient is quiet all through interaction.						
2	Active.	( )	( )	( )	( )	( )	( )
	Patient-initiated interaction.						

Family-initiated interaction..

Patient makes suggestions during discussion..

Family makes suggestions during discussion.

Other nurses that have interacted with family

1	None.	( )	( )	( )	( )	( )	( )
2	1-2	( )	( )	( )	( )	( )	( )
3	3-4	( )	( )	( )	( )	( )	( )
4	5-6	( )	( )	( )	( )	( )	( )
5	Above 7.	( )	( )	( )	( )	( )	( )

Other family members with whom nurses have interacted with

1	None.	( )	( )	( )	( )	( )	( )
2	1-2	( )	( )	( )	( )	( )	( )
3	3-4	( )	( )	( )	( )	( )	( )
4	5-6	( )	( )	( )	( )	( )	( )
5	Above 7.	( )	( )	( )	( )	( )	( )

Appendix VII

Patient Satisfaction Questionnaire

Dear Respondents,

I am conducting a study to determine how satisfied you are with the nursing care which is rendered to you while here in this ward. The findings from this study will help nurses to tailor nursing care to your needs and will also help in the improvement of the quality of care that is given to you. Anonymity is ensured and your responses will be kept strictly confidential. Your name is not required.

Please tick circle the appropriate response as it relates to you and fill in the blank spaces where necessary.

Part I:

Indicate your gender:

1. Male.
2. Female.

For how long have you been in the ward?_____

Part II

In this part, there are five responses. You are please required to tick (X) the one that is most appropriate for each question. There is no correct response.

Subscale I: Technical-Professional Area

(1) The nurse renders the desired nursing care in an appropriate manner to me.

5. Strongly agree ( )
4. Agree ( )
3. Undecided ( )
2. Disagree ( )

1. Strongly disagree ( )

(2) When talking about my condition, the nurse really knows what he/she is talking about.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(3) The nurse has no confidence in what she does.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(4) The nurse makes it a point to show me how to carry out doctor's orders.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(5) The nurse makes me wait before doing things for me.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(6) The nurse is too disorganised.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(7) The nurse gives good advice concerning my care

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

Subscale II: Educational-Relationship Area

(1) The nurse gives directions at the right speed.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(2) The nurse explains things in simple language to me.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(3) The nurse asks a lot of questions, but once he/she finds the answers, nothing seem to be done.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(4) I wish the nurse would tell me more about the results of my tests than he/she does.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(5) It is always easy to understand what the nurse is talking about.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(6) Too often the nurse does not bother to tell me the medical explanation of my illness.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(7) The nurse gives complete enough explanations of why tests are ordered for me.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

Subscale III: Trusting-Relationship Area

(1) The nurse is understanding in listening to my problems.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(2) The nurse should be more attentive than he/she is.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(3) The nurse is not patient enough.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(4) When I need to talk to someone, I can go to the nurse with my request.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(5) The nurse is too busy to spend time talking with me.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(6) The nurse appears pleased to talk to me.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(7) I'm tired of the nurse talking down to me.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(8) The nurse is a person who can understand how I feel.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(9) A person feels free to ask the nurse questions.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(10) The nurse should be more friendly than he/she is.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(11) Just talking to the nurse gives me the confidence that I am receiving the best care.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

Appendix VIII

Family Satisfaction Questionnaire

Dear Respondents,

I am conducting a study to determine how satisfied you are with the nursing care which is rendered to your patient while here in this ward. The findings from this study will help nurses to tailor nursing care to your needs and the needs of your patients and also will help in the improvement of the quality of care that is given to your patients. Anonymity is ensured and your responses will be kept strictly confidential. Your name is not required.

Please circle the appropriate response as it relates to you and fill in the blank spaces where necessary.

Part I:

Indicate your gender:

1. Male.
2. Female.

What is your relationship with the patient.

1. Friend
2. Spouse
3. Brother
4. Sister
5. Others: Please specify:

How often do you visit the patient? _____

Part II

In this part, there are five responses. You are please required to tick (X) the one that is most appropriate for each question. There is no correct response.

Subscale I: Technical-Professional Area

(1) The nurse is skilful in taking care of my relative.

5. Strongly agree ( )
4. Agree ( )
3. Undecided ( )
2. Disagree ( )
1. Strongly disagree ( )

(2) When talking about my relative's condition, the nurse really knows what he/she is talking about.

5. Strongly agree ( )
4. Agree ( )
3. Undecided ( )
2. Disagree ( )
1. Strongly disagree ( )

(3) The nurse is not precise in doing her work.

1. Strongly agree ( )
2. Agree ( )
3. Undecided ( )
4. Disagree ( )
5. Strongly disagree ( )

(4) The nurse makes it a point to show my relative how to carry out doctor's orders.

5. Strongly agree ( )
4. Agree ( )
3. Undecided ( )
2. Disagree ( )
1. Strongly disagree ( )

(5) The nurse takes a long time before doing things for my relative.

1. Strongly agree ( )
2. Agree ( )
3. Undecided ( )
4. Disagree ( )
5. Strongly disagree ( )

(6) The nurse is too disorganised.

1. Strongly agree ( )
2. Agree ( )
3. Undecided ( )
4. Disagree ( )
5. Strongly disagree ( )

(7) The nurse gives good advice concerning my relative's care

5. Strongly agree ( )
4. Agree ( )
3. Undecided ( )
2. Disagree ( )
1. Strongly disagree ( )

Subscale II: Educational Relationship Area

(1) The nurse gives directions at the right speed.

5. Strongly agree ( )
4. Agree ( )
3. Undecided ( )
2. Disagree ( )
1. Strongly disagree ( )

(2) The nurse explains things in simple language to me.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(3) The nurse asks a lot of questions, but once he/she finds the answers, nothing seem to be done.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(4) I wish the nurse would tell me more about the results of my relative's tests than he/she does.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(5) It is always easy to understand what the nurse is talking about.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(6) Too often the nurse does not tell me the medical explanation of my relative's illness.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(7) The nurse gives complete enough explanations of why tests are ordered for my relative.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

Subscale III: Trusting Relationship Area

(1) The nurse is understanding in listening to my opinions.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(2) The nurse should be more attentive than he/she is.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(3) The nurse is not patient enough.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(4) When I need to talk to someone, I can go to the nurse with my request.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(5) The nurse is too busy to spend time talking with me

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(6) The nurse is welcoming when I visit my relative.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(7) I'm tired of the nurse talking down to me.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(8) The nurse is a person who can understand how I feel.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(9) A person feels free to ask the nurse questions.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

(10) The nurse should be more friendly than he/she is.

1. Strongly agree ( )

2. Agree ( )

3. Undecided ( )

4. Disagree ( )

5. Strongly disagree ( )

(11) Just talking to the nurse gives me the confidence that my relative is receiving the best care.

5. Strongly agree ( )

4. Agree ( )

3. Undecided ( )

2. Disagree ( )

1. Strongly disagree ( )

Appendix IX

Questionnaire for Determining the type of Nursing Organisation Pattern used in the model ward.

Institution:

Ward:

Part 1:

1. Does each patent's kardex and chart on the unit have a written plan for his/her care on them that includes identified problems and expected outcomes and nursing interventions for these problems?

Yes( ) No( )

2. Does each patient on the unit have assigned staff members to turn to or who are responsible for his/her planned care 24 hours per day, 7 days per week?

Yes( ) No( )

3. Is there evidence of consistency or that the interventions for the patient's problems are carried out 24 hours per day, 7 days per week on the unit as demonstrated through observation or recordings on the chart?.

Yes( ) No( )

4. Is there evidence that a communication plan is being utilised on the unit?

Yes( ) No( )

5. Is there a plan on the unit for 24 hour staff communication that tells who communicates with whom in regard to the patient's care? The plan tells what will be communicated, how, when and where it will be communicated, and is evident through a diagram or written plan.

Yes( ) No( )

6. Are there written responsibilities of nursing staff members, which are more specific than the job description, in relationship to patient assignments?

Yes( ) No( )

Part 2

1. Do the nursing progress notes consist only of information on nursing procedures or task performed, medications given, responses to procedures and activities of daily living, and observations on obvious behaviour problems?

Yes( ) No( )

2. Does the day shift do the major portion of the nursing care on the unit?

Yes( ) No( )

3. Are the nursing staff members on the unit assigned to specific tasks, duties or procedures such as bed bathing, mouth toiletting, injection, medications, dressings etc.?

Yes( ) No( )

4. Is a nurse assigned to the desk for administrative duties on the unit?

Yes( ) No( )

5. Is the kardex or nursing report book on the unit comprised only of basic data information, procedures and treatments to be done, medication to be given, and information about activities of daily living?

Yes( ) No( )

6. Is a nurse assigned the duty of medicine and/or injection nurse?

Yes( ) No( )

YES for all answers in part 1 would indicate patient-centred nursing care.

YES in all answers in part 2 would indicate task-oriented nursing care.

YES answers in at least three answers each in both parts 1 and 2 would indicate components of both patient-centred and task-oriented nursing care.

Appendix X

Primary Nursing Practice Assessment Form.

This form is designed to determine how you practice primary nursing in your establishment. No one system of primary nursing is the most appropriate. Different modes are suitable for different settings. Therefore this tool is not meant to criticise your approach to primary nursing practice. Please respond as appropriate.

Check the appropriate category

Unit: _____

Cadre of co-ordinator/charge nurse: _____

1. For how long have you been practising primary nursing?

_____

2. For what length of time are nurses employed on your unit before they are designated

Primary nurse?_____

Associate nurse?_____

3. Which of the following are used to assign primary nurses to patients? (You can check more than one item)

(a) Nurses volunteer

(b) Head nurse assignment

(c) Admission nurse is primary nurse

(d) By room number

(e) By district

(f) Other: Specify

4. In making assignments/selecting primary patient, is the patient condition matched with the nurses skills? Yes( ) No( )

5. On which shifts are primary nurses usually assigned?

(a) Morning

(b) Afternoon

(c) Night

(d) Other: Specify

6 How are primary nurses identified? (You can check more than one response)

(a) Name on kardex

(b) Name on door plaque

(c) Bulletin board

(d) Name on chart

(e) Time schedule/room assignment

(f) Primary nurse letter to patient

(g) Other: Specify

7 How are associate nurses identified?

(a) Name on kardex

(b) Name on door plaque

(c) Bulletin board

(d) Name on chart

(e) Time schedule/room assignment

(f) Primary nurse letter to patient

(g) Other: specify

8. How is a patient made aware of who is his/her primary nurse:

_____

_____

9. How is report given? (More than one response may be given)

(a) Tape

(b) Verbal

(c) Walking rounds

(d) 1:1

(e) In teams

(f) Entire staff included

(g) Other: Specify

10. Are care plans other than treatment kardex used in report?

Yes( ) No( )

11. Who initiates care plans?

_____

_____

12. Who contributes to care plans? (More than one answer may be checked)

(a) Primary nurse

(b) Associate nurse

(c) Patient

(d) Family

(f) Physician

(g) Other: Specify

13. Are care plans initiated within 24 hours? Yes( ) No( )

If No, within what time frame?_____

14. Do other shifts follow the primary nurse's plan of care?

(a) Always

(b) Never

(c) Sometimes

Comments:

_____

_____

_____

_____

_____

15 How frequently is the care plan evaluated?

_____

16. Do you hold patient care conferences? Yes( ) No( )

How often?_____

17. Is discharge planning done? Yes ( )No( )

18. Does charge nurse take (a) Primary patients Yes( ) No( )

(b) Associate patients Yes( ) No( )

19. Do you have regular educational programmes for

(a) Primary nurses Yes( ) No( )

(b) Associate nurses Yes( ) No( )

20. Are primary patients ever reassigned? Yes( ) No( )

Comments:

21 Do you feel you are doing primary nursing?

22. How do you feel about primary nursing generally?

Appendix XI

Commissioner's Permission Letter for Introduction of Change

Ministry of Health and Social Welfare

Block 8

Secretariat Complex

Uyo Akwa Ibom State

Nigeria.

Tel.: (085) 204091

Commissioner's office

Our ref./ N. Res

14th April 1993

The Acting Chief Consultant

St. Luke's Specialist Hospital

Anua - Uyo

Re: Introduction of Primary nursing into St. Luke's Hospital Anua

Permission has been granted to Mrs. U. E. Archibong, a research student, at the University of Hull, England, to use St Luke's Specialist Hospital as a nucleus site for this project. She is yet to decide on which ward(s) will be involved in the project.

Kindly give all necessary support to make the project a success.

Signed: ADNS (state) for

Chief (Dr.) Benson Ino-Ekanem

Hon. Commissioner for Health

Appendix XII

A short address by Mrs. A. M. B. Akpan - CNO (Admin), Acting Nurse in charge, St. Luke's Specialist Hospital, Anua. On the occasion of the Commission of Primary Nursing Project. Date: 5th May 1993. Venue: Conference Hall, St. Luke's Specialist Hospital.

1. Hon. Commissioner for Health, represented by the Deputy Director of Nursing Services (State), Mr Ralph Effiong,
2. The Acting Chief Consultant of St. Luke's Hospital, Dr Etuk,
3. The Manager of Union Bank of Nigeria PLC, Uyo
   Mr E. E. Archibong
4. Deputy Director of Nursing Education,
   Mrs A. O. Essang
5. Principals of Schools of Nursing and Midwifery - St. Luke's Specialist Hospital Anua
6. Assistant Director of Nursing Services, St. Luke's Specialist Hospital Anua
7. All unit heads - St. Luke's Specialist Hospital Anua
8. Ladies and Gentlemen

You are heartily welcome to St. Luke's Specialist Hospital Anua on this occasion of official commissioning of the primary nursing project in this hospital. Primary nursing will be introduced into this hospital through Mrs U. E. Archibong, a research student, University of Hull, England.

It has been a long standing intention to change from the old fashioned functional method of nursing to a modern holistic approach to care, but we have not been lucky enough to have someone to direct our intentions. I am happy that today we have someone to direct us and primary nursing is no more a theoretical concept but a dream -come-true.

The part which interests me most is the fact that the nursing process which we have been trying to implement is also incorporated in the primary nursing practice. At this point, I appeal to the research fellow to please make sure that nursing process is established here along side the primary nursing practice.

The research fellow certainly needs co-operation, and tolerance to change, from all of us and I hope we will all give her all necessary assistance.

I wish her and all participants success and hope that at the end, primary nursing and the nursing process will be applied in St. Luke's Specialist Hospital - Anua and eventually in the whole of Nigeria.

Thank you.

Appendix XIII

An opening seminar on the introduction of primary nursing in Nigeria by Uduak E. Archibong (Ph. D. Student), Institute of Nursing Studies, The University of Hull, England at the Conference hall of St. Luke's Hospital Anua on the 5th of May 1993.

1. Hon. Commissioner for Health, represented by the Deputy Director of Nursing Services (State), Mr Ralph Effiong,
2. The Acting Chief Consultant of St. Luke's Hospital, Dr Etuk,
3. The Manager of Union Bank of Nigeria PLC, Uyo
   Mr E.E. Archibong
4. Deputy Director of Nursing Education,
   Mrs A.O. Essang
5. Principals of Schools of Nursing and Midwifery - St. Luke's Specialist Hospital Anua
6. Assistant Director of Nursing Services, St. Luke's Specialist Hospital Anua
7. All unit heads - St. Luke's Specialist Hospital Anua
8. Ladies and Gentlemen

All other protocols observed.

I am happy to be with all of you and to share the little I know on the area of family-centred approach to health care with you. I wish to introduce a family-centred mode of organising nursing care, called primary nursing, into the Nigerian Nursing System. This project, though part of my Ph.D. work, is an indication of my personal interest in improving or raising the standards of nursing practice in Nigeria in particular and the world at large.

Primary nursing has gained rapid momentum in nursing practice in most parts of the world, but there is no evidence of its practice in Nigeria. Therefore, we may count

ourselves lucky to be the nucleus hospital and consequently State from which this concept will spread to all parts of Nigeria in particular and West Africa as a whole.

The nursing profession has gone a long way, and over the years it has passed through various stages of development; the pre-Nightingalian and Nightingalian era of Asceticism which emphasised self-denial, the era of Romanticism full of sentiments and subservience, the post-world War II era of pragmatism with nursing shortage and nursing's adoption of the management principle of division of labour and this era of Humanistic Existentialism which views a human being as unique and as a whole that is different from the sum of his/her parts.

This dynamic nature of nursing coupled with the increasing awareness of the consumers of health care, and the general public, therefore calls for a corresponding change in nursing care patterns which grew from the case nursing, functional or task nursing and team nursing on the one hand and now to primary nursing.

Primary nursing: the Who, What, and How about it

Primary nursing is a philosophy of nursing and a mode of organising care which is aimed at strengthening the nursing profession and increasing the interaction of nurses with patients and families. In primary nursing practice, one nurse, the primary nurse is solely responsible for the care of a group of patients twenty four hours a day, seven days a week, from admission till these patients no longer need nursing care.

The primary nurse is accountable, autonomous, committed and has the authority to plan care for his/her designated patients. Since the primary nurse cannot be physically present at all times, there is a group of nurses who work on his/her behalf to take care of the patients when he/she is not on duty. These nurses who give supportive care to patients in the absence of the primary nurse are called associate nurses. The primary nurse initiates the patients care plan, he/she assesses the patients, prescribes nursing action, provides care when on duty and evaluates care. While the associate nurses

provide care based on the instructions of the primary nurse, they can also make decisions in the absence of the primary nurse under the supervision of other senior nurses or according to the set standards in a particular unit.

In primary nursing practice, the role of the ward charge is in the hands of a nurse called, the primary nursing co-ordinator. This nurse relinquishes his/her present role of the 'know it all' and leaves decision making concerning patient care to individual primary nurses.

Advantages

- Improves quality of nursing care.
- Increases patients/family satisfaction with nursing care.
- Increases patient/family involvement in care.
- Enhances nursing autonomy and professionalism.
- Improves the communication between health care practitioners.
- Increases nurses job satisfaction.
- Promotes comprehensive, total and individualistic care to the consumers of care.
- The Government of Nigeria; Federal, State and Local would benefit from primary nursing practice in the sense that health settings will be a conducive environment that promote health. This will in turn promote the health status of Nigerians, the productivity level of the country will be enhanced and the much - talked - about year 2000 will be looked up to with great joy.

Primary nursing is not without its disadvantages but these have been studied in depth by the researcher and the knowledge of these constraints has been utilised to draw up a better primary nursing plan for Nigeria. Examples of these **disadvantages** include:

- Personality clash between patients and nurses.
- Need for stable staffing.

- Conflict between primary nurses and the ward sister/ other health care practitioners.

How would we know more about this concept?

This concept has been simplified into a book called *A Guide to the Introduction of Primary Nursing* written by the researcher which will be launched jointly with a book titled *The Bank Inspector* by Archibong (1993) on the 4th of June 1993.

Why do we need to introduce primary nursing into the Nigerian Nursing System?

(1) Incompatibility of nursing process with nursing organisational designs used in Nigeria.

(2) An increased fragmentation of care as a a result of patients coming in contact with large numbers of nursing staff day in, day out, with little consistency of personnel.

(3) Nursing personnel involvement in non-patient care activities.

(4) Non-commitment of nurses to nursing care because they are not accountable for the care given.

How will primary nursing involve other health care practitioners?

A change in nursing pattern will be affected by and will be affect other health team members. The health team implies a group of professionals who work together for the purpose of improving patient care. For primary nursing to succeed as a holistic mode of organising nursing care delivery, nurses have to reach a level that allow them to accommodate and be accommodated by other health team members. Open Communication should exist between all health team members.

Will primary nursing thrive in the Nigerian Nursing System?

The Nigerian Nursing System is very conducive for primary nursing practice because:

1. Primary nursing involves formation of bond between nurses and the family system. It is a partnership between nurses and family. In the traditional Nigerian Society in particular and African society, the family is all in all, therefore any care that will involve the family will surely be embraced with open arms.
2. The Nigerian Nursing system has an all-RN staffing structure.
3. There is no permanent night shift assignment of nurses.

After having heard so much about this all-embracing concept - What should we do?

I pledge for the co-operation and support of all and sundry. The people of Akwa Ibom state deserve the best nursing care- don't we? I am going to do my best in directing such care but I'm afraid this can never succeed except you own the change. I am only a vehicle and a facilitator, if you leave it entirely to me it will die when I go back to school. If you regard it as yours, it will be here forever and the history would have been made - that Primary Nursing entered Nigeria and West coast of Africa through you.

Mr Uwem Carpus is my research partner. Please do not hesitate to contact any of us when the need arises.

Thank you!

Appendix XIV

Nurses' Consent Form

This ward has been selected for a special nursing research project which involves the introduction of a family-centred approach nursing care called primary nursing. In the course of this study, questionnaires will be distributed, interview and observation will be conducted to examine the nursing care given to patients in the hospital and how their relatives are involved in the nursing care and decisions concerning their patients. Knowledge from your responses in the questionnaire, interviews and observation will be used to improve the nursing care given in Nigerian Hospitals.

Your voluntary participation in this research will very much be appreciated. The study involves you practising primary nursing along with others, answering some questions that will be put to you. In addition to this, you would be watched whilst giving care of patients. This would take approximately thirty minutes during the morning shift and thirty minutes during the evening shift. Patient's relative will also be interviewed and observed. There is no foreseeable risk to you by participating in this study. Your responses are confidential and in no way influence your job. Your name will not be used in any way. All information collected will be analysed and published in group form.

If you have any questions, any member of the research team would be glad to answer them. Although we are nurses, we are not employed by this hospital. The study has been approved by the Commissioner for Health in the State and the Nursing and Midwifery Council of Nigeria.

Thank you for your consideration of this request.

I hereby agree freely to participate in this study and I accept to share my experience of this new approach to nursing care. I also consent to observations being carried out whilst I will be giving care to patients.

I understand that all information gathered during this study will be treated as confidential and my anonymity will be guaranteed.

Signed _____

Date _____

Appendix XV

Patient's Consent Form

This ward has been selected for a special nursing research project which involves the introduction of a family-centred approach nursing care called primary nursing. In the course of this study interview and observation will be conducted to examine the nursing care given to patients in hospitals and how their relatives are involved in the nursing care and decisions concerning their patients. Knowledge from these interviews and observation will be used to improve the nursing care given in Nigerian Hospitals.

Your voluntary participation in this research which will involve you answering some questions that will be put to you, is very much appreciated. This will take about twenty minutes. In addition to this, you would be watched whilst nurses give you care. This would take approximately thirty minutes during the morning shift and thirty minutes during the evening shift. Your relative will also be interviewed and observed. There is no foreseeable risk to you by participating in this study. Your responses are confidential and in no way influence your nursing care. Your name will not be used in any way. All information collected will be analysed and published in group form.

If you have any questions, any member of the research team would be glad to answer them. Although we are nurses, we are not employed by this hospital. The study has been approved by the Commissioner for Health in the State and the Nursing and Midwifery Council of Nigeria.

Thank you for your consideration of this request.

I hereby agree freely to participate in an interview about my experience while receiving nursing care. I also consent to observations being carried out whilst nursing care is being given to me.

I understand that all information gathered during this study will be treated as confidential and my anonymity will be guaranteed.

I also consent to my relatives being approached and asked to participate in the interview and observation.

Signed _____

Date _____

Appendix XVI

Relative's Consent Form

This ward has been selected for a special nursing research project which involves the introduction of a family-centred approach nursing care called primary nursing. In the course of this study interview and observation will be conducted to examine the nursing care given to patients in hospitals and how their relatives are involved in the nursing care and decisions concerning their patients. Knowledge from these interviews and observation will be used to improve the nursing care given in Nigerian Hospitals.

Your voluntary participation in this research which will involve you answering some questions that will be put to you, is very much appreciated. This will take about twenty minutes. In addition to this, you would be watched whilst nurses interact with you and your relative. This would take approximately thirty minutes during the morning shift and thirty minutes during the evening shift. There is no foreseeable risk to you by participating in this study. Your responses are confidential and in no way influence your nursing care. Your name will not be used in any way. All information collected will be analysed and published in group form.

If you have any questions, any member of the research team would be glad to answer them. Although we are nurses, we are not employed by this hospital. The study has been approved by the Commissioner for Health in the State and the Nursing and Midwifery Council of Nigeria.

Thank you for your consideration of this request.

I hereby agree freely to participate in an interview about my views on the nursing care received by my patient whilst in hospital. I also consent to observations being carried out on my involvement in the nursing care of my relative.

I understand that all information gathered during this study will be treated as confidential and my anonymity will be guaranteed.

I also consent to my patient being asked to participate in this study.

Signed _____

Date _____

Appendix XVII

Rules in observation of interactions in the study.

General rules

* Introduce yourself to the nursing personnel in charge who will in turn introduce you to the patients without necessarily indicating which patient attention will be focused on.

* Select a position as unobtrusive as possible, yet one where you will be within easy assessment of the patient to be observed.

* Avoid entering into any conversation with patients or personnel to the extent possible.

* Remain uninvolved in the care of the patient in all but emergency situations.

* Interaction between nurse and observed patient starts as soon as nurse walks into the room and addresses all patients. The interaction stops when the nurse is no longer receptive to replies, that is, if the nurse turns to another patient or engrosses him/herself in another task, if the patient breaks interaction by chatting with another patient or family member or another nurse.

* Record only interaction with patient being observed, if nurse interacts with more than one patient simultaneously.

* Regard each nurse-patient contact as single episode. Ignore brief interruptions.

* Record episodes of interaction as two or more when there is an obvious interruption.

* Make hasty notes if interactions occur in rapid succession and ascribe ratings later.

* Record multiple ratings, whether the results are the same for each interaction or different for each one.

Specific Rules for observation in nurse-patient and nurse-family interaction

* Observe one patient and one family member at a time.

* If no family member visits during the two observation episodes for a particular patient, assess the nurse-family interaction of that patient whenever a family member visits even outside that patient's observation time.

* Observe only pre-coded activities.

* Record the cadre of the first nurse that has contact with the patient, any other nurse that has contact with patient thereafter is regarded under 'other nurses'.

* Observe patient and family 30 minutes during the morning care period and 30 minutes during the afternoon care period on two different days using time-table provided.

Specific Rules for observation in the Quality study Using QUALPACS

* Measure the quality of care received by one patient for 3 hours. 2 hours for direct observation, 1 hour for indirect observation; learning about the patient, assessing his/her nursing care needs, review of patient records, care plans and nursing notes and completing ratings in retrospect following the period of observation.

* Observed one patient at a time following the time table.

* Rate care rendered by a person not on the nursing staff:

(1) If the volunteer or family member is under the supervision of the nursing staff.

(2) If the care is arranged for, as part of the nursing care plan for the patient .

* Rate care as 'poorest care' when particular care and interventions are omitted based on the evidence from observation and from record.

* Rate care as 'not applicable' for any item or action or care that is not likely or is not expected to take place in a particular instance.

* Rate care as 'not observed' for care not performed by personnel which ought to have been performed for the patient.

* Do not limit ratings to interactions listed in the cue sheet.

Appendix XVIII

Time table for different changes in the project

Date	Activities	Comments
3/2/92 to 3/4/93	Literature review and designing of the study.	
4/4/93	Arrival in Nigeria for field work	
5/4/93	Meeting with the Registrar and Secretary General of the Nursing and Midwifery Council of Nigeria	Approval given for the Introduction of Primary Nursing into the Nigerian Nursing System
8/4/93	Visit to University of Nigeria Teaching Hospital Enugu (UNTH) - Original Research Site for the study	Doctors on strike at UNTH. Hospital offers only skeletal and emergency services, therefore not enough patients to use for the study
12/4/93	(1) Decision taken on the use of St. Luke's Specialist Hospital Anua- Uyo as the pilot study for the research. (2) Selection of research partner.	The hospital is an urban large hospital in the researcher's town therefore language barrier erased. Research partner in the hospital chosen for the study.
13/4/93	Meeting with the Commissioner for health, Deputy Director of Nursing(State) and the Deputy Director of Nursing Education in Akwa Ibom State of Nigeria.	Hospital is administered by the State Government and run by the state ministry of health- thus the need to obtain permission from authority of the Ministry of Health.

Date	Activities	Comments
14/4/93	Permission granted by the Commissioner for health AKS for the use of St. Luke's Hospital Anua as the nucleus for the study.	
14 to 18/4/93	Meetings and discussions with research partner.	To discuss the concept of primary nursing and all aspects of the study.
15/4/93	Meeting with the acting chief consultant and the Assistant Director of Nursing Services in charge of the hospital.	Study embraced. Researcher advised to submit itinerary for project.
16/4/93	Scoring of all wards in the hospital.	To select the model ward and plan for pre-implementation data collection.
16 to 17/4/93	Pilot study	To try out the research methods and instruments.
19/4/93	First meeting with research assistants	To discuss their roles in the study, examine the purpose of the study and train on the use of instruments for data collection.
20/4/93	Second meeting with research assistants and interview practice.	Interviewers interviewed each other.

Date	Activities	Comments
21/4/93	Third meeting with the research assistants and practice session: observation of patients in Male ward II at St. Luke's Spec. Hosp.	To try out the instruments and check inter-rater reliability for QUALPACS and Interaction sheets.
22/4/93	Revision and discussion with research assistants .	Areas of difficulties reviewed and agreement for a re trial of instruments reached.
23/4/93	Repeat Practical session on the use of instruments.	Inter-rater reliability rechecked.
27 to 28/4/93	Pre-implementation data collection.	
30/4/93	First meeting with staff of the model ward.	To examine the need for change.
3/5/93	Formation of the Primary Nursing Group (PNG).	(a) To allow the client system own the change. (b) To define their roles and help them set their goals.

Date	Activities	Comments
5/5/93	Opening seminar on primary nursing and official commissioning of the project.	Commissioning done by the Commissioner for health Akwa Ibom State of Nigeria. In attendance: Deputy Director of Nursing(State), Deputy Director of Nursing Services (Education), all heads of nursing departments in the ministry of Health in Akwa Ibom state, Nursing and Midwifery final qualifying examination co-ordinator for Akwa Ibom State, all heads of nursing units of St. Luke's Specialist hospital Anua and some heads of other departments in the hospital. This afforded opportunity for the senior nurses and resource persons to be involved in the early stage of the change in order for them to be associated with and also own the change. Change was welcomed by all.

Date	Activities	Comments
9/5/93	Meeting with nurses, patients and relatives in the model ward.	To discuss the need for change. To listen to an audio play on primary nursing in practice and watch a video primary nursing in practice. This was aimed at stimulating the need for change. They unanimously accepted the need for change.
10/5/93 to 12/5/93	Primary Nursing Orientation Course (PNOC) for resource persons	To familiarise the group with the concept of primary nursing as they are the would-be change agents.
18 to 19/5/93 (Gp I) 20 to 21/5/93 (Gp II)	Primary Nursing Orientation Course (PNOC) for practitioners	To familiarise the group with the concept of primary nursing and to teach them other concepts which will help in the acquisition of the required skills for the successful practice of primary nursing.
24/5/93	General meeting of PNG members and staff of the model ward. Researcher and partner invited for the meeting.	To decide on the date for the commencement of the change. To select the primary nurses based on set criteria which was accepted by all.
26/5/93	Change commenced	
31/5/93	First meeting of researcher and research partner with staff after introduction of primary nursing.	To discuss the progress and problems of the change.

Date	Activities	Comments
2/6/93	First meeting of researcher and partner with primary nurses only.	To discuss the progress and problems of the change.
7/6/93	Second meeting with all staff.	
9/6/93	Meeting with members of module I.	
10/6/93	Meeting with members of module II.	
11/6/93	Meeting with members of module III.	
12/6/93	Meeting with members of module IV.	
21/6/93	Only research partner met with all staff.	To learn how to assist independently in the absence of the research.
22/6/93	Only Research partner met with all staff.	
27/6/93	Meeting with all staff and research partner.	To monitor progress of change so far, to inform them of researchers planned departure and to pledge for their full support to the research partner.
1 to 14/7/93	Two weekly meeting of primary nurses only with research partner. Two weekly meeting of each module with research partner.	
15/7/93 to 31/8/93	No patients in model ward.	Nurses and doctors on strike

Date	Activities	Comments
From 1/9/93	Monthly meetings of research partner with: (a) Primary nurses only (b) Members of each module.	
17/10/94	Announcement of the change by the media (Akwa Ibom State Radio Corporation News Item)	
25/10/93 to 28/10/93	Arrival of new primary nursing co-ordinator, orientation course, and handing over from old to new co-ordinator by the research partner.	
29/10/93	Old primary nursing co-ordinator left hospital	
20/12/93	Research partner meets with research assistants	Revision on the use of research tools.
21/12/93 to 22/12/93	Post-implementation data collection.	

Appendix XIX

Philosophy of care and Mission statement for the Model Ward

PHILOSOPHY OF NURSING CARE

MALE WARD I

St. Luke's Hospital Anua - Uyo

1. To treat our patients as individuals and provide the best possible care with available resources.
2. To introduce our patients to their primary nurse and his/her team within 24 hours of admission.
3. To involve our patients and families in their plan of care and give clear explanations of all treatments.
4. To create an environment conducive for learning.
5. To ensure all members of the ward team feel valued and considered as important part of the team.
6. To be open and honest with each other, be prepared to accept constructive criticism.
7. To be reflective in our practice.

MISSION STATEMENT

The Provision of Excellent patient care by valued well Trained staff within available Resources

Appendix XX

Certificate of Participation in PNOC

PRIMARY NURSING ORIENTATION COURSE

Certificate of Participation

this is to certify that

has attended the Primary Nursing Orientation Course held at the Conference Room of St. Luke's Hospital, Anua — Uyo from .....May 1993 to .....May 1993,

Comprising Subjects under the following headings,

* THE CHANGE PROCESS
* SKILLS REQUIRED IN THE EFFECTIVE PRACTICE OF PRIMARY NURSING
  - *Assertiveness Training*
  - *Systematic Decision Making*
  - *Communication Skills.*
* PRIMARY NURSING CONCEPT
  - *Historical and Conceptual Issues*
  - *Benefits and Potential Constraints*
  - *Role Structure in Primary Nursing*
  - *Structuring of Primary Nursing Unit*
  - *Staff Scheduling in Primary Nursing Unit*
* NURSING PROCESS IN PRIMARY NURSING PRACTICE

Level of Participation

MR RAPHAEL S. EFFIONG
Deputy Director of Nursing Services
Akwa Ibom State.

MRS. UDUAK E. ARCHIBONG
Course Organiser, Research Fellow
The University of Hull.England

Appendix XXI

Report from research partner dated 1st June 1994.

I have been able to send you this successful report on the project. However this was not without hindrances and obstacles.

(1) The project was unable to establish its roots at the time it was due because of the nurses' strike which lasted for one month (August 1993). This followed the doctor's own which lasted a month (July 1993).

(2) While the programme started gaining momentum after the series of strikes, the Primary nursing co-ordinator was transferred out of St. Luke's Specialist Hospital in October 1993. What this meant was for me to start all over with the new ward charge who was not around when the seminar on Primary nursing was conducted. Happily despite the huddles, she was able to pick up her role and responsibilities as the Primary Nursing Co-ordinator. She is really enjoying the role.

(3) I continued to have regular meetings with all practitioners. Specifically two weekly meetings continued till mid July, 1993 just before the doctors and nurses went on strike and monthly meetings commenced in September 1993.

(4) Another problem was the unco-operative attitude of the hospital authority when the ward ran out of the nursing care plan formats. The stencils of this four-paged format got defaced and were no longer good for more cyclostyling. So I appealed to the authority to provide these stencils. The doctors still remained unperturbed about the change.

(5) The preparation for and post-change data collection was spread over three days - being Monday (20), Tuesday (21) and Wednesday (22) December, 1993. Monday was scheduled for the research assistants' orientation on the use of the tools - the various assessment forms, the use of the tape recorder and familiarisation with the items of the forms and areas to pay preference to during observation, interview and observation technique to be used. Tuesday and Wednesday were for the actual assessments. As this assessment coincided with the PTS practical examination, which took place in the ward

on the 21st. The external examiners were amazed at the wonderful performances in this ward.

(6) Finally success emerged although it meant my organising fresh and constant orientation programmes for the participating staff of the model ward.