AN EXPLORATION OF VARIOUS CLINICAL SETTINGS FOR THE EDUCATIONAL PREPARATION OF STUDENT NURSES

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AN EXPLORATION OF VARIOUS CLINICAL SETTINGS FOR THE EDUCATIONAL PREPARATION OF STUDENT NURSES

BY

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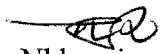PROMOTER: PROF H. I. L. BRINK
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NOVERMBER 2000

DECLARATION

I declare that:

An Exploration of Various Clinical Settings for the Educational Preparation of Student Nurses, is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Cynthia Nkhumisang Pilane   30th November 2000

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Abstract

The purpose of this study, was to identify and describe factors, which facilitate or impede learning in clinical learning settings. The study adopted an exploratory descriptive approach, incorporating both quantitative and qualitative designs.

Data collection tool, comprised of two sections: Section 1 focused on demographic characteristics. While section 2 addressed study variables of clinical setting, staffing, patient care/ practice standards, nurse manager's commitment and interpersonal relationships. The last section had two parts; part 1 being close ended Likert type scale ranging from strongly agree to strongly disagree. Part 2, was open ended, and solicited respondents' feelings opinions and experiences on factors they perceived to facilitate or impede clinical learning.

The findings indicate that the majority of settings studied did not provide adequate factors to facilitate clinical learning. Factors such as availability of learning experiences, acceptable unit organization, space and resource availability, and accessibility to students, adequate staffing with qualified staff who actively participate in teaching, appropriate and quality patient care role modelled, lecturer availability and involvement in clinical teaching, team building and inclusion of students in the team, committed nurse managers involved in students' learning, conducive relationships among staff, students and patients, comfort relationships, advocacy and

creating conducive relationship by the nurse manager, were identified as necessary for learning.

These factors however, were found to be either lacking, inadequate or inaccessible to students. Findings were based on data from a quota sample of 202 participants proportionately drawn from students, nurse managers and nurse lecturers. The study made recommendations to improve and enhance the conduciveness of clinical practice settings used for learning in Botswana.

Key Terms:

Clinical nursing education, clinical settings, clinical learning, clinical teaching, clinical learning environment, factors facilitating or impeding learning, conducive environment, nurse teachers role in clinical teaching, nurse managers' role in clinical teaching/ learning, nurse managers commitment, humanistic teaching/ learning approaches, role modelling care.

LIST OF ABREVIATIONS USED

ABBREVIATION	MEANING
PHC	Primary Health Care
DHT	District Health Team
FWE	Family Welfare Educator
MCH	Maternal and Child Health
TB	Tuberculosis
WHO	World Health Organisation
NHI	National Health Institute
BNS	Bachelor of Nursing Science
B Ed (Nursing)	Bachelor of Education (Nursing)
CLE	Clinical Learning Environment
SANC	South African Nursing Council
CL	Clarity Index
UNISA	University of South Africa
SPSS	Statistical Package for Social Sciences
Clinset	Clinical Setting
Patcare	Patient Care
NMCOM	Nurse Managers Commitment
Interpers	Interpersonal Relationships
MMW	Male Medical Wards
FMW	Female Medical Wards
MSW	Male Surgical Wards
FSW	Female Surgical Wards

OBW	Osbtetric Ward
OPD/ C	Out-patient Departments/ Clinics
PW	Private Wards
Orth W	Orthopaedic Wards
ICU	Intensive Care Units
GYN W	Gynaegolocical Wards
A/ E	Accident and Emergency
Staff/ NM	Staff/ Nurse Manager
D/ Hosp	District Hospital
Ref Hosp	Referral Hospital
T/ INST	Training Institution
SRN	State Registered Nurse
MSN	Master of Nursing Science
N/ Manager	Nurse Manager
HIV	Human Immuno-deficiency Virus
AIDS	Acquired Immune Deficiency Syndrome
"SOAPIE"	Subjective, Objective, Assessment, Plan, Implementation, Evaluation.

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CHAPTER 1

1.0   INTRODUCTION

1.1   AN OVERVIEW OF THE RESEARCH PROJECT

1.1.1   The Country Profile

The Republic of Botswana is a landlocked country, boarded by the Republic of South Africa on the south, Namibia on the west, Zimbabwe on the northeast, and Caprivi and Zambia on the North. Botswana's total land area is 582 000 square kilometres. The major part of the country is flat, with gentle undulations and occasional rocky outcrops. The north-south railway line runs along the eastern region, which is more fertile and it is here, where most Botswana live.
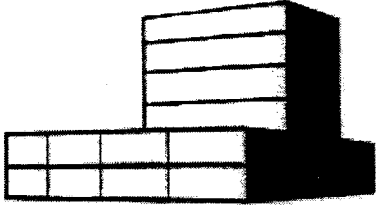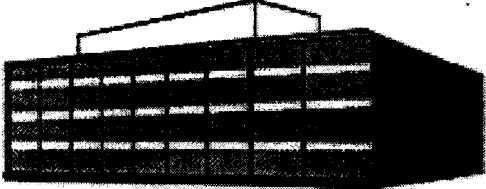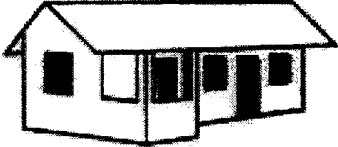
Botswana's climate is semi-arid, with very high temperatures in summer, and low in winter, often reaching sub-zero levels. Rainfall is seasonal and unevenly distributed. The country's economy is mainly dependent on agriculture, mining and manufacturing. While agriculture plays a major part in the economy, the country periodically experiences drought, which adversely affects the agricultural production and income, thus impinging on the health and well being of the people.

According to the Ministry of Finance and Development Planning (1991), Botswana hosts some of the great population of wild life still available in Africa. This constitutes a tourist attraction that is yet to be fully developed, to further boost the country's economy.

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1.1.2 The Health Care System

The Government of Botswana, through the Ministry of Health, remains committed to Primary Health Care (PHC) strategy for the attainment of health for all Batswana. In this regard, the health care system is based on the principles of PHC as contained in the Alma-Ata declaration of 1978. To this end, the government when planning its activities puts health promotion and care, and disease prevention among its priorities. The basic objectives of health care activities include but are not limited to the following: access to all citizens to essential health care, regardless of their financial resources or place of residence; equitable distribution of health resources; utilization of health care services; intersectoral collaboration and community participation.

The Primary Health Care Strategy shapes the referral system, which supports it. The referral system provides increasingly sophisticated services at successive levels. In remote areas, the first point may either be the mobile stop or the health post, while in other areas, the clinic, with or without maternity beds may be the first point of contact. Services in these facilities are implemented by local authorities and supervised by the District Health Teams (DHTs) of the Ministry of Local Government, Lands, and Housing. The remaining levels of the referral system consist of primary, district and referral hospitals. The Ministry of Health directly holds the responsibilities for the services provided by these facilities. For a pictorial view of the organization of the National Health Care system in Botswana, see **Fig. 1.1**.

Type of Facility	Health and Medical Personnel	
Two Referral Hospitals One Psychiatry Hospital One Private Hospitals	Specialised professionals such as Medical Specialists, Nurses, Midwives, Pharmacists, and allied health officers	
15 District Hospitals	District Medical Officers, Nurses allied health professionals and midwives	
14 Primary Hospitals	Physicians, Nurses, Midwives and allied health of ricers	
182 Clinics Two types of clinics: ·Clinics with maternity beds ·Clinics without maternity beds	Nurses, Midwives, and Family Welfare Educators (FWE)	
309 Health Posts	Nurses, Family Welfare Educators (FWE)	
834 Mobile Stops	Managed by Health Teams, Nurses and Midwives	

Source: General nursing curriculum, 1995

Figure 1.1   Organisation of the National Health Care System in Botswana

As depicted in Figure 1.1, health facilities become increasingly complex as the size increases. Similarly, the services provided and the variety of personnel staffing these facilities, increase with the size of the facility. Table 1.1 below summarizes the type of facility, capacity, staffing, services provided and the population served.

Table 1.1   **Referral System and Criteria for Health Facilities**

Facility	Services provided	Description	Location and Population
Mobile Stop	Limited PHC services	No fixed facilities	Local authorities to determine
Health post	Staffed by one nurse and Family Welfare Educators. PHC including family planning, environmental health, MCH, school health, first aid treatment of common diseases, case finding Community based worker as first contact; primary health care services, including family planning; environmental health; first aid treatment of common diseases; case finding and follow up; periodic visits by area clinical staff.	3 rooms and toilet. House in remote areas.	Local Authorities to determine
Clinic without maternity ward	Maternal/child health; preventive works at health post; diagnosis and treatment of common diseases; simple laboratory tests; case finding and follow up with emphasis on TB.	5 rooms covered area toilets, one vehicle and two staff houses	Villages with population 3000 and above. This population criterion may be varied downwards by the Local Authority on the basis of remoteness or distance.
Clinic with maternity ward	As above but including deliveries	As above plus maternity unit, vehicle, and 3 staff houses. Enough doctors to be employed in major villages and town to visit clinics and ensure full utilization of these of these facilities	As above, maternity ward depends on area's needs. Remote villages standing on their own to be given special consideration. Major villages and towns should have enough clinics to take the outpatient load. Routine outpatient departments should not be seen in hospitals. The hospitals will cater for emergencies and referrals only.
Primary Hospital Level 11	As at clinic; general in-patient care; laboratory tests; X-rays and surgery.	20 – 70 beds in total, comprising general, maternity and TB beds. Outpatient facilities. Refers to District hospitals.	Villages with population 10 000 and above before considering catchment area.
Primary Hospital Level 1	As at primary hospital Level 11	50-70 beds comprising general, maternity and TB beds. Out patient facilities. Equipped and staffed to the level of a district hospital to minimize referrals. Refers to National Referral Hospitals.	Remote villages with population 4 000 – 10 000. Special consideration given to distance and other factors.
District Hospital Level 11	As at primary hospitals; special services for serious and complicated health problems; preventive, curative and rehabilitative services; in-patient care for more complicated health needs.	Primary hospital on a larger scale. 71 – 250 beds.	Major villages and towns.
District Hospital Level 1	As above. Specialist services in surgery and gynaecology.	As above. 71 – 250 beds. Higher status in referral hierarchy.	Major villages and towns
National Referral hospital	As at district hospital; Specialist clinical services	251 - 400+ beds.	Gaborone, and Francistown

Source: Ministry of Finance and Development Planning (1998 – 2002)

Table 1.1 shows that the basic promotive, preventive and educational supportive services are provided on ambulatory basis at mobile stops, health posts and clinics. On the other hand, different levels of hospitals provide varying levels of impatient services for increasing population groups, and increasing complexity of services. Consistent with this view, McGregor (1991) made observations that the government of Botswana has emphasized the expansion of services to reach all communities, especially those in remote areas. He stated that the activities and services are today organized at different levels of sophistication and coverage. He summarized the services as follows:

- At the very lowest level is the health post, run and managed by the local authorities and local communities. The aim is to establish a health post for all communities with the population of 500 or more people. Nurses staff these.

- At the next level are clinics; each staffed with at least a registered nurse. Their function is to provide education in health matters, immunizations, limited services and collection of statistics.

- At the next level are hospitals, ranging from health centres (primary hospitals), district hospitals and referral hospitals. The functions range from provision of simple curative to the most complex services.

McGregor (1991) concluded his review by stating that, " Botswana now boasts a comprehensive network of health facilities; that 89% of the population has access to health facilities, and 85% live within the recommended 15 kilometre radius from the nearest health facility." The ultimate aim of the Botswana Government is to have the majority of the population live within an 8 kilometre or less radius from a health facility. In line with the principles of the PHC strategy of equitable distribution and accessibility, health facilities are distributed throughout the country. The main purpose is to bring health services as close to the people as possible as shown in Figure 1.2.

HEALTH CARE FACILITIES IN THE REPUBLIC OF BOTSWANA
MAY 1991

LEGEND

■	District & Sub-District Headquarters
●	District Health Team Headquarters
▲	Town Council
⊕	Referral Hospital
★	District Hospital
+	Primary Hospital
7	District Health Team
〰〰〰	District Health Team–District Council & Sub-District Boundaries.
□3	Denotes 3 Clinics with maternity wards in Health District
△4	Denotes 4 Clinics without maternity wards in Health District
HN3	Denotes 3 health posts with nurses.
H4	Denotes 4 health posts without a nurse.

Figure 1.2: Map showing distribution of health services in Botswana

Source: Botswana Central Statistics Unit 1991.

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Figure 1.2 shows a network of health facilities distributed countrywide in the republic of Botswana. Although there is a decentralized approach to health care delivery, the Ministry of Health has portfolio responsibility for health. According to Ministry of Finance and Development Planning (1991:359), the Ministry of Health's main functions are to guide and implement:

- *National health policies and strategies,*
- *Health promotion and ill health prevention,*
- *Health care curative services,*
- *Health research, investigations and technical support,*
- *Health manpower development, and*
- *Health care administration.*

1.2 BACKGROUND OF THE PROBLEM

1.2.1 Historical Review

During the colonial era and a few years after this period, the nursing education system in Botswana was hospital based. Both theoretical and clinical teaching occurred concurrently in a hospital setting. The concept of clinical teaching was unknown. Students worked in the wards and took responsibility for patient care. Nobody in the hospital was appointed to supervise students and nurse teachers did not visit to assess students' progress. This state of affairs is summarized by Selelo-Kupe (1993:126) as follows:

> "*There was no effort to coordinate the teaching-learning at the school, with the doing in the wards. Available data did not indicate any effort on the part of nurse educators to influence events in the wards for the benefit of students. The nurse educators of the day apparently did not fully appreciate the importance of clinical facilities as teaching laboratories.*"

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This brought about the distortion to the concept of clinical laboratory, which according to Selelo-Kupe (1993:127) is defined by some professions as *"a place where the neonate works with the expert, to acquire skills and knowledge."* He/she has no responsibility in the clinical area other than to learn. The neonate or learner looks forward to acquiring the skills and knowledge he/she would use later as a qualified practitioner. In nursing education however, clinical areas became labour camps, where the learner became an unskilled labourer, and the patient received non-professional services. Furthermore, rotation of students to specialty wards did not aim at exposing them to clinical learning experience, but rather to provide services.

1.2.2 Institute Facilities

Selelo-Kupe (1993) further observed that schools of nursing did not exist but the hospital allocated a room in the hospital for teaching purposes. Furthermore, she stated that the idea to establish a National Health Training Institute was first conceived in 1967, as the central training unit for all health personnel, excluding doctors. Moreover, Selelo-Kupe referred to the first National Plan issued in March 25th 1968 in which reference was made to a training unit in Gaborone, called the National Health Institute. Sello-Kupe (1993), makes reference to a report by WHO regional nurse adviser, Potts, who observed that training facilities were inadequate in terms of space and equipment. She therefore stated that the establishment of a central unit would start an enlarged school of nursing to accommodate more students. This was consistent with the situation of the country then, and the new health care system, which required a large number of nurses. This according to Selelo-Kupe (1993) necessitated an increased and an improvement of nurse training facilities. The dream was realized in 1969, when the Danish government approved a grant to construct a

central training unit to be known as the National Health Institute, which started operating in 1970.

The first phase of the institute, a modern facility for the education of nurses, was officially opened in 1973. At the same time, a new curriculum had been developed, which was first implemented in 1970. The curriculum emphasized the student as the learner and not the worker. The philosophy of the curriculum also stated the educator's belief that the teaching-learning process is an endeavour in which the learner took responsibility for learning while the teacher guided, and provided an environment, which is conducive to learning. A guide to clinical teaching was developed to facilitate teaching in the clinical area. Clinical teaching was defined as not supervision of practical work, but exposure to appropriate learning experiences selected in all settings where nursing was practiced. Selelo-Kupe (1993) further explained that clinical settings for student learning included places such as; homes, schools, industries, health posts, clinics, and varying levels of hospitals. This situation was a departure from the former practice, and it met with fierce opposition from nursing service, which resulted in conflicts between educators and nurse practitioners.

The first National Health Institute was established in 1970 in the capital city of Botswana, Gaborone, and with campuses in Lobatse, Francistown, Molepolole, and Serowe. During this time, enrolled nurses, general nurses, midwives, and paramedics were trained in these institutions. The name **National Health Institute** was retained until April 1993, when it changed to **Institute of Health Sciences (I.H.S)**, with all five campuses becoming autonomous and independent of each other.

This development was in line with the objectives of the Government of Botswana, *"to increase training capacity and improve the quality of training health personnel"* (Ministry of Finance and Development Planning, 1991 and Ministry of Health, 1989). Physical expansion of these institutes was embarked upon in 1994, in order to increase the capacity, as well as enhance the quality of programs offered. However, clinical settings used for students' learning lacked behind despite their contribution in clinical learning. In their article, "assessing the adequacy of clinical learning environment and/ or setting" Bevil and Gross (1981) suggested that in order to meet the learning objectives, the setting must have the necessary human and material resources. Furthermore, clinical settings must provide integrated variety of learning experiences, Haukenes and Mundt (1983).

Over the years, the nursing education system for Botswana evolved into the current diploma and degree level programs. The diploma programs include the three-year basic registered and the twelve-eighteen months post-basic diploma courses. The post basic diploma courses are offered in specialty areas as dictated by the needs of the nation. The university offers a Bachelor of Education in nursing degree and a Master of Nursing Science degree with specializations in Community Health Nursing, Adult Health, Community Mental Health and Midwifery. The purpose for these programs is to produce nurse lecturers to work in nurse training institutions and nurse administrators to strengthen nursing leadership and for health services management. Plans to start a generic Bachelor of Nursing Science degree program in 1999, per cabinet memorandum Cab 4/93 of 1993, are at an advanced stage. However, with all these developments in nursing education, the clinical facilities have lagged behind.

The present study therefore aims at exploring factors in the health facilities, which facilitate or impede learning for student nurses.

1.3   THE NATURE OF THE PROBLEM

The Government of Botswana has already adopted Primary Health Care (PHC) as the most appropriate strategy for Health for all, Ministry of Finance and Development Planning, (1991). The change to the PHC delivery system has presented a challenge to nursing education, where nurses constitute 80 – 90% of all health care providers. The PHC approach to delivery of health services has mandated the need for increased skills, knowledge and attitudes in comprehensive health assessment, problem identification and diagnosis, interventions and problem solving, as well as leadership and management.

In order to respond to the PHC needs, the Ministry of Health commissioned a Kellogg Consultancy in 1990, to review and advise on an alternative system of nursing education for Botswana. The terms of reference were that the consultancy should advise on the system which:

- *Is more efficient and cost effective*
- *Strengthens the knowledge, skills and attitudes of nurses for direct provision, Leadership and management of PHC services*
- *Increases the attractiveness of nursing as a career to potential entrants, and*
- *Supports career development for practicing nurses (Poindexter and Shaw-Niekeson 1990).*

A National task Force reviewed the consultancy recommendations in 1992, and the final recommendations were presented to cabinet. The recommendations were accepted and a Presidential Directive Cabinet Memorandum was issued in 1993. The

directive stipulated that the nursing education system for the country be reviewed and changes be made as follows:

- *Training of enrolled nurses be discontinued;*

- *A program to convert the current stock of enrolled nurses be designed and implemented*

- *The registered nursing program be changed from the current 3 years concurrent didactic and practice to 2 years of academic study and one year internship,*

- *A Bachelor of Nursing Science (BNS) program be developed and implemented,*

- *The current B.Ed (Nursing) be diversified to cater for other clinical nursing specialties currently offered at post basic diploma level,*

- *A master's degree in nursing be developed, and*

- *Institutes of Health Sciences, the Ministry of Health and the University of Botswana develop the schedule of implementation for these programs jointly.*

The directive gave the mandate to the revision of the old curricula and development of new ones, which aimed at equipping nurses with the requisite knowledge, skills and attitudes needed to meet the health care needs of Botswana. The curricula have been developed and are currently being implemented. However, clinical settings, which are used for student learning, have not been assessed for their appropriateness to facilitate the achievement of student learning outcomes.

1.4 MOTIVATION FOR THE STUDY

The researcher has often wondered what factors characterize the clinical learning environment for the educational preparation of nursing students. The study therefore intended to explore and describe factors, which characterize clinical settings (clinical learning environments) used for the educational preparation of students in Botswana.

The information obtained through this study would assist the researcher to identify and describe those clinical settings, which provide appropriate factors necessary for learning. Furthermore, the researcher hopes that factors that facilitate learning will be nurtured. On the other hand, factors that impede learning will be identified and ways to improve them suggested. Since no study of this nature has been done in the country, the results will also add to a body of knowledge in nursing education in this part of the world.

Learning is believed to take place when opportunities are provided for the learner to practice and experience what is being learned in a variety of settings or situation. WHO (1985:13) purported that "learning is facilitated when it takes place in or near to situations in which the learner expects to work." The clinical setting is therefore very vital to facilitate the learning experiences, where competence development and problem solving skills are sharpened, and scientific principles are tested in practice. Mabongo (1983) in her study of the perceptions of Botswana nursing students towards the relationship between classroom and clinical teaching found that classroom teaching was positively related to clinical settings, which offer the best possible environment that facilitates learning. These settings should include areas where clients with common health problems and diseases are managed. The settings should also provide a variety of services including preventive, promotive, curative and rehabilitative, as well as follow-up services. Clients should be available and adequate in terms of number, variety and length of hospital stay. The necessary equipment and supplies should be available. With the curriculum based on PHC model, the use of a variety of settings is imperative for the realities of service demands.

The researcher however has observed that the clinical settings currently used for students' learning in Botswana are often inadequate in supplies, equipment and teaching aids. The number of nurses with advanced practice skills and physicians is limited. This decreases the contributions of these professionals to the teaching-learning process for nursing students. Some settings have low numbers of clients and limited variety, which deny students the opportunity for competence development.

Despite the revision of nurse training curricula and the development of new ones based on the primary health care model, the community, supervisors, and employers continue to raise dissatisfaction with the quality of nursing services. Concerns raised are that registered nurses' practice is not consistent with their role expectation, that their clinical skills are often lacking or inadequate; and they seem inadequately prepared to function independently in the assigned clinical units. One wonders whether the clinical settings used for students' learning are conducive to enable them to develop the necessary competencies and skills for patient care.

The researcher believes that in addition to the provision of service, the goal of the setting should be to provide opportunities that allow nursing students to develop knowledge, skills and attitudes of beginning practitioners. Fothergil-Bourboinnais and Hiquchi (1995) who stated that educational opportunities in the clinical settings must facilitate for the preparation of beginning practitioners support this view. To date, no research has been done in the country to examine the source of the problems.

The researcher, through experience, is convinced that for the environment to facilitate learning, the staff working in the setting plays a key role. Reilly and Oermann (1992) described the role of nursing service staff as mentors, preceptors and role models, as

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well as identified their willingness to actively participate as very important. In Botswana, where the teacher-student ratios are very high, nursing service staff provides essential clinical instructions for students. Wilson (1994) observed that students view participation by the nursing service staff, and the feedback they give about student's performance as increasing their sense of competence. Therefore, for students to develop their competencies, the clinical settings used for their learning must possess factors alluded to in the literature.

Several respondents identified factors found to facilitate clinical learning. These included conducive clinical learning environment in which:
- Faculty take responsibility for clinical learning,
- A variety of health problems exist,
- Nursing service staff was available and willing to participate in student clinical learning.
- Resources are available and accessible for use by students in learning to provide care.
- In order to explore the various clinical settings for their appropriateness to facilitate student learning in the clinical area, factors suggested above were used as the guiding framework for the study as identified by Reilly and Oermann (1992), Wilson (1994) and Forthegill-Bourboinnais and Hiquchi (1995).

1.5   SIGNIFICANCE OF THE STUDY

The current study has the potential to contribute locally relevant information, which will be used in the development of a model in Botswana for selecting appropriate clinical learning settings for nursing students. The findings will therefore result in improving education of nurses in the country and in turn, contribute to quality care.

1.6 STATEMENT OF THE PURPOSE

The purpose of this study is to identify and describe factors, which characterize clinical learning environment for nursing students, with a view to identifying and proposing strategies to nurture those, which are facilitative, while improving those that impede learning. The research project therefore aims to:

- Determine factors in the CLE which are perceived by students, lecturers and nurse Managers, to facilitate learning

- Identify those factors which impede learning

- Describe both factors which facilitate and those which impede learning

- Determine any similarities or differences in the facilitative or impeding factors as perceived by both students nurse lecturers and nurse managers.

1.7 RESEARCH QUESTIONS

1.7.1 What factors in the clinical learning environment are perceived by nursing students, nurse teachers, and nurses in charge as facilitating or retarding both theoretical and clinical learning for nurses in Botswana?

1.7.2 Are there any similarities or differences in the factors, which facilitate learning as perceived by nursing students, nurse teachers, and nurses in charge of units?

1.7.3 Are there any similarities or differences in the factors, which impede learning as perceived by nursing students, nurse teachers, and nurses in charge of units?

1.7.4 To what extent does the clinical learning environment facilitate or impede learning?

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1.8   DEFINITION OF TERMS

1.8.1   **Clinical settings/clinical area** are facilities where health providers serve and are in constant interaction with health care customers. These facilities may include:

- schools, clinics, day care centers, residential and nursing homes and community agencies,

- hospitals and other acute care settings,

- old age apartments, and

- campus wellness clinics,prisons, and counseling centers.

These settings were suggested by authors such as Bevil and Gross (1981),Forthergill-Bourboinnais and Hiquchi (1995), and Reilly and Oermann (1992).

1.8.2   **Student nurse/nursing student**

- In this study, refers to an individual, male or female, registered for the three year diploma in general nursing program at a college of nursing or institute of health science in Botswana.

- Defined by Mhlongo (1994:12) as "a person undergoing education and training at an approved nursing school (college or institute), who has complied with the prescribed conditions and has furnished the necessary particulars."

- In the clinical setting (clinical learning environment) students are taught in the real world where they learn technical skills, caring, problem solving

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and interpersonal skills. They interact with all persons who provide care, as well as those who receive care, their families and relatives.

1.8.3 Learning Environment:

- Dunn and Burnett (1995:165) in defining the learning environment refer to Booms definition that it is "all forces or stimuli that impact on the learning and development of an individual. It may exist both within and outside the class-room setting."

- In the context of this study, the researcher regards the learning environment as a network of forces and factors, which surround, influence and play on an individual in order to help in the development of human potential.

1.8.4 Clinical Learning Environment

- Is viewed as the "interactive network of forces within the clinical settings that impact on the behavior of individuals within the setting, and influence the student's clinical learning outcomes" (Dunn and Burnett 1995:1166).

- "The attributes of the clinical work setting which nurses perceive to influence their professional development in terms of their knowledge, skills and attitudes" (Hart and Rotem 1995: 3).

1.8.5 Humanistic Staff

Is described by Quinn (1995:101) as "qualified staff, who treat students with kindness, are approachable, provide support and help to learn, and foster the students' self esteem."

1.8.6 Team Approach

Quinn (1995:101) defines team approach as "working as a team, to create working and learning atmosphere through own relationships."

1.8.7 Teaching/Learning Support

Described by Quinn (1995) as qualified staff who creates opportunities and conducive environment for the student to participate actively in own learning.

1.8.8 Nurse-Lecturer (teacher).

- In the context of this study, refers to a registered nurse who holds an additional qualification in nursing education, and is responsible to guide and facilitate for student learning in both classroom and in the clinical area.

- According to Quinn (1995:103), the role of the nurse lecturer (teacher) is to "facilitate for, and act as a learning resource to the student, as such must be accommodative and flexible to the student's individualism, in an effort to become the best he is able to be."

1.8.9 Clinical Teaching:

Refers to "the teaching, supervision and accompaniment of the student in the clinical nursing laboratory" (SANC Terminology list, 1995:5).

1.8.10 Clinical Setting:

Is defined as "any setting where a nurse renders care, which may be preventive, promotive, curative or rehabilitative. The care may be provided to an individual, family or group of individuals or a community, either in a hospital, clinic, school, industry or a home" (Brink, 1994:6).

1.8.11 Clinical nursing laboratory

Is viewed by Cele (1990:13) as "the actual and simulated patient/client care settings created and utilized for clinical teaching."

1.8.12 Unit Sister/nurse –unit manager

Is defined by Mhlongo (1994:12) as "the professional nurse in-charge of a nursing unit."

1.8.13 Teaching role of nurse-manager

Refers to "all the activities undertaken by the nurse-unit manager to facilitate for the learner to apply knowledge gained in class-room in the nursing of patients in order to develop nursing skills and attitudes" (Mhlongo 1994:12).

1.9   ASSUMPTIONS

1.9.1   Definition

- LoBiondo-Wood and Harber (1994:49) define assumption as "a basic principle about existence that is accepted as true, with no need for scientific proof. The abstract concepts embedded in assumptions are independent of an individual's perceptions.

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- Assumptions may also be referred to as "basic principles that are assumed to be true without proof or verification." Polit and Hungler (1993:13) or "Basic principles that are accepted as being true on the basis of logic or reason, without proof or verification" (Polit and Hungler, 1993:431).

1.9.2 The current study was undertaken with the following assumptions in mind

- The clinical settings used for nursing students' learning are adequate, in terms of space, organization, and staffing.

- The settings provide reference material and resources required for patient care and student learning.

- A wide range of learning experiences in terms of patient population with a variety of conditions is available in the settings for student learning.

- The settings use the nursing process as the framework in providing patient care.

- Patient care is documented using a problem oriented recording system, Subject Objective, Assessment Plan, Implementation and Evaluation (SOAPIE).

- Nursing care is patient centered, holistic and safe.

- Patients are given information and are allowed to participate in their own care.

- The settings are staffed with adequate numbers of qualified nursing, allied health personnel and medical doctors.

- The qualified staff supports students' learning.

- Nurse-lecturers are available in the clinical settings to guide students and collaborate with clinical staff to support learning.

- The nurse unit manager manages and coordinates all patient care activities, facilitate teamwork, and student learning.

- The interpersonal relationship among all qualified staff, students and patients is friendly, humanistic and accommodative.

1.10   CONCLUSION

In this chapter, the introduction, which covered the country profile, the health care system for Botswana was discussed. The background and nature of the problem, motivation for the study, significance, purpose, study questions, were described. Terms were defined and assumptions were outlined. The next chapter focused on the review of relevant literature.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter dealt with introduction to the study, which covered country profile and the health care system. The background to nursing education, motivation, significance, purpose and study questions were described.

In this chapter, available relevant literature was reviewed. It covered the perception and expectation of the students on factors, which either facilitate or impede learning in the clinical setting. Perceptions of nurse teachers related to their role in clinical teaching are discussed. Particular emphasis is placed on criteria used in previous studies to determine the factors in the clinical learning environment, which facilitated learning, as well as those, which impeded learning (Reilly and Oermann 1992; Dunn and Burnett 1995).

The aim was to identify concepts, which cut across the studies, which could be used to guide the current study. Although clinical nursing has been acknowledged as the heart of all nursing education programs, the balance between theory and practice has been a source of long standing controversy to which there is no perfect solution (Lee, 1996). Some authors argue that the current emphasis on early acquisition of theoretical knowledge must not underestimate the importance of practicing basic skills for the development of students' confidence in clinical practice (Elzubeir, and Sherman 1995). Clinical teaching/learning input in the clinical area, directly affect the quality of patient care. Dunn and Burnett (1995) observed that, theory and practice

integration have remained a problem despite some development in the area of clinical

nursing education. The current researcher wondered what the problem could be, and

raised the following questions:

- *To what extent does the clinical learning environment facilitate or impede learning in the clinical settings in Botswana?*
- *What factors in the clinical settings facilitate learning?*
- *What factors in the clinical settings impede learning?*

Various authors, Slimmer, Wendt and Martinkus (1990), Craig (1991), Reilly and

Oermann (1992), Wilson (1994), Leonard (1994), Forthergill-Bourbonnais and

Hiquchi (1995), and Mahat (1996), provide evidence that a considerable amount of

research has been done on the assessment and/or selection of clinical learning

environment. However, not much research in this area has been done in Botswana

specifically, or Africa in general. Most studies suggest certain factors that need to be

considered in assessing selecting a clinical learning environment for nursing

programs.

2.2   LITERATURE REVIEWED

Reilly and Oermann (1992) suggest that the decision to select or to continue to use the

setting for clinical learning should be based on an evaluation of that setting, and the

extent to which it facilitates for learner's achievements of clinical objectives. The

evaluation should identify factors that promote or impede student learning and

therefore determine the appropriateness to attain the learning objectives. Reilly and

Oermann (1992), who also allude to the presence of both human and material

resources if the environment is to facilitate clinical learning, support this view.

Reilly and Oermann (1992) further suggested factors that need to be considered in assessing the appropriateness of the clinical learning environment. These factors should include. The nature of nursing as demonstrated during patient care process; the health needs of the populations as evidenced by health problems affecting individuals, families, groups, and communities; and the educational environment, which focuses on the curriculum framework as it relates to patient care, the ability of faculty to use creative instructional models in clinical teaching; and the nature of the student populations as it relates to their needs and expectations of the clinical learning environment. They also should emphasize the collaboration between faculty and the clinical staff in assisting students to attain clinical learning objectives.

Furthermore, these authors attested that the administrative staff should be flexible to the student time in the setting, and the nurse teachers who are expected to teach in the setting. In addition, Reilly and Oermann (1992) proposed that the learning environment should have adequate numbers of patients, with a variety of problems and staying for an adequate length of time to allow for student learning. Moreover, these authors further suggested that the students must be allowed to provide hands-on-care, and have access to all the resources for patient care.

A qualitative study by Kelly (1993) examined the expectations of senior nursing students of hospital nursing practice. The sample consisted of 23 senior baccalaureate-nursing students from a possible population of 120 doing their final clinical rotation just before graduation. The results showed that:

- *Senior nursing students were not naïve about the reality of practice*

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- *Most students perceived themselves as fairly powerless*
- *Students voiced a commitment to ethical principle of respect for the client*
- *They experienced guilt when they did not say something.*
- *They expressed disappointment that nurses did not stand up for patients*

Kelly (1993) further identified that the new graduates lacked confidence and were vulnerable to stress- induced compromise. This was attributed to the non-supportive clinical environment. Kelly (1993), and Reilly and Oermann (1992), alluded to the fact that the clinical learning environment must minimize stressful situations for students to learn.

Wilson (1994) explored and described nursing students' experience in a clinical practice setting. Data were collected using observation and ethnographic interviewing techniques. The findings revealed that students developed a perspective as they interacted with the clinical learning environment. The perspective then served to guide their actions within, and in relationships to that environment. Wilson (1994:82) described the perspective as:

- *Student goals:*
- *Actions consistent with goals;*
- *Criteria for goal achievement, and*
- *Student perceptions of student, instructor and staff nurse roles. "*

This perspective constituted a shared understanding of what a clinical learning environment was like for students. Within the framework of this perspective, students perceived six goals for their clinical learning. Wilson (1994:84), summarized the goals as follows:

- *To cause no harm to the patient, as they were expected to learn by caring for people,*

- *To help patients, as students were expected to do more than just practicing on patient,.*

- *To integrate based-knowledge from lecture and reading into clinical practice in the day-to-day nursing care of patients,*

- *To learn nursing clinical practice skills, and*

- *To look good as a student and as a nurse, students needed to look good to instructors, staff, peers and patients.*

Within the students perspective of the clinical learning environment, and guided by their learning goals, students completed their experiences with the following outcomes:

- *Students moved from the role of student into the role of the nurse in order to asume responsibility for patient care,*

- *Students used working in the clinical setting as an opportunity to help people,*

- *Students used the clinical setting to help them retain newly learned facts, concepts and theories,*

- *Students used the clinical setting to learn and practice clinical skills,*

- *Students identified two roles they filled during the experience, that of a student, as during interaction with the instructor, and that of a nurse, as during caring for and helping patients.*

In order for these outcomes to be attained, the clinical learning environment provided factors conducive for learning. Some of these factors included patients, clinical staff and instructors. Wilson (1994:85), viewed these factors *"as the basis for the meanings the students assigned to the learning process, and to the roles each individual played in the clinical setting."* The observation made by Wilson (1994) is in concert with those of Kelly (1993), who observed that for learning to take place, the environment

must be conducive. Sieh and Bell (1994) examined the students and faculty's perception of effective clinical teachers in associate degree programs. Both students and teachers' responses were comparable and agreed that clinical teachers should correct student's mistakes without belittling them; direct the students to use nursing literature; and that nurse teachers must act as role models for students. Wilson (1994) supported the role-modeling behavior. While on the other hand, correcting students without belittling them and guiding them to use nursing literature seemed to be in conflict. The clinical instructor was seen as an evaluator rather than a teacher, who was always making the students feel bad (Wilson, 1994).

Wiseman (1994) studied the role model behaviors of the clinical nursing faculty in the clinical setting. The study indicated that students perceived faculty as role models. Moreover, the students perceived themselves as practicing the role taking behaviors. However, they argued that clinical faculty were inconsistent in rewarding their attempts to emulate behaviors. Wilson (1994) and Sieh and Bell (1994) supported the role model behavior of faculty. Also the role model taking behavior of student and seemingly negative attitude is consistent in both studies.

The study by Polifroni, Packard, Shah and MacAvory (1995), aimed at determining who, other than the client/ patient influences the student learning at the clinical site, and how learning time was spent. Nine clinical settings were observed and findings showed that students in the clinical setting were in contact with clinical faculty, registered nurses in the unit and other students. It was observed that for 84%of the time students interacted with another students or were on their own in the settings.

Ten (10%) of the time was spent with registered nurses, while 15% of the time was with the instructor, other nursing or non- nursing staff. On the whole, time spent with a supervisor, being an instructor, or a registered nurse, totaled 25% only, meaning that 75% of student time in the clinical area was unsupervised. Polifroni et al (1995:168) concluded that:

- *Learning that occurs in clinical practice courses is largely unguided;*

- *Students provided a service to the clinical agency, and receive scanty input from staff, in return;*

- *Agency staff do not view the education of students as an integral part of their role;*

- *Without support of staff, clinical instructors must focus attention to the needs of Patients, rather than students;*

- *An instructor took responsibility for patient care in several areas of the institution, and this constituted questionable safe practice;*

- *There was limited opportunity for faculty to assist student with clinical judgment, and establishment of therapeutic nurse-patient relationship skills;*

- *When student time is devoted to independent provision of patient care, there is limited opportunity to observe expert nursing practice; and*

- *Time was not the equivalent of quality education in a clinical practicum course.*

These findings seemed to suggest that the role of the student was that of a worker as opposed to that of a learner. It would seem that the environment did not support learning. The findings were in conflict with previous studies. Wilson (1994), Sieh and Bell (1994) and Wiseman (1994) all found that students perceived clinical faculty and unit staff as role models and that clinical setting facilitated for student to learn.

Forthergill-Bourboinnais and Hiquchi (1995) described factors, which influence the process of selecting learning experiences in a particular clinical environment.

They claimed that for the clinical environment to provide learning experiences, it must allow for students to be socialized into the role of professional nurses. The findings indicated that consideration must be given to the curricular goals such as development of clinical judgement and decision-making skills. In order to fulfill this goal, the students needed to interact with clients in various situations, where they would make observations on patients, analyze data collected, and plan nursing actions for intervention on behalf of, or with patients. Forthergill-Bourboinnais and Hiquchi (1995) purported that there was a need to match student-learning needs and the patients' care needs.

The second curricular goal proposed by Forthergill-Bourboinnais and Hiquchi (1995) is the development of scientific basis for nursing care. For this goal to be fulfilled, these authors emphasized that the clinical environment needed to allow the student to apply theory taught in class, to the actual patient care. This would assist the students to rationalize their nursing actions. Furthermore, Forthergill-Bourboinnais and Hiquchi (1995) stated that the main curricular goal was the development of the caring behavior. They asserted that students develop this behavior through interacting with patients, which enables them to gain deeper understanding of patients' and how they cope with their illnesses.

The other major factor by Forthergill-Bourboinnais and Hiquchi (1995) was the "learning environment itself. They proposed that in considering the learning environment, patient acuity, technology used, health professionals' mix, as well as staffing and material resources should be taken into account.

Based on this premise therefore, Forthergill-Bourboinnais and Hiquchi (1995) suggested that the learning environment must have adequate number of patients and appropriate mix to facilitate for hands on care by students.

Furthermore, they claimed that clinical teachers should be available to guide students as they learn to care for patients with complex problems. Similarly, these authors attested that the participation of clinical staff made the learning environment conducive, through fostering development of working relationships. Another factor yet emphasized by Forthergill-Bourboinnais and Hiquchi (1995) was the teacher expertise.

The authors stressed that clinical teachers must be knowledgeable and have nursing experiences relevant to the clinical environment selected in order to serve as role models for students. Moreover, they maintained that clinical teachers must have a deeper understanding of subject content knowledge. This knowledge enables the clinical teacher to select appropriate patients consistent with the student's level of competency. Furthermore, the clinical teacher was expected to monitor both students and patients they provide care for, in order to ensure patient safety.

Second to subject content knowledge, Forthergill-Bourboinnais and Hiquchi (1995), further asserted that the clinical teacher must possess the pedagogical knowledge and be able to apply this knowledge to the demands of the clinical learning environment. In this way, the clinical teacher is expected to be aware of the learning needs of each student, and select clinical learning opportunities, which facilitates student growth.

Forthergill-Bourboinnais and Hiquchi (1995) further suggested that the clinical teacher should have curricular content knowledge; this knowledge deals with the instructional resources available to promote learning in the clinical setting. Included in the curricula content, knowledge is the ability of the clinical teacher to plan clinical experiences, which enable the students to apply theory to practice.

Heliker (1994) supported this view, and stated that *placing learning in a functional context encourages the application of different forms of knowledge and the understanding of various concepts in such a way as to clarify pertinent factors and their interaction and interconnectedness."* Further to this, curricular content knowledge enables the clinical teacher to plan clinical experiences that reinforce content of concurrent courses as well as build on previous ones.

Forthergill-Bourboinnais and Hiquchi (1995) also suggested that student needs are important factors to be considered in selecting the clinical learning experiences. To this end, they proposed that the selected setting must enable the student to apply theoretical knowledge into practice situations. This will happen where the setting allows for progressive development of the student, and provides for students to match their needs with patient situations, and develop the psychomotor skills expected of beginning practitioners.

A study by Stockhausen (1992) discovered that nursing education in Australian schools of nursing was not based on research supported educational outcomes. Similarly, the current researcher's experience is that nursing education in Botswana is not based on any substantial research outcomes. The current research was initiated in response to a perceived need for a well-documented research on which to base

decisions for clinical nursing education, of particular interest, is the assessment and description of the clinical learning environment (clinical settings).

Study by Dunn and Burnett (1995) aimed at describing the relationship between the format of clinical education placement and the student learning outcomes. Sixty-four (64) second and third year undergraduate nursing students in all clinical facilities constituted a convenient sample. Data were collected using a combination of qualitative (semi-structured interviews and participant observation) and quantitative (questionnaire) methods. Results showed that placements of one day every week was perceived to facilitate interpersonal relationships as opposed to two days every two weeks with long intervals. Dunn and Burnett (1995), described the results of such placements as follows:

- *The interrupted presence of students in the wards denied the clinical nursing staff the opportunity to know students as individuals.*
- *Students perceived the arrangement to deny them the opportunity to form any predictable relationships with either the clinical staff or the clients.*
- *The students lacked real involvement in patient care, were unable to formulate or implement plans or to observe patient outcomes.*

Dunn and Burnett (1995) however observed that on the whole, for the two formats of one day/week and two days every two weeks, sixty students had difficulty in meeting their learning goals, and did not see the clinical placement as a rewarding or fulfilling experience. Both groups reported better responses for the two-week block for which three interrelated factors emerged:

- *Through enabling establishment of continuity of care, students established an improved rapport with the patients and they began to trust the students, during the two-week block. Staff tended, after an initial period, to accept students' presence*

and were more open to the students' need for freedom and responsibility within the clinical environment;

- *Students indicated that the block experiences assisted them to gain confidence and considered more holistically, the care of the people they were nursing. This improved their self-esteem and personal confidence. Students emphasized the need to give holistic care to familiar patients;*

- *The two-week block experience provided the students with a broader understanding of the clinical environment. This was through providing a range of learning experiences and facilitating improved communication with patients and staff.*

These researchers concluded that their study showed significant differences between the perceived benefits of short placements and block placements systems. The differences were consistent both in qualitative and quantitative data, and indicated that the student outcomes were far superior in the two week block.

Mahat (1996) studied stress and coping by the first year Nepalese nursing students in clinical settings. The sample consisted of 104 nursing students who had been in the clinical setting for 6 to 8 weeks. Four stressful events were identified as:

- *Interpersonal relationships, especially negative interactions with the teacher, visitor, patients, community members, staff nurse, doctor, medical student, ward in charge and cleaning people.*

- *Initial experiences, which included-providing care to the patient, seeing a patient die or seeing a dead body, seeing a wound, seeing a patient suffer, cleaning a patient's*

  private area, administering an injection and medication.

- *Feeling helpless, as in seeing patient suffer lack of caring from doctor or nurse, and*

  inadequate treatment due to poverty.

- *Demeaning experiences, which included bed making, as this activity did not fall within their expected nursing responsibilities.*

These findings were in agreement with those of previous researchers cited in Kleehammer, Hart and Kerk (1990), Wilson (1994) and Davidhizar (1993). On the other hand, Mahat (1996) identified that students developed coping mechanisms, which they used to cope with stressful situations they encountered. These included-seeking social support, whereby students sought support from friends, teachers, senior students, staff nurses, parents and relatives. This coping mechanism was reported in relation to interpersonal relationships and initial experiences.

In most instances, students sought support from senior nursing students, but not much support was sought from ward staff although they were knowledgeable and were always available in the ward. Wilson (1994) supported this finding, and observed that:

- *Reducing stress and problem solving were other coping mechanisms identified in their study. Students reported crying, praying to God or consoling oneself as reducing stress. On the other hand, practicing to improve skill, analyzing the problem and providing care were identified as components of problem solving mechanisms.*

- *Self-control coping strategy - students reported getting angry but remaining quiet or not expressing their anger. This strategy was used especially when stress was induced by negative interpersonal relationships.*

- *Negative feelings - when students described their feelings as "doubted own ability, felt like leaving nursing, or regretted coming into nursing." The majority of students
reported this feeling, especially in relation to interpersonal relationships, induced stress.*

- *The wishful thinking strategy was reported with all stressful events, and included some comments like "I wished I could have prevented the patient from dying."*

- *Accepting responsibility was another strategy, where students reported to have accepted or tolerated the stress because they knew nothing could be done.*

- *Avoidance was yet another coping mechanism where students reported avoiding situations or people who caused them stress.*

This study although not directly related to the topic under investigation, was included in the literature review because of the sighted implication for clinical experience. Although stress is not an unusual phenomenon, and is a necessary ingredient in challenging students to learn, overwhelming form of negative stress threaten and discourage learning rather than provide a challenge. Mahat (1996) stated in the implications of her study for clinical experience that:

Teachers needed to be aware of factors that caused stress in students so that they could create an environment that did not threaten but facilitated learning. It was observed that working relationships between faculty and clinical staff was one of the factors inducing stress. Clinical teachers needed to recognize that the clinical setting was a complex place where nursing students were confronted with a wide range of situations and varied people who required effective interpersonal skills. Teacher-student relationships were therefore observed to be a key factor. It was suggested that teachers needed to have given students instructions on effective communication and assertiveness skills to minimize stress.

These observations were supported by previous research, Nehring (1990) observed that positive teacher-student relationship inside and outside the classroom reduced students' stress, or prepared them to cope with it more efficiently. Reilly and Oermann (1992) in agreeing to this view emphasized emphatic understanding as a significant attribute of a teacher-student relationship. These authors purported that teachers should understand students' reactions and be sensitive to their feelings, in order to reduce students' stress.

They concluded by pointing out that teachers could play an important role in decreasing or avoiding a certain type of stress, by developing good interpersonal relationships with students and creating a humanistic climate that supported the learning process. The comfortable and supportive learning environment would offer students the feeling of confidence, hope and increased self-esteem.

Hart and Rotem (1995) conducted a study entitled, the clinical learning environment: nurses perceptions of professional development in clinical settings. The purpose of the study was to identify the attributes that define the clinical learning environment for registered nurses. The findings were based on a questionnaire answered by 516 respondents. There was significant relationship between professional development and six identified independent variables, which were autonomy and recognition, role clarity, job satisfaction, quality of supervision, peer support, and opportunities for learning. These variables accounted for 40% in perceived professional development. However, some units and institutions were perceived to be more conducive to learning than others. These authors conceded that the unit culture determined, to a significant extent, what and how nurses learn.

Despite these findings, Lee (1996) described the clinical role of the nurse-teacher in relation to the clinical learning experience of the nursing student, as an area of long standing confusion and dispute. This problem is said to have led to lack of concerted effort in the provision of educational input in the clinical area by the nurse-teacher, which has in turn affected patient care. Lee (1996) did a comprehensive review of the dispute with the aim of unraveling the problem. The study found that the clinical role of the nurse-teacher appeared to be "implicit and hidden." The result was wide

differences in the interpretations of the extent, purpose and the nature of the role. Just to cite a few contradicting views about nurse-teacher perception, of their role, McHale (1991), observed that some nurse-teachers feel that their loss of clinical expertise and lack of preparation for the clinical role caused them dissatisfaction, while most teachers got satisfaction from liaison with clinical staff. None of the nurse teachers mentioned clinical teaching as part of their role.

Crotty (1993), in her study: clinical role activities of nurse-teachers in project 2000, interviewed twelve nurse teachers. The findings indicated that none of the respondents reported that they did clinical teaching in the form of hands on care. Instead, nurse-teachers in the study described their clinical role as liaison. They saw themselves as developing the clinical environment and supporting the clinical staff to do the clinical teaching. The findings in both the Clifford (1993) and Crotty (1993) studies, seemed to agree in the conclusion that the role of nurse-teachers in the clinical area is largely social, in which activities are focused on building working relationship with the clinical staff. The study by Baillie (1994) also supported these findings. This study explored the nurse-teacher feelings about their participation in direct patient care, and the findings showed that 50% of the teachers had some participation in the clinical practice, but only a few participated on regular bases. Furthermore, the findings indicated that nurse-teachers were not satisfied with their participation in clinical practice.

A previous study by Infante, Forbes, Houldin, and Naylor (1989) purported that the clinical role of nurse-teacher was to provide academic guidance by setting the stage for clinical learning, and not to supervise practice. These authors claimed that nurse-

teachers were role models for teaching and served as consultants for practitioners, so as to enhance education for students. Osborne (1991) supported this view. This author argued that the move towards student-centered learning in nursing education has necessitated the need for nurse-teachers to create the clinical environment, which is conducive to students' learning. In agreement, Acton, Gough and McCormack (1992) observed that the continued presence of nurse-teachers in the clinical area is a doubling of roles and resources, when there were clinically credible and expert practitioners. They asserted that nurse-teachers should facilitate the development of clinical competence of students by supporting the clinical learning environment, for practitioners to demonstrate skills.

Crotty (1993) shared similar sentiments in the study of nurse teachers' role in clinical teaching. Findings indicated that nurse-teachers had made a decision that to teach and supervise students in the clinical area was the practitioner's role. The nurse-teacher concentrated in teaching at the college, while they provided a supportive and liaison role to the practitioners in the clinical setting.

Regardless of these strong beliefs by nurse-teachers, some concerns have been raised. Webster (1990) cautioned that clinical staff contributed to the teaching and supervision of students. Nevertheless nurse-teachers need to share the clinical teaching responsibilities. This would lessen the chance of demoralizing the clinical staff, and risk of loosing their cooperation. Previous studies also supported this thinking and agreed that while clinical staff safeguarded the quality of clinical experience, nurse-teachers should not delegate all of such responsibilities. Karuhije (1997) attested that clinical teaching should not be delegated to clinical staff.

The authors argued that the teacher in the classroom should be the same teacher in the clinical setting in order to bridge the theory and practice gap. The arguments for or against active participation in the clinical area are relevant to the present study, in which the researcher aims at identifying and describing factors in the clinical learning environment, which support or impede learning. Dunn and Burnett (1995:472) in their article, **the development of a clinical learning environment scale** (CLE) identified factors, which characterize the CLE. The factors are included in a 23-item scale with five subscales:

- *Staff-student relationship*
- *Nurses-manager commitment*
- *Patient relationships*
- *Interpersonal relationships*
- *Student satisfaction*

Furthermore, Dunn and Burnett (1995) purported that these factors influence strategies most predictive of desirable student learning outcomes, while decreasing those with negative influence. Above all, they ensure that clinical learning experiences offer the students the best possible learning outcomes. On the other hand, Reilly and Oermann (1992) suggested criteria to use in assessing or selecting a clinical learning environment. This criteria is organized into four main area as follows:

- *The setting, in which clinical learning has to take place, must be licensed, willing to have students and faculty, and have adequate number of clients with appropriate mix of conditions or problems.*
- *Staffing must be adequate, with requisite qualifications and willing to collaborate with faculty in teaching students.*
- *Resources used for patient care must be available, adequate and accessible to students.*

- *The extent to which, the setting facilitates for students to attain their learning objectives.*

Other studies reviewed, supported in one way or the other, the views of these two studies, Forthergill-Bourbonnais and Higuchi (1995), and Leonard (1994).

The reviewed literature seems to be in agreement with the requirements for approval of a "Health Service facility" to be used for student-nurse clinical learning as laid down by Nursing and Midwefry Council of Botswana (Nurses and Midwives Education Regulation 1996:6) that:

- *An approved health facility should be where male and female clients with a variety of problems are managed.*
- *The resources must be available to facilitate instruction and provision of good quality care.*
- *The facility must have adequate physical structure for the provision of appropriate care and training of nursing students.*
- *The facility must accord the students priority to learn, as opposed to being given other assignments*
- *Clinical staff-student ratios must be one to four.*
- *Clinical unit where students are placed must be headed by qualified registered nurse-midwife and*
- *The matron in –charge of the facility takes responsibility for students' learning.*

2.3   CONCLUSION

The literature reviewed thus far has discussed factors, which are viewed as important to facilitate learning in the clinical area. Critical analysis of Dunn and Burnett (1995) CLE scale, and the Reilly and Oermann (1992) criteria are discussed, with a view to finding common concepts on which to base the tool development for the current study.

These are further refined using criteria as set out in the Botswana Nurses and midwifery (now Nurses and Midwifery Council of Botswana) Act and regulations (1996). The literature, particularly these last two studies, is relevant to the current study, which seeks to explore and describe factors in clinical settings that characterize the clinical learning environment in Botswana health care settings used for clinical learning by nursing students.

The chapter that follows discusses the conceptual framework that relates the concepts used in identification of a conducive clinical learning environment.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1   INTRODUCTION

The previous chapter presented review of literature in order to identify factors suggested as facilitative or impeding to clinical learning. Common concepts were then used as framework of this study.

This chapter presents the theoretical framework for the current study. The purpose of the framework according to LoBiondo-Wood and Harber (1994: 144) is to *"provide a frame of reference that is a base for observations, definitions of concepts, research designs, interpretations and generalizations."* In other words, the theoretical framework serves as the guide to systematic identification of logical and precise relationships among variables.

3.2   THEORETICAL FRAMEWORK

Theoretical framework as defined by Polit and Hungler (1993: 109) refer to *"a well-formulated deductive system of abstract formal statements"*. It may also be viewed as *"a set of interrelated constructs, definitions and propositions that presents a systematic view of the phenomenon, by specifying relationships among variables, with the purpose of explaining and predicting the phenomenon"*, LoBiondo-Wood and Harber (1994: 143).

Furthermore, theoretical framework is described as a map that gives direction with regards to methods for the conduct of the study, and guides the interpretation, evaluation and integration of the study findings, (LoBiondo-Wood and Harber 1994).

The researcher chose the humanistic theories as the basis for this study with the belief that these theories provide insights into factors, which influence human growth and fulfilment in the context of student learning in the clinical environment. The humanistic theory of learning is concerned with feelings and experiences, which lead to the personal growth and individual fulfilment.

The humanistic framework, according Maslow (1971), Rogers (1983) and Knowles (1990) in Quinn (1995) combines the views of three theorists. The three concur that their approach "*involves the study of man as a human being, with thoughts, feelings and experiences*", Quinn (1995: 99). Their viewpoint is summarized as

> "*The psychological stance that focuses not so much on a person's biological drives, but on their goals; not so much on stimuli impinging on them, but on their desires to be or to do something; not so much on their past experiences but on their current circumstances; not so much on life conditions perse, but on subjective qualities of human experiences, the personal meaning of an experience to persons, rather than on their objective observable responses*", Quinn (1995: 100).

This theory has relevance to the current study, which seeks to explore factors in the clinical learning environment, which provide experiences that foster student growth and individual fulfilment.

According to the humanistic theorists, the goal of education is to assist an individual to become the best he is able to be, or facilitate for the student to become a fully functioning person. For the achievement of this goal, the theorists propose several factors to be considered. However, for the purpose of this study, only those thought to be relevant are discussed. These included; the establishment of a climate conducive to learning. This applies to the physical, human and the interpersonal environment, which can either be classroom or clinical. For the purpose of this study, the focus is on the clinical learning environment.

3.3   Determinants of an Effective Clinical Learning Environment

The following factors were identified, (Quinn, 1995: 101) as important determinants of effective clinical learning environments in the clinical setting. These are summarized below:

3.3.1   A Humanistic Approach to Students

- **Qualified staff role**

    - *Treat students with kindness*

    - *Are approachable and helpful to students*

    - *Provide support for students to learn*

    - *Are aware of students as learners rather than just pairs of extra hands;*

    - *Foster students' self-esteem*

    - *Qualified nursing staff act as student supervisors, assessors or counsellors*

- *They provide opportunities for students to ask questions, attend medical rounds, observe new procedures, and have access to clients' records*

- *Non-nursing professionals constitute members of the team, and contribute to the learning environment.*

3.3.2 Team Approach

- **Qualified staff**

  - *Work as a team*

  - *Make students feel part of the team*

  - *Create a learning atmosphere by their relationships within the team*

  - *Considerate of each other*

  - *Respectful of each other*

3.3.3 The Nurse Unit Manager

- **Nurse Unit Manager**

  - *Controls the management of the area*

  - *Role models for nursing practice*

  - *Assumes the role of the team leader*

  - *Is efficient and flexible to produce quality care*

  - *Ensures that teaching is an integral part of the organization*

  - *Ensures that nursing practice is compatible with what students are taught at the college*

  - *Facilitates for students to be given responsibility and encouraged to use initiative, and provides resources necessary for client care.*

3.3.4 Lecturer/ Clinical Teachers' Role

- **Lecturer/ clinical teacher**

  - *Facilitates for student to take responsibility for own learning by actively seeking opportunities to learn, asking questions without feeling guilty, and applying new concepts and principles in client's care.*

  - *Works with the student to minimize risk of danger to the client, and examine reasons for failures or mistakes to assist students to learn from them,*

  - *Assists other students at different levels to provide support, for one another through working together, discussing approaches, decisions and rationale for their nursing actions.*

  - *Teacher-student relationship is that of mutual respect, friendliness and support where teachers facilitate for students to be aware of own learning needs, and be self-directing in developing competence to be where they want to be.*

  - *Collaborates and liases with clinical staff for teaching.*

  - *Guides, supervises, teaches and evaluates students for attainment of clinical objectives.*

The factors identified by humanistic theorists are applicable to the study under investigation. The purpose is to explore and describe factors, which characterize the clinical learning environment for student nurses in Botswana using this theory as a point of reference.

3.4 CONCEPTUAL FRAMEWORK

The following is a conceptual relationship of factors/concepts as perceived by the researcher, and applicable to the study. Accordingly, the concepts in the framework are all interrelated and influence each other in the creation of the conducive learning environment, and in the provision of quality care for the client, as presented in the Figure 3.1:

CONCEPTUAL FRAMEWORK

FOR THE ASSESSMENT AND SELECTION OF A

CLINICAL LEARNING ENVIRONMENT (CLE)

Nurse Manager Role
- Leads team
- Provides resources
- Integrates teaching in unit
- Role models care
- Constructive feedback
- Supportive to learning

Humanistic Staff
- Kind + helpful
- Approachable
- Provide learning opportunities
- Supportive
- Foster self-esteem
- Care provision
- Guide + supervise

Care standards

Client + Family care

Student learning

Space/ organization

Team Approach
- work as team
- students team members
- conducive relationships
- considerate of each other

Clinical Teacher's Role
- Friendly relationships
- Supportive non-nursing staff
- Facilitative lecturers
- Supportive peers
- Supervisory to student
- Collaborate
- Liason

Figure 3.1 Conceptual Framework for Assessment and Selection of a Clinical Learning Environment for Nursing Education In Botswana

Health Care System:
(Hospital, clinic, community) permeable to influences from the larger society

3.4.1 List of concepts

- Nurse manager's role.

- Humanistic staff role.

- Team approach.

- Clinical teachers'/ lecturers' role.

- Client and family care.

- Student learning.

- Clinical setting organization and space adequacy.

- Patient care standards.

3.4.2 Description of the Model

The conceptual framework derives from humanistic theories, with the identified concepts, as described under 3.3 above

- The outer cycle represents the openness of the health care system to influences from other systems such as social, political, psychological and physical factors. These factors continuously impact on the health care environment, which may be hospitals, clinics or other community settings, used for clinical learning.

- The middle cycle is made up of key concepts, which constitutes clinical learning environment. These concepts include the nurse managers' role, the humanistic staff role, the nurse teachers' role and the team approach. These variables interact together, and influence each other in the creation of the conducive learning environment.

- The innermost square is made up of client and family care and student learning which interacts with each other. This interaction may positively or negatively influence learning and care provided. Availability and utilization of practice standards guide the quality of care provided. The setting in which patient's care and clinical learning takes place must be appropriately organized to facilitate learning. Space must be adequate for both students and patient care and provide adequate and variety of learning experiences. The function of this part of the framework is a direct result of the impact by the four concepts identified previously.

Quinn (1995: 193) has observed, that the right amount, and the balance between these factors result in optimum stimulation for the student to perform learning tasks, and make appropriate decisions in client and family care. Conversely, imbalance or inappropriate amounts will result in either over or understimulation, which may cause student a lot of anxiety. This anxiety may affect student's performance of learning tasks, and also affect client/family care. The ultimate outcome will be a non-conducive clinical learning environment, which fails to facilitate for students to learn or for quality client and family care. The arrows indicate interaction between all variables, influencing each other positively or negatively.

3.4   CONCLUSION

This chapter has discussed the theoretical framework, which was used to guide the study. Factors conducive to effective clinical learning environment were identified as, staff who are humanistic in dealing with students; nurse manager who is committed to student learning, the concept of team approach, and nurseteachers role.

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These factors were described as interacting together to create a conducive learning environment. However, they were also influenced by the external environment, which may be the whole hospital, or even the larger health care system.

A conceptual framework was described which showed how all the concepts interact and impact on each other. In the following chapter the methodology is discussed.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

The previous chapter presented and discussed a proposed conceptual framework which was used to guide this study. The current chapter will focus on the research methodology, as the approach to the study.

Research methodology, according to LoBiondo-Wood and Harber (1994:244), refers to *"different ways of doing research for different purposes, ways of stating hypotheses, methods of data collection and measurement, and techniques of data analysis."*

In support of this view, Polit and Hungler (1993: 53-54) attested that the purpose of methodology is *to "describe exactly what the researcher did to solve the research problem or answer study questions."* It also describes research subjects, study design, instruments and method of data collection, which includes all procedures followed in the conduct of the study to observe ethics and to validate the findings.

The current study aimed at answering the following questions as reflected in 1.7 of chapter 1:

- *What factors in the clinical learning environment do nursing students, nurse teachers, and nurses managers perceive as facilitating or retarding both theoretical and clinical learning for student nurses in Botswana?*

- *Are there any similarities or differences in the factors, which facilitate learning as, perceived by nursing students, the nurse teachers and the nurses in charge?*
- Are there any similarities or differences in the factors, which impede learning as, perceived by nursing students, nurse lecturers and nurses in charge?
- To what extent does the clinical learning environment facilitate or impede learning?

The purpose of this study was to identify and describe factors, which characterize clinical learning environment for student nurses, with a view to identifying and proposing strategies to nurture those, which are facilitative, while improving those that impede learning. This chapter therefore explains the process followed to eventually come up with answers to research questions. The research methodology, design, population, sample components and sampling techniques are discussed. The procedures for the development of data collection tool, pilot testing of the tool, soliciting permission to conduct the study, validity and reliability measurements as well as ethical considerations are elaborated upon.

4.2   RESEARCH DESIGN

According to LoBiondo-Wood and Harber (1994: 194), the purpose of the research design is to provide the scheme for answering specific research questions, or a plan for obtaining answers to research questions (Polit and Hunger, 1993: 129). Both of these authors view the design as involving the plan, structure and strategies. The following statement confirms their views as they affirmed that research design:

> *"aids the solution of research questions, through the use of methods and procedures; control measures used by the researcher to hold conditions of the investigation uniform, and therefore reduce bias which may affect the outcome".*

Furthermore, Polit and Hungler (1993: 129) described the design as "*strategies that the researcher adopts to develop information that is accurate, objective and interpretable*".

The study involved the integration of both quantitative and qualitative approaches. The advantage of blending these two approaches is that they complement each other. Polit and Hungler (1993:334), argued that while *"quantitative data has an advantage of generalizability, precision and reliability of measurement, validity is sometimes called to question."* Quantitative data may fail to capture a full context of the study. This is because data analysis is numerical and superficial to complex human behavior and experiences.

On the other hand, *"qualitative data is based on an unrepresentative sample and data collection and analysis procedures rely on subjective narratives of respondents"* Polit and Hungler (1993:334). This approach therefore lacks generalizability and objectivity. Combination of the two approaches therefore reduces the limitations experienced with a single method.

The study is quantitative in the sense that it used a structured self-administered questionnaire to collect data, which were numerically analyzed. The researcher did an in-depth literature review before data collection, which is an important aspect of quantitative research. The sample and sample size were determined and decided upon prior to data collection. These views are both supported by Polit and Hungler (1993: 258). However, Miles and Huberman (1994: 41) presented strong argument for linking the qualitative and quantitative data and proposed that this allow for the:

- *Confirmation of data from each type through triangulation;*

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- *Elaboration or development of analysis, and thus providing richer detail; and*

- *Mitigation of new lines of thinking through attention to surprises or turning ideas around to provide fresh insight.*

The study was also qualitative in that at the end of each main questionnaire item, the respondents were allowed to provide additional information in the form of general comments. These additional data either supported the one solicited by the closed-ended questions or added some other dimension. This type of data is described by Brink (1996: 192) as "non-numerical, usually in the form of written words, video-tapes, audio-tapes or photographs"; analysis of such data therefore involves examination of such sources. In this part of the study, the "respondents were allowed to express opinions, feelings and experiences gained during interactions in the clinical settings", Polit and Hungler (1993:19) and LoBiondo-Wood and Harber (1994:256). In this case, the research explored and described the lived experiences of the educators, managers and students as they occurred naturally during the learning process. This data was transcribed and analysed to determine any support of quantitative data and the conceptual framework.

The researcher planned to utilize naturalistic observation; this technique was later not used, because permission was denied to use it. In order to maintain ethical requirements, observation was thus excluded. However the researcher acknowledges the fact that this exclusion may have deprived this study the richness that could have been contributed by the naturalistic observation. This is therefore regarded as a limitation of the study.

Although data was not pre-coded, the researcher is convinced that this did not create

any problems of analysis as data was categorized according to main items in the

questionnaires. Qualitative data was analysed using narrative format as opposed to

numbers, in order to determine the depth and complexity of the phenomenon, Uys and

Basson (1991: 55). Moreover, narrative data was organized and interpreted for the

purpose of discovering important dimensions and patterns, Polit and Hungler (1993:

444), and identifying themes, Brink (1996: 192) and whether these were in agreement

or otherwise with quantitative data.

This study was also exploratory – descriptive, the aim was to identify and describe

factors, which characterize the clinical learning environment for student nurses in

Botswana. The study sought to identify factors in the clinical learning environment,

which facilitate and or impede learning, so that recommendations could be made to

nurture those, which facilitate and to improve on the ones that impede learning.

According to Polit and Hungler (1993), this method is advantageous because it

enables the researcher to observe, describe or classify factors, which characterize the

phenomenon under investigation. It also enables the researcher to explore the manner

in which the phenomena and all the related factors are manifested. LoBiondo-Wood

and Harber (1994: 233) support this observation by stating that:

> " ... *exploratory -descriptive surveys collect detailed descriptions of
> existing variables, and use data to assess and justify current conditions
> and practices, or make more intelligent plans for improving health
> care services. It further allows the researcher to collect accurate
> information about the characteristics of particular groups, subjects,
> institutions or situations, or about the frequency of a phenomenon's
> occurrence ...*"

For this study, descriptive exploratory project assesses and describes the clinical learning environment. Polit and Hungler (1993) observed that a descriptive exploratory research project does not necessarily need an absolute hypothesis, but are often guided by research questions. To this end, Polit and Hungler (1993: 147) stated that *"descriptive research focus on depiction of the status quo of some situation, and therefore do not need hypothesis"*. However, these authors also cautioned that it is important to conduct the study logically and objectively. Research questions and not hypothesis thus guided the current study.

4.3   TARGET POPULATION

4.3.1   Criteria for inclusion

Population as defined by Polit and Hunger (1993: 173) *"...is the entire aggregation of cases that meet designated set of criteria"*. LoBiondo-Wood and Harber (1994: 288) described it as a *"well-defined set that has certain specified properties, which may be people, animals or events"*. Endorsing these definitions, Wood and Catanzaro (1988: 97) viewed population as *" an aggregate of elements sharing some common set of criteria, such as all adult women, all children attending pre-school or all epochs of sleep during the course of a night."*

The target population for this study comprised of all nursing students, male or female, registered for their second year, during the academic year 1998/1999. The students were drawn from all health training institutions in Botswana, which were offering general nursing diploma.

The second portion of the population consisted of all nurse lecturers' male and female, who were teaching these students both in classroom and in the clinical area. Thirdly, nurse unit managers, male and female, who were in charge of the clinical units where these students learned, were included.

The population of nurse unit manager's ranged from those prepared at basic and post basic diplomas, baccalaureate and masters degrees, while the nurse teachers have a minimum preparation of a baccalaureate degree and a maximum of a masters degree. The second year nursing students have had experiences in these settings during year 1 and the initial experiences for year 2. Both of these groups of nurses are therefore believed to have insight into what is expected of a clinical setting to facilitate learning, and are thus able to form perceptions about the clinical settings currently used for student learning.

While the researcher recognizes the importance of other members of the health team such as doctors, pharmacists, social workers, psychologists, and other nursing staff as well as the rest of the students and clients, in the multi-disciplinary health team, they were however excluded from the study. This exclusion may add an element of bias and therefore this is considered as a limitation of the study. The researcher however, believed that the inclusion of the three subgroups mentioned above, and opening the questionnaire to allow additional data would yield enough information to ensure validity of the study.

4.4   SAMPLE SELECTION

4.4.1   Sampling Techniques:

The sampling techniques used were quota sampling, whereby strata from the population were identified, and specified proportions of needed elements included in the sample.   This sampling technique is chosen because it ensures that diverse segments of the population are represented in the sample, Polit and Hungler (1993). According to Woods and Catanzaro (1988: 97), *"quota sampling ensures adequate representation of the underlying groups within the population being studied."*

The researcher used knowledge of the population to specify the desired number of participants (quota) from each of the population segments.   Although quota sampling has the same bias as convenience, Woods and Catanzaro (1988) argue that quota sampling increase the representatives of the population being studied.

In some instances, convenience sampling was used.   Various authors define convenience sampling as *"the use of most readily accessible subjects in the study"* LoBiondo-Woods and Harber (1994: 291), *"use of the most conveniently available subjects in the study"* Polit and Hungler (1993: 177), or *"accessing individuals who are easy to identify and contact"* Woods and Catanzaro (1988: 107).   To this end, 12 clinics were selected conveniently from two (2) villages and one (1) town, to add to the five- (5) teaching hospitals.   A proportionate number of nurse unit managers were selected from these seventeen (17) clinical settings, which were used for student's clinical learning.

To some extent, purposive sampling was also used to include nurse unit managers, nurse lecturers and year II nursing students. Polit and Hungler (1993: 179) observed that *"purposive judgmental or sampling proceeds on the belief that the researchers knowledge about the population and its elements can be used to handpick components to be included in the sample"*.

In support of this view, LoBiondo-Wood and Harber (1994: 294) suggested that this technique might be used to select *"individuals who reflect different ends of the range of a particular characteristic"*. For example, the nurse unit managers may view clinical learning environment as facilitative, while nurse lecturers or students perceive the same environment as impeding to learning. Brink (1996: 141) described purposive sampling technique as selecting *"subjects or objects who are especially knowledgeable of the phenomenon being studied"*. This view tallies well with that of Coyne (1997:624) who contented that *"the logic and power of purposeful sampling lies in selecting information-rich cases for study in depths, issues of central importance to the purpose of the research."*

In this study, the researcher believes that the nurse unit managers, nurse lecturers and second year nursing students are knowledgeable and are therefore able to form impressions about factors in the clinical learning environment which facilitate or impede learning. Literature reviewed however cautioned that this technique has the potential for sampling bias, and therefore limits the generalizability of the result, Brink (1996: 141).

Furthermore, the researcher who uses this technique, *"assumes that errors of judgement in thinking that over-representing or under-representing elements of the population will balance out"*, LoBiondo-Wood and Harber, (1994: 294). The researcher believes that by combining both the quota and purposive techniques, in selecting the sample, this bias was minimized.

4.4.2   The Sample

A sample is defined as a *"subset of the population of interest, or a subset of the entities that make up the population, a set of elements that make up the population"* (Woods and Catanzaro, 1988: 97, Polit and Hungler, 1993: 174, and LoBiondo-Wood and Harber, 1994: 290).

 The study sample consisted of second year nursing students, drawn from all five (5) health-training institutions where basic registered nurses were trained in Botswana in the 1998/ 99 academic year. A portion of the sample was made up of nurse lecturers who were working at these health-training institutions. Another portion of the sample consisted of nurse unit managers, who were employed in the five- (5) teaching hospitals to which training institutions were affiliated, and twelve (12) conveniently selected ambulatory clinics, where students learn clinical skills.

Based on a total population of 450, a sample size of two hundred and forty (240) was drawn. The population was made up of two hundred and fifty (250) second year students (53%), one hundred and twenty-eight (128) nurse unit managers (28%) and eighty-two-- (82) nurse lecturers (19%).

The sample was thus proportionately drawn to represent these percentages. The sample therefore consisted of 127-second year students, 67 nurse unit managers and 46 nurse lecturers. The total was 240 participants.

Two hundred and forty (240) questionnaires were therefore sent out through contact people in various facilities mentioned above. The contact people had agreed to distribute questionnaires, collect and return them to the researcher as agreed. A total of six months was used for data collection, with three months for student and another three for lecturers and nurse-unit managers. This time stretched from the time of questionnaire dispatch, follow-up returned responses to closure of collection time. A total of two hundred and two were returned and completed.

4.5   RESEARCH INSTRUMENT

4.5.1   Development and Designing of the Research Instrument

In order to come up with the appropriate tool to be used in data collection, extensive literature review was done. The purpose was to identify any existing tools, which could be used, which were eventually relevant. Secondly, the review of literature assisted to further define the construct to be measured which was the extent to which the clinical learning environment in Botswana's clinical settings facilitated or impeded learning for student nurses.

Steps outlined by both Polit and Hungler (1993: 203) and LoBiondo-Wood and Harber (1994: 258) were followed. After defining the construct to be measured, the researcher proceeded as follows:

- *Reviewed existing tools,*

- *Instrument content was outlined from reviewed literature + existing tools,*

- *Questions for relevant content area were then drafted.*

In order to finalize this step, most of the content was borrowed and adapted from Dunn and Burnett (1995), Clinical Learning Environment (CLE) scale, Reilly and Oermann (1992), criteria for assessing or selecting a clinical learning setting, and Forthergill-Bourboinnais and Higuchi (1995) factors which influence the process of selecting learning experiences in a particular clinical environment. The following procedure was followed in order to finalize the instrument.

- *Draft questions were then carefully screened for clarity, sensitivity to respondents' psychological state or culture, freedom from bias and reading level, Polit and Hungler (1993: 203).*

- *Questions were sequenced in a meaningful order, and drafted into an instrument.*

- *The draft instrument was given to two nurse researchers, who were also knowledgeable about clinical nursing, to determine if it measures what it was intended to measure (content validity). That is, were items internally consistent and clear? Were they free from bias, Polit and Hungler (1993: 203)?*

- *The feedback from this review was incorporated into the instrument. Such feedback included suggestions to separate double barrel questions to make responses distinct. Furthermore, some questions were re-arranged for better sequence, and some terms were replaced by those culturally relevant. However, content and consistency were found to be valid.*

- *The tool was a close-ended self-administered questionnaire. The responses ranged from strongly agree, agree, undecided disagree and strongly disagree.*
- *Instructions were developed for respondents and users.*

4.5.2   Pilot Testing

- *A completed tool was pilot tested on a small sample of seven (7), which consisted of three (3) students, two (2) nurse lecturers and two (2) nurse unit managers. The information obtained was used to improve the tool, and it included:*
- *The title of the study, which was initially omitted, was inserted at the top of the questionnaire.*
- *The purpose of the study was also inserted to explain why the study was being conducted.*
- *Suggestions were made to provide additional instructions, and key to the abbreviations used in the response scale.*
- *Some suggestions were made to use terms easily understood by respondents, such as substituting nursing unit with ward or clinic.*
- *It was suggested that a space be provided for comments at the end of each questions item. This was to enable respondents to express opinions, feelings and experiences, which were not solicited through the questionnaire.*
- *Pilot test revealed a need to add two (2) more response categories of moderately agree and moderately disagree, to reduce possibility of responses crowding at the undecided column.*

The refined data collection tool consisted of two sections. Section 1 solicited data on demographic characteristics of respondents. While section 2, both close-ended and open-ended addressed parts addressed factors in the clinical learning environment and these were:

- Clinical setting

- Patient care / practice standards

- Staffing

- Nurse managers' commitment

- Interpersonal relationships

Although some instruments exist which assessed the adequacy of the clinical learning environment, none was found applicable without adaptation. The few, which were found therefore, were used as the base to develop the relevant instrument, for Botswana context.

4.5.3 Testing For Clarity

Clarity index of each question was determined with the assistance of Prof. Fresen (a UNISA statistician). Clarity index (CI) was determined using the formula:

$$CI = I - U/ (A+U+DA)$$

In which clarity ranged on a scale of $0 - 1$, with '0' indicating poor clarity, as shown by this scale:

```
I-------------------------------------------I-------------------------------------------I
0      . 1     . 2     . 3     . 4     . 5     . 6     . 7     . 8     . 9     1
```
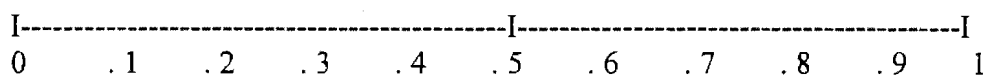
The researcher decided to consider all questions ranging between 0.50 and 1.0 as clear and those below 0.50 as unclear. Conclusions drawn from the less or not clear questions were treated with caution. Additional data collected as comments from the respondents were used to verify before conclusions could be drawn.

The majority of the questions fell within the range .80 to .99 index, and this was considered very clear. All item 1 sub-questions ranged between .84 to .98; item 2 sub-questions were from .67 to .97; item 3 sub-questions were between .54 to .93; item 4, were from .22 to .97 and item 5 ranged from .44 to 1.00. The worrisome questions were those with clarity index of .22, which was question 4.10, and .44, which was question 5.4. Particular attention was therefore given to analysing these two with reference to verifying them with qualitative data.

4.6 VALIDITY AND RELIABILITY

4.6.1 Validity

Issues of validity addressed in this study focused on factors affecting external validity. The internal validity issues were not addressed because they were not relevant in the current study. Internal validity *"refers to the causal relationship"*, Polit and Hungler (1993: 203). This was therefore not discussed as the study aimed at exploring and describing factors in the clinical environment, which facilitate or impede learning for student nurses, but did not deal with causation.

External validity *"deals with possible problems of generalizability of the study findings to additional populations and to other environmental conditions"*, LoBiondo-Wood and Harber (1994: 205). Efforts were therefore taken to establish minimum requirement for meeting external validity.

4.6.2 Effect of selection

Since non-probability-sampling techniques were used, the researcher would like to caution the reader that findings could not be generalized to other populations other than the population studied. This is a limitation of the study as observed by LoBiondo-Wood and Harber (1994: 206), that *"sampling methods utilized, affect generalizability to other groups"*.

4.6.3 Reactive Effect (Hawthorne effect)

This refers to subject's responses to being studied. This effect is a high possibility since all the respondents may have responded the way they did because they knew they were being studied. However, making the responses anonymous and minimizing contact with respondents was an effort to control this effect.

4.6.4 Content Validity

Is concerned with *"sampling of adequate content area being measured"*, Polit and Hungler (1993: 250) or representativeness of questions on each aspect of the topic. In this case, all factors in the clinical learning environment such as:

- *The clinical setting*
- *Patient care /practice standards*
- *Nurse unit managers' commitment*
- *Interpersonal relationships, and*
- *Staffing*

as appeared in Dunn and Burnett (1995) were listed. Then question items were developed for each. Reilly and Oermann (1992) and Forthergill-Bourboinnais and Higuchi (1995) also supported the factors listed. The researcher therefore believes that content validity was ensured through this process.

4.6.5 Factor Analysis

The computer department at UNISA assisted the researcher, to use SPSS version 6.1.2 to do factor analysis. The purpose was to determine whether all sub-items within the five major variables actually *"group together,"* Polit and Hungler (1993:252), or *"cluster together around one or more dimension,"* LoBiondo-Wood and Harber (1994:372). In order to identify clusters of related variables on a scale, items, which measure the same dimension load on the same factor. Those that measure different dimensions also load on different factors.

However, as a result of the small sample used for pilot testing, it was not possible to complete factor analysis prior to data collection. Results of factor analysis are therefore presented as part of the study findings.

4.6.6 Reliability

Polit and Hungler (1993: 244) defined reliability as the *"degree with which the instrument measures the attribute"*. Of particular interest to this study was whether the study process was consistent and reasonably stable overtime, or whether things were done with reasonable care, Miles and Huberman (1994: 278).

The researcher believes that the process followed in conducting the study was reliable in that *"the research questions were clear and the features of the study design congruent with them. Data were collected across the full range of appropriate settings and respondents, as suggested by the framework and research questions,"* Miles and Huberman (1994: 278). Chronbach' s alpha was used to measure reliability. However due to small sample size for pilot testing, reliability testing was done after data collection. Results are as such part of the main study findings.

According to Maxim (1999:243) *"Lee Chronbach has extended the Kuder-Richardson approach of dichotomous items to incorporate continuous variables."* Maxim (1999:243) further stated that the coefficient varies from 0 to 1.0, where 1 represents perfect reliability. The alpha increases, *"as the number of items increase in the scale."*

Polit and Hungler (1993:247), define Chronbach's alpha *"as a widely used reliability index that estimates the internal consistency or homogeneity of a measure, composed of several subparts."* This index may also be reflected to as coefficient alpha. Polit and Hungler (1993) further observed that the higher the reliability coefficient, the more accurate (internally consistent) the measure. A level of 0.70 or higher is considered to be acceptable reliability index, LoBiondo-Wood and Harber (1994:374), Polit and Hungler (1993:245).

Reliability analysis was done for all sub-items of the 5 main variables in the scale, using SPSS version 6.1.2. the following are levels of reliability:

- Question 1, clinical setting, had 12 sub items and the reliability coefficient alpha was .8476, with standardized item alpha of .8425.

- Question 2, patient care, had 15 sub items and a reliability coefficient of .8868 and with standardized item alpha of .8879.

- Question 3, staffing, had 9 sub items, and reliability analysis revealed that the 9 sub items were to be regrouped into 2 as they were not internally consistent. For the 5 sub items (staff 1, 2, 4, 5 & 6) reliability coefficient was .7400, with standardized item alpha of .7409. The remaining sub items (staff 3, 7, 8 & 9) had reliability level of .2676, which was very low compared to the norm of .70, and were therefore not acceptable as a group. These items were reported individually.

- Question 4, nurse-unit managers commitment had 16 sub items, and a reliability coefficient of .8651, with standardized item alpha of .8657.

- Question 5, interpersonal relationships had 13 sub items, which could not be reported as a group because of low reliability index. Sub items split in to 2 groups, and left 2 sub items, which could not group with others. Group 1 (interpers 1, 2, 3, 10, 11, 12 & 13) had seven (7) sub items, and a reliability level of .6936 and a standardized item alpha .6894. Group 2 (interpers 6, 7, 8, 9 & 14) had a coefficient alpha of .7283 and a standardized item alpha of .7286. The last 2 sub items (interpers 4 & 5) could not be grouped because of very low .2761 coefficient alpha and standardized item alpha of .2785. These were therefore reported individually.

The reliability analysis done seems to justify the conclusion that the instrument used for this study was reliable.

4.6.7   Confirmation Of Validity And Reliability- Qualitative Data

In addition, reliability and validity of data was confirmed through method and data source triangulation, where data were collected by close-ended questions answered by respondents. They were also given an opportunity through open-ended part of the questionnaire to express their opinions, feelings and experiences. Grouping of narrative responses was confirmed by having 2 colleagues to independently categorize data and then compare agreement rates, Polit and Hungler (1993:261).

4.6.8   Control Of Confounding (Extraneous) Variables

While control of confounding (extraneous) variables according to Polit and Hungler (1993:35) must be handled in such a way that "they are not related to either independent or dependent variables, *"even more important in strict advances quantitative studies."* These authors further observed that, *"phenomenological studies which aim at capturing the full context of the problem are not concerned with control."* Polit and Hungler (1993:36) contested this view that to *"impose controls on a research setting is to irrevocably remove some meaning of reality."*

LoBiondo-Wood and Harber (1994:201) alluded to the fact that exploratory study designs, are concerned with describing and categorizing phenomenon, which in themselves do not conform to strict controls. The current study is exploratory in nature, and therefore controls were used with flexibility as suggested by these authors.

4.7   ETHICAL CONSIDERATIONS

Brink (1996) observed that to conduct a research in an ethically, means that the researcher conducts the study competently. She continued to state that to fulfil this goal, the researcher must acknowledge fairly those who contributed to, guided or assisted in the study. In particular, researchers dealing with human subjects were cautioned of their responsibility to protect their human rights.

Three basic principles suggested by literature reviewed, (Brink, 1996: 38 - 40; LoBiondo-Wood and Harber, 1994: 324 – 327; and Polit and Hungler, 1993: 371) include:

4.7.1   The principle of respect for human dignity

This principle involves the belief that individuals are autonomous and/ or have the right to self-determination, which must be respected. Secondly individuals with diminished autonomy such as children or institutionalised clients must be protected. The right to self-determination demands that people are allowed to voluntarily agree or refuse to participate in the study without the risk of penalty or prejudice. They also should be accorded freedom to withdraw from the study if they so wish, refuse to give certain information or ask for clarification on the purpose of the study.

4.7.2   The principle of beneficence, which describes the efforts, made to secure the well being of a person, and doing everything possible to avoid harm. The researcher is urged to protect the human subject from discomfort and danger, and exploitation.

4.7.3   The principle of justice involves the need to ensure that subjects have the right to fair selection, treatment and privacy. This means that while selection of the sample should give equal opportunity of being selected to the target population, respect and care of individuals must also be enforced to avoid invasion of privacy, such as collecting private information without consent. Information collected with consent must also be treated anonymously and confidentially. The researcher should provide all the necessary information about the research study to enable the subjects to make informed consent.

Polit and Hungler (1996: 359) consider voluntarily participating in a research project as a key principle of ethical conduct. The permission to conduct this study went through various structures, until subjects voluntarily consented to participate. A letter was written to the Permanent Secretary, Ministry of Health and Chairperson of the National Health Research Committee, to request permission to conduct the study. In addition, individual facility managers were requested in writing to allow the researcher to conduct the research in various clinical and training institutions. A copy of the letter from the National Health Research Committee was shared with all the selected facility management.

All individuals, who participated in the study, did so voluntarily upon reading an individual consent request letter attached to the questionnaire. By responding and returning completed questionnaires therefore, respondents were taken to signify consent to participate in the study.

Respondents were assured that no individual or facility name would be linked to data collected. Moreover, they were made aware that they were free to withdraw from the study if they felt uncomfortable responding to questions, and that there were no right or wrong responses.

Furthermore, respondents were assured that their responses would be treated with strict confidence and kept anonymous. They were further informed that the study had no inherent risks to either individuals or facilities they represent.

Initially, the researcher had planned to do an observation of selected facility units to verify data from respondents. However, facility management felt uncomfortable with this data collection technique. This data collection method was therefore excluded in order to respect the right of choice of research subjects, and avoid the possible Harthorne Effect LoBiondo-Wood and Harber (1994: 352). The researcher considers this exclusion as a limitation to the study as it may reduce the validity of the study results.

4.8   CONCLUSION

In this chapter, the design and methodology of the study was described. The research project was both a quantitative and qualitative exploratory-descriptive study. Data collection techniques were described, which were semi-structured self-report questionnaires. Ethical considerations in conducting the study, validity and reliability were discussed. The chapter that follows presents data analysis and methods used to analyse data.

CHAPTER 5

STUDY FINDINGS

5.1 INTRODUCTION

The previous chapter dealt with research methodology. It is a process, which provided the scheme for answering the research questions, through a systematic plan. The current chapter will focus on data analysis in order to come up with study findings.

Data presentation and analysis, according to LoBiondo-Wood and Harber (1994: 386) *"calls for the choice of method for organising and processing raw data, so that meaning can be derived."* The method chosen depends on the kind of data collected and the hypothesis to be tested or questions to be answered. In order to test the hypothesis or answer study questions, Polit & Hungler (1993: 269) proposed that "research data must be processed and analysed in some systematic fashion, so that trends and patterns of relationships can be detected".

Descriptive statistics, specifically frequency distributions and contingency tables were used to process and analyse quantitative data for this study, Polit & Hungler (1993: 272-284), LoBiondo-Wood & Harber (1994: 389-399). On the other hand the qualitative data was processed and analysed by grouping individual narratives into categories. Respondents chose not to address all question items. The reader is therefore cautioned to take note of the fact that the differences in population disparities are a result of differences of total responses to various items.

5.1.1 Confirmation Of Validity And Reliability

Chronbach's alpha was used to test reliability of data collection instrument. The reliability index for all the five (5) major study variables and their sub items ranged from .6936 as the lowest to the highest of .8868, as compared to the minimum index of .70(LoBiondo-Wood & Harber 1994:374, Polit & Hungler 1993:243). Details are presented below.

5.1.1.1 Reliability testing

Reliability analysis was done for all sub-items of the 5 main variables in the scale, using SPSS version 6.1.2. The following are levels of reliability:

Table 5.1   **Reliability Results**

VARIABLES	ITEM NO.	RELIABILITY CO-EFFICIENT	STANDARDISED ITEM ALPHA
Clinical setting	12 items	.8476	.8425
Patient care/Practice Standards	15 items	.8868	.8879
Staffing	a) 5 items b) 4 items	.7400 .2676	.7409
Nurse-Management' Commitment	16 items	.8651	.8657
Interpersonal relationships (13)	a) 7 items b) 5 items c) 2 items	.6936 .7283 .2761	.6894 7286 .2785

As reflected in the table above, reliability index, for most variables, consistently fell above the acceptable level of .70 (LoBiondo-Wood & Harber 1994:374, Burns & Grove 1993:339). However, some variables fell below that minimum acceptable level. Staffing (b) was far below at .2676. The other variable, interpersonal relationship (a) was .6936 while (c) was the lowest at .2761 and was not acceptable.

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5.1.2   Factor Analysis

The purpose of factor analysis as described by Polit & Hungler (1993:307), is to *"reduce a large set of variables into smaller, more manageable measurements. It disentangles complex interrelationships among variables, and identifies those which go together"*.   LoBiondo-Wood & Harber (1994-372) suggested that factor analysis is *"a procedure that gives the researcher information about the extent to which a set of items measures the same underlying construct, or its dimension"*.

A principal component analysis was used to extract factors, Burns & Grove (1993: 340-345) and Polit & Hungler (1993: 307). Furthermore, factor -loading cut off point of .30 was used to determine clusters (Burns & Grove 1994: 542).

There were five (5) major study variables, and each one had several sub-items, which clustered to form different factors as shown below. The following five tables present the findings.

Table 5.2   Factor Analysis of Clinical Setting

VARIABLE	FACTOR	FACTOR NAME	FACTOR LOADING
Clinical setting	Factor 1	Experiences Availability	Clinset 7 = .7780 Clinset 8 = .76578 Clinset 9 = .75876 Clinset 5 = .5702
	Factor 2	Resources Availability	Clinset 10 = .77518 Clinset 9 = .74945 Clinset 4 = . 67798
	Factor 3	Space/Unit Organisation	Clinset 1 = .80647 Clinset 2 = .78586 Clinset 3 = .75405
	Factor 4	Resource Accessibility	Clinset 12 = .84629 Clinset 11 = .67387

Table 5.3   **Factor Analysis Patient Care/Practice Standards**

VARIABLE	FACTOR	FACTOR NAME	FACTOR LOADING
Patient Care & Practice Standards	1	Patient advocacy	Patcare 11 = .74249 Patcare 14 = .65844 Patcare 10 = .65803 Patcare 14 = .65423 Patcare 12 = .59954
	2	Patient Care Process	Patcare 6 = .72882 Patcare 5 = .70199 Patcare 8 = 69287 Patcare 9 = .66658 Patcare 4 = .58062 Patcare13 - .49963 Patcare 7 = .35707
	3	Patient Care Standards	Patcare 3 = .81048 Patcare 1 = .68002 Patcare 2 = .67373

Table 5.4   **Factor Analysis of Staffing**

VARIABLE	FACTOR	FACTOR NAME	FACTOR LOADING
Staffing	1	Learner Support	Staff 5 = .74351 Staff 4 = .72002 Staff 2 = .69686 Staff 1 = .67803 Staff 6 = 66470
	2 (a)	Lecturer availability	Staff 9 = .82689 Staff 8 = .72809
	2 (b)	Willingness to assist	Staff 3 = .76515 Staff 7 = .69390

Table 5.5   Factor Analysis of Nurse Managers Commitment

VARIABLE	FACTOR	FACTOR NAME	FACTOR LOADING
Nurse Managers Commitment	1	Create Conducive Environment	MNCOM 4 = .76123 MNCOM 3 = .74785 MNCOM 1 = .73415 MNCOM 9 = .63645 MNCOM 8 = .58942 MNCOM 15 = .57187 MNCOM 13 = .53905
	2	Team building process	MNCOM 12 = .76724 MNCOM 14 = .75490 MNCOM 10 = .68000 MNCOM 16 = .61953 MNCOM 11 = .59208
	3	Nurse Managers involvement in student learning	MNCOM 5 = .64680 MNCOM 7 = .64340 MNCOM 6 = .59311 MNCOM 2 = .43343

Table 5.6   Factor Analysis of Interpersonal Relationships

VARIABLE	FACTOR	FACTOR NAME	FACTOR LOADING
Interpersonal Relationships	1	Conducive Learning Relationships	INTERPERS 3 = .74584 INTERPERS 2 = .72900 INTERPERS 1 = .69608 INTERPERS 12 = .53362 INTERPERS 11 = 51974 INTERPERS 13 = .46407 INTERPERS 10 = .41349
	2	Non conducive relationships	INTERPERS 7 = .74248 INTERPERS 8 = 72422 INTERPERS 9 = .71512 INTERPERS 6 = .65125 INTERPERS 14 = .62749
	3	Comfort relationships	INTERPERS 5 = .76217 INTERPERS 4 = .76217

As it is indicated in data presented above, the majority of factors loaded above .50. These include clinical settings, factors 1,2, 3 and 4. For patient care/practice standards, factors 1 and 3 loaded above .50, but factor 2 had two items loading at .4993 and .35707. Staffing had all items loading above .50. Nurse-managers commitment had all but one item loading above .50.

One item of factor 3 loaded at .43343. For interpersonal relationships, all items loaded above .50, except two of factor 1, which loaded at .46407 and .41349. However, considering the used minimum of .30 as cut off point all were acceptable (Burns & Grove 1993: 542).

Data were obtained from 202 returned questionnaires. Initially 240 questionnaires were sent out, consisting of 127 for student nurses, 67 for nurse unit-managers and 46 nurse lecturers. The sample was a proportionate one drawn from the existing population. The response rate was 84%. Not all respondents answered every item, hence the total number will vary from item to item.

The instrument consisted of three parts; viz, demographic data, quantitative research data and qualitative data. Presentation of findings has therefore followed the same format.

5.2   SECTION 1: DEMOGRAPHIC DATA

5.2.1   Age Distribution

The first item of demographic data was the age range of respondents. The ages were grouped into three viz 24-30, 31-40 and 41+. This grouping was necessary to include students age ranges as well as senior nurses in either management or lecturing positions. Figure 5.1 presents the findings.
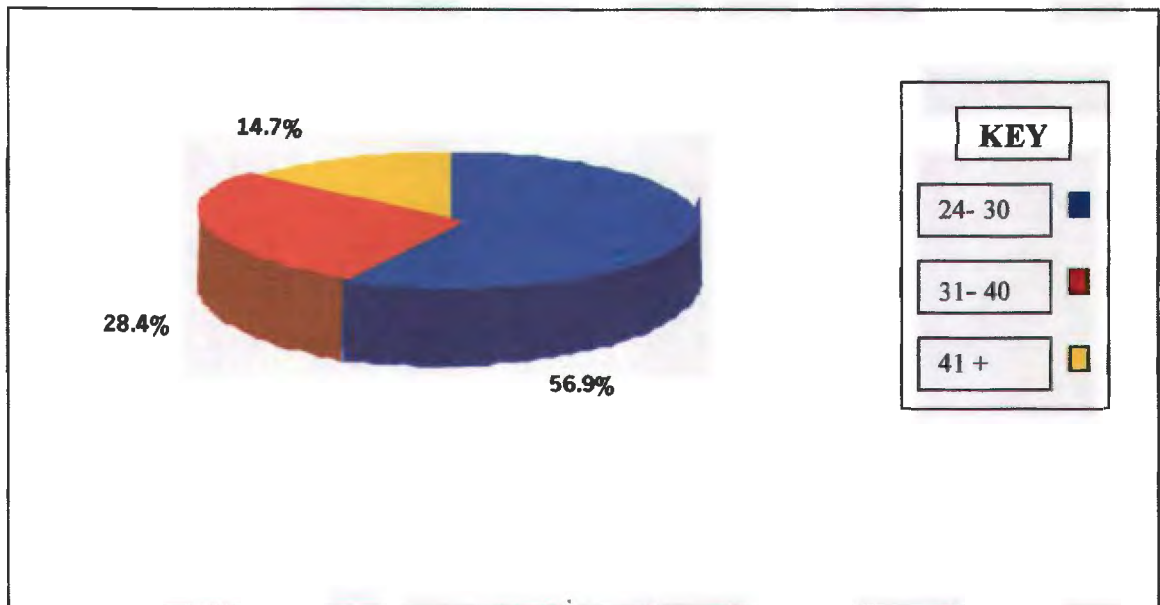
Figure 5.1   Age Distribution   N = 202

Figure 5.1 reflects that most of the respondents 112 (56.9%) were in the age group 24-30 years, followed by those between 31-40, 56 (28.4%) and the lowest 41+, 29 (14.7%) while 5 (2.5%) where missing. The largest number in the low age group may be based on the fact that the majority of respondents, were students, who enter the nurse training programs in their early twenties.while students could still be younger, for this study it turned out that the youngest was 24 years.

5.2.2   Item 2: Gender

This item solicited the gender of the respondents and the findings are shown in the Table 5.7 below.

Table 5.7 <u>Gender of Respondents (N = 201)</u>

GENDER	FREQUENCY	PERCENTAGES
Male	91	45.3
Female	110	54.7

As depicted by Table 5.7 above, most of the respondents 110(54.7%) were female, and 91(45,3%) were male.

5.2.3 Item 3: Marital Status

The results on marital status are presented in Table 5.8

Table 5.8 <u>Marital Status of Respondents (N = 200)</u>

MARITAL STATUS	FREQUENCY	PERCENTAGES
Single	132	66
Married	58	29
Widowed	5	2.5
Divorced	5	2.5

As depicted in Table 5.8 above, the majority of the respondents 132 (66%) were single while 58 (29%) were married, 5 (2.5%) widowed and 5 (2.5%) divorced.

Although this was not investigated, the disparity in the marital status might have been due to the large number of students in the sample, most of who are still unmarried. Only 2(1.0%) were missing.

5.2.4 Item 4: Family Setting

This item of the demographic information determined to identify the type of family setting of the respondents. Table 5.9 summarises findings on this variable.

Table 5.9   Family Setting of Respondents (N=200)

FAMILY SETTING	FREQUENCY	PERCENTAGES
Nuclear	138	69
Extended	62	31

Table 5.9 shows that the majority of respondents 138 (69%) fell within the nuclear family setting, while 62 (31%) came from the extended type. Again this may be due to large student numbers, who may have been raised in anucclear famlilies. Only 2 (1.0%) were missing.

5.2.5 Item 5: Number of Children of Respondents

Respondents were required to state number of children they had, and Table 5.10 below presents the findings.

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Table 5.10   Number of children (N = 201)

NUMBER OF CHILDREN	FREQUENCY	PERCENTAGES
0-2	154	76.6
3-5	45	22.4
6+	2	1.0

As depicted in Table 5.10 above, the majority of the respondents, 154(76.6%) had 0-2 children. The rest 45(22.4%) had 3-5 children, while only 2(1.0%) had 6+ children. Only 1(0.5%) was missing. Again the large figure at 76.6% was a result of the large number of students, most of who do not have children yet.

5.2.6 Item 6: Religion

Respondents were asked to state their religion, and the Table 5.11 shows their religious affiliation.

Table 5.11   Respondents' Religion (N = 199)

RELIGION	FREQUENCY	PERCENTAGES
Christian	184	92.5
Islam	7	3.5
Other	8	4.0

As shown in Table 5.11, most respondents 184 (92.5%) were affiliated with the Christian religion, 7 (3.5%) with Islam while 8 (4.0%) were associated with other religions. Only 3(1.5%) were missing.

5.2.7 Item 7: Nurse Qualifications (N=201)

Respondents were further asked to state their nursing qualifications and Figure 5.12, presents data on the highest qualification level of the respondents.
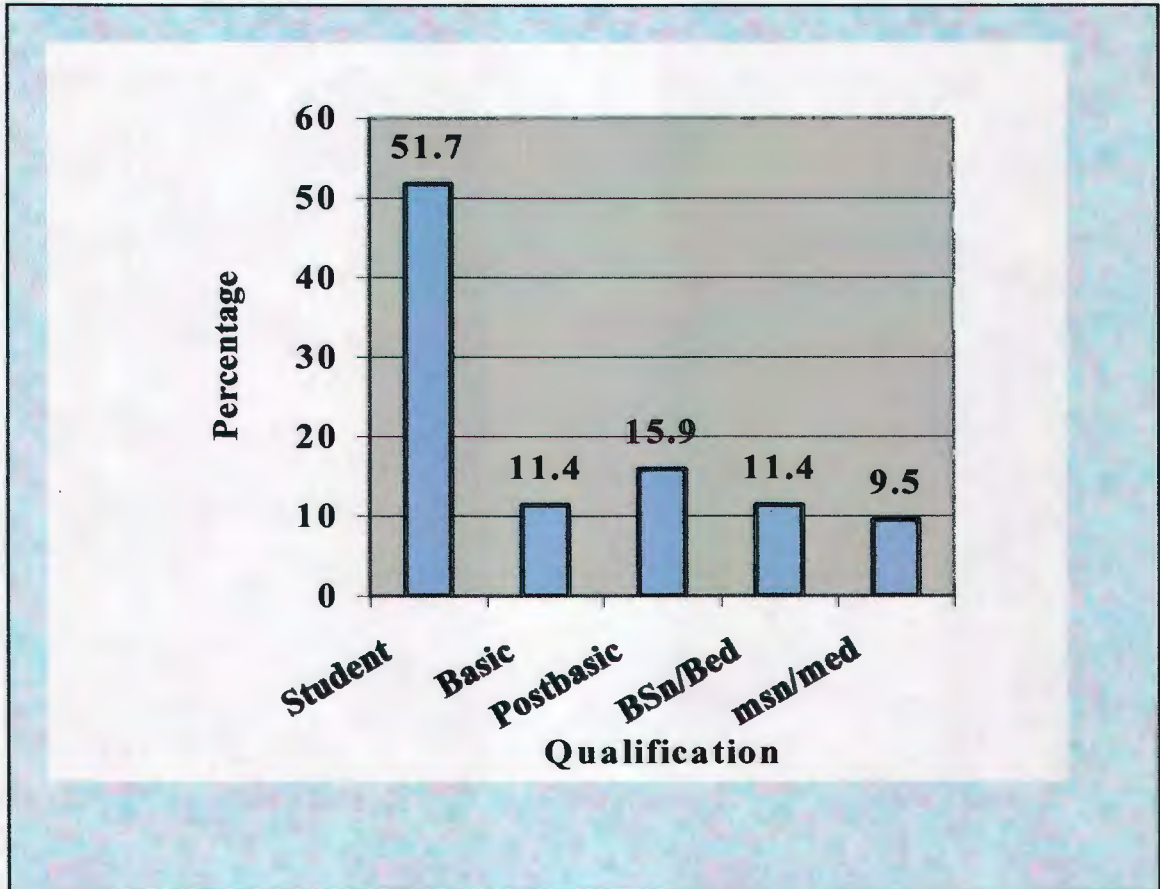
Figure 5.2   Respondents Qualifications (N= 201)

As Figure 5.2 above reflects, majority of the respondents 104(51.7%) were students, 23(11.4%) had basic registered nurse qualifications, 32(15.9%) had post basic diploma. Another 23(11.4%) had BSN/ BED qualifications, while only 19(9.5%) had MSN/ MED. Only 1(0.5%) was missing.

5.2.8 Item 8: Nursing Experience

Asked about their nursing experiences, respondents gave data as reflected on Figure 5.3 below.
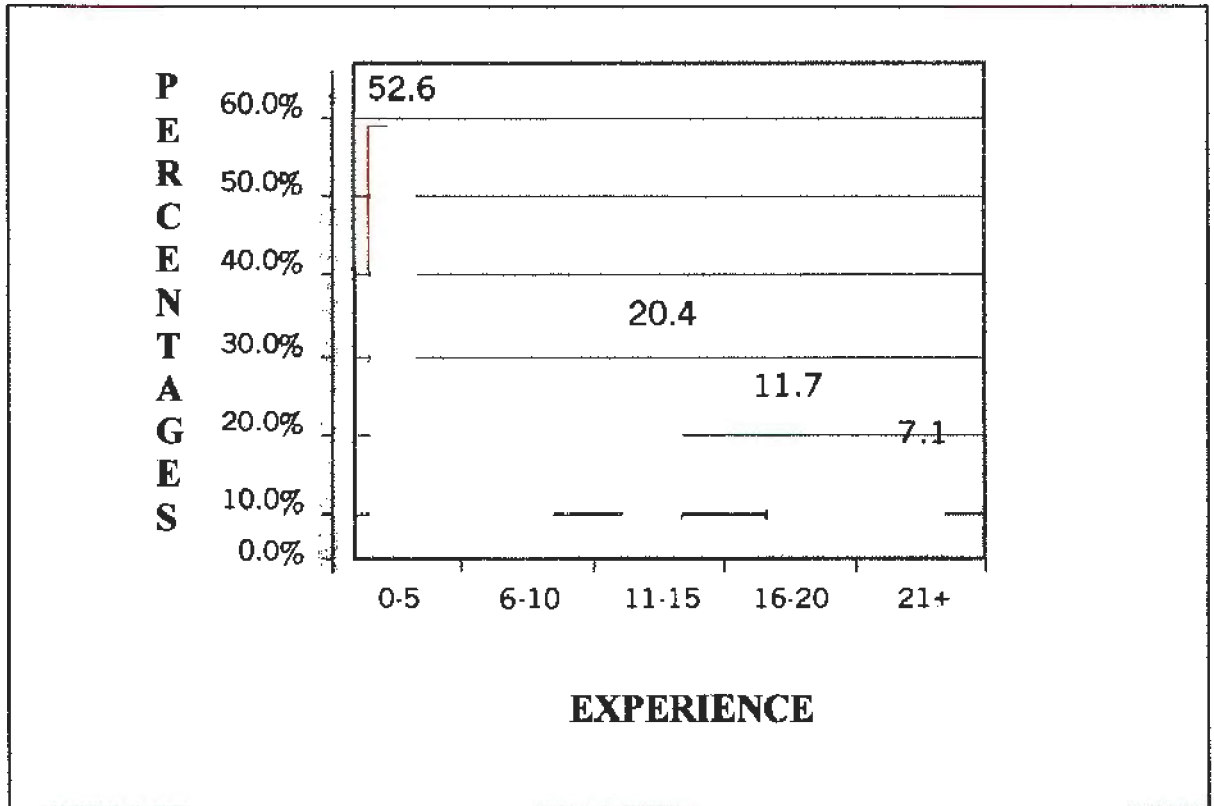
Fig. 5.3   <u>Nursing experience (N = 196)</u>

As shown in Figure 5.3 above, the majority of respondents 103 (52.6%) fell between 0-5 years of experience. The next group 16 (8.2%) had between the 6-10 years of experience. About 40 (20.4%) had 11-15 years of experience. Those with experiences ranging between 16-20 years were 23 (11.7%), while only 14 (7.1%) fell within the 21+ years and 6 (3.0%) were missing.

5.2.9 Item 9: Nursing Position

Respondents were also asked to state their current position, and responses are presented in Figure 5.4.
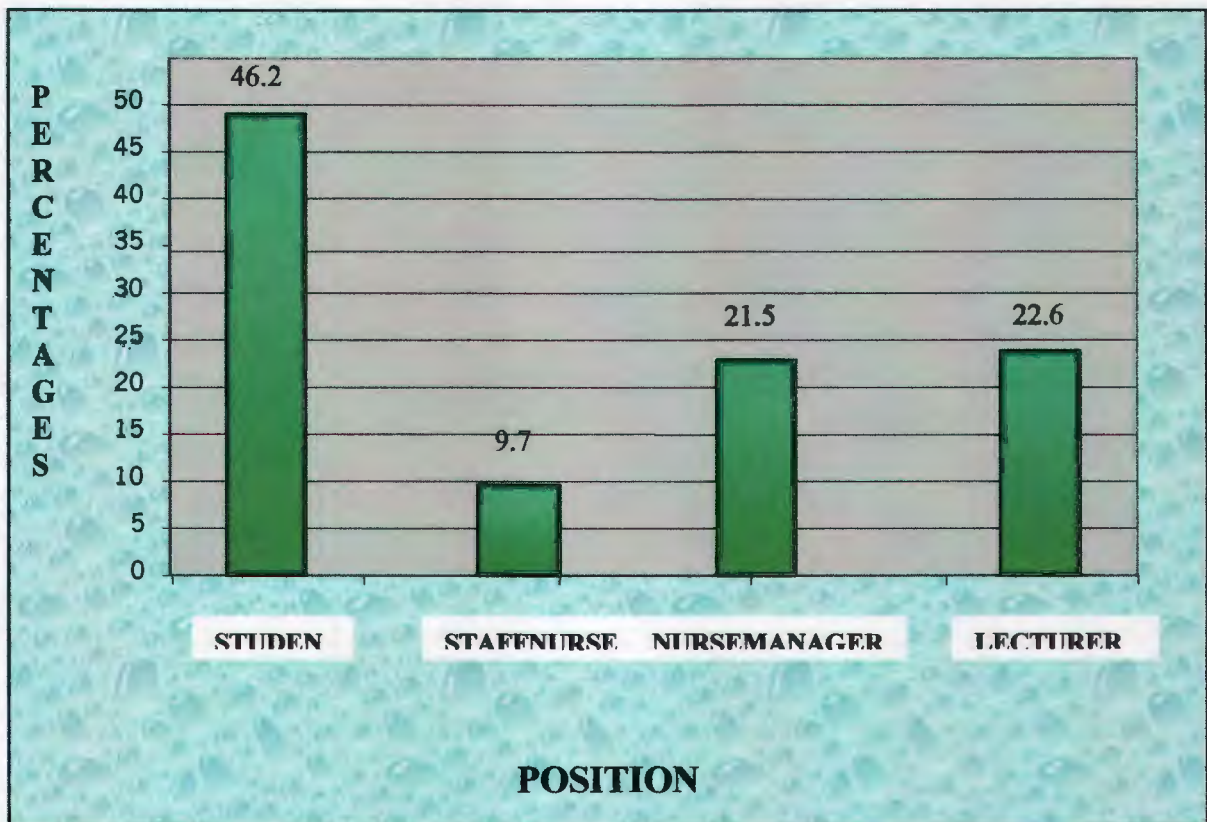
Figure 5.4   Nursing Position (N = 195)

As reflected by the Figure above, the majority of respondents 90 (46.2%) were students. The staff nurses consisted of 19 (9.7%) while Nurse Managers were 43 (21.5%). The two positions of Staff Nurse and Nurse Manager made up a total of 61 (31.2%) who acted as Unit Managers in this study, The remaining 44 (22.6%) were nurse lecturers.

5.2.10 Item 10: Type of Setting

In this part, respondents were asked for the type of setting they worked at a year prior to data collection. Findings are presented in Figure 4.5.
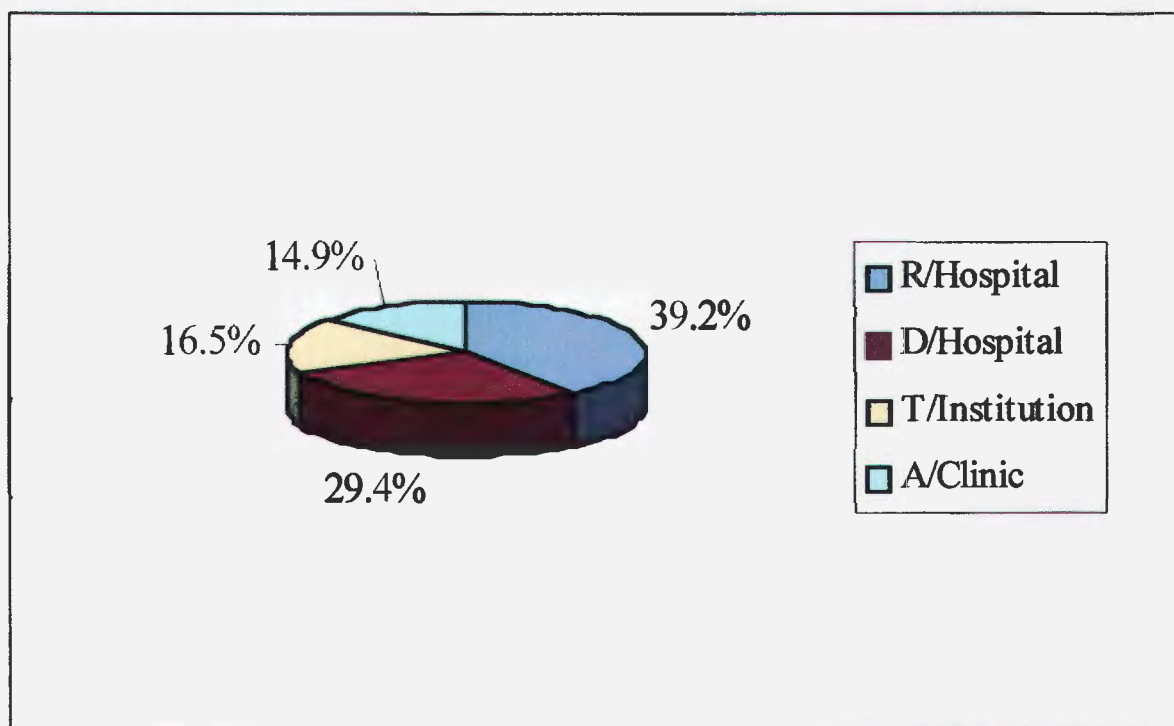
Figure 5.5   Type of setting (N= 194)

Data in Figure 5.5 above reveal that 76 (39.2%) worked at a Referral Health facility, 57 (29.4%) worked at District Hospitals, 32 (16.5%) at Health Training Institutions, while 29 (14.9%) worked at Ambulatory Clinics. About 8 (4.1%) were missing.

5.2.11 Item 11: Unit last worked at

Respondents were required to respond by "yes" or "no" against a list of units as shown in Table 5.12:

Table 5.12   Unit Last Worked At (N= 202)

UNIT	FREQUENCY		PERCENTAGE		TOTAL	
	YES	NO	YES	NO	NUM.	%
MMW	60	142	29.6	69.8	202	100
FMW	54	148	26.7	73.3	202	100
MSW	49	153	24.3	75.7	202	100
FSW	42	160	20.8	79.2	202	100
PW	39	163	19.3	80.7	202	100
ORTH W	21	181	10.4	89.6	202	100
INTENSIVE (ICU)	15	187	7.4	92.6	202	100
GYN W	21	181	10.4	89.6	202	100
OB	38	164	18.8	80.2	202	100
A/E	18	184	8.9	91.1	202	100
OPD/ C	45	157	22.3	77.7	202	100

* LEGEND: **MMW** - Male Medical Wards   **PW** – Private Wards

FMW - Female Medical Wards   **ORTH W** – Orthopaedic Wards

MSW - Male Surgical Wards   **ICU** – Intensive Care Units

FSW - Female Surgical Wards   **GYN W** – Gynaecological Wards

OB W – Obstetric Ward   **A/ E** – Accident and Emergency

OPD/ C – OutPatient Departments/ Clinics

As depicted in the Table above, almost all participants in the study had worked in a variety of clinical units. As can be expected, more participants had worked in general units (19.3% - 29.6%) than in specialist units. This was important because nursing students are placed in general wards for their clinical learning. Nurses who supervise them threfore needed to have had experiences in these areas.

SECTION 2: FINDINGS ON MAIN STUDY VARIABLES

5.3.0   Introduction

Section 1 of this chapter dealt with demographic variables which will be used in the current section to determine differences in perception of the clinical learning environment. The section also addressed reliability and validity confirmation through Chronbach's alpha and factor analysis respectively. The current section will focus on quantitative data analysis using descriptive statistics.

This section addressed the five (5) study variables namely, clinical setting, patient care/ practice standards, staffing, nurse managers' commitment and interpersonal relationships. A principal component analysis extracted factors, which constituted each sub scale, which were factored into various clusters for each sub scale. The items in each sub scale were factored to form clusters as reflected in paragraph 5.1.2, Tables 5.2 - 5.6 above. Described hereunder are examples of how factors constituted components of each sub scale:

- Clinical setting was made up of 12 items, from which a principal component analysis extracted 4 factors, as shown in Table 5.2.
- Patient Care/ Practice Standards' sub scale, consisted of 15 items, and 3 factors were extracted, see Table 5.3.
- Staffing had 9 items, which clustered into 3 factors, one main factor and two minor ones, which resulted from further varimax rotation as referred to in Table 5.4

- Nurse managers' commitment was made up of 16 items, out of which 3 factors were extracted, presented in Table 5.5.
- Interpersonal relationships consisted of 14 items, from which 3 factors were extracted, as shown in Table 5.5. Initially one factor was extracted, but after regrouping, two additional factors were extracted.

Data were therefore analysed using the identified factors and are presented in the tables that follow.

RESPONDENTS' PERCEPTION OF CLINICAL SETTINGS

Findings are presented in Table 5.13

Table 5.13   Factor Analysis of the Clinical Settings: Availability of Experiences

FACTOR 1 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Variety of patient conditions available	149 (74.1%)	2 (1.0%)	50 (24.9%)	201
• Patients present long enough in setting	126 (63.0%)	10 (5.0%)	64 (32.0%)	200
• Patient populations adequate in number	130 (64.7%)	8 (4.0%)	63 (31.3%)	201
• Wide range of experiences available	121 (60.5%)	7 (3.5%)	72 (36.0%)	200

As reflected in Table 5.13 above, the majority of the respondents (60.5% - 74.1%) agreed that learning experiences were available in the clinical settings. Those disagreeing were in the 24.9% to 36.0% range and only 1% to 5% were undecided.

The table that follows presents data on the respondent's views on availability and adequacy of resources in the clinical settings.

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Table 5.14   Factor Analysis of the Clinical Settings: Availability/Adequacy Resources

FACTOR 2 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Adequate resources available	93 (46.7%)	9 (4.5%)	97 (48.7%)	199
• Required resources available	88 (44.2%)	9 (4.5%)	102 (51.3%)	199
• Reference materials available	78 (39.2%)	10 (5.0%)	111 (55.8%)	199

As reflected in Table 5.14 above, there was marginal agreement/ disagreement on the issue of resource availability/adequacy. Just over 50% of the respondents disagreed, and disagreement ranged between 48.7% to 55.8, while agreement was in the range of 39.2% to 46.7%. Only about 5% were undecided.

Clinical settings were further examined to determine the adequacy of space and organisation of the unit. Table 5.15 presents findings.

Table 5.15   Factor Analysis of Clinical Settings: Space Adequacy and Organisation

FACTOR 3 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Facility has adequate space	102 (51.5%)	2 (1.0%)	94 (47.5%)	198
• Unit organisation conducive to learning	106 (53.3%)	4 (2.0%)	89 (44.7%)	198
• Space available for students' belonging	68 (34.9%)	13 (6.7%)	114 (58.5%)	195

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Table 5.15 above reveals that 51.5% to 53.3% of respondents agreed that space is adequate and unit organisation is conducive to learning, while 44% – 47.5% disagreed. However, 58.5% disagreed that space is available for students' belongings in the clinical settings. Only 34.9% agreed while 6.7% were undecided. As stated earlier, the differences in population are due to the response disparities.

The last factor of the clinical setting examined accessibility of resources to student nurses. Table 5.16 presents findings.

Table 5.16   Factor Analysis of Clinical Settings: Resource Accessibility to Students

FACTOR 4 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Patient records accessible to students	183 (91.5%)	5 (2.5%)	12 (6.0%)	200
• Patient care resources accessible to students	142 (73.6%)	12 (6.0%)	39 (20.2%)	193

Table 5.16 above reflects that an overwhelming majority (73.6% - 91.5%) agreed that available resources were accessible to student nurses. Only 6-20% disagreed, while only 2.5% - 6.0% were undecided. Again differences in population are a result of response disparity.

5.3.2   VIEWS OF RESPONDENTS ABOUT PATIENT CARE/PRACTICE STANDARDS

As explained under 5.3.0 above, factor analysis identified three factors under which patient care was analysed as shown in the Table 5.17 - 5.19:

Table 5.17   Factor Analysis of Patient Care: Patient Advocacy

FACTOR 1 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Patient care is safe, organized and holistic, based on patient needs	151 (74.8%)	11 (5.4%)	40 (19.8%)	202
• Nurses allow patients to participate in own care	171 (85.1%)	7 (3.5%)	23 (11.4%)	201
• Nursing care is individualized for each patient	153 (76.1%)	10 (5.0%)	38 (18.9%)	201
• Patients are given adequate information about their own care	125 (63.5%)	29 (14.7%)	43 (21.8%)	200
• Nurses relate therapeutically with patients in various conditions	147 (73.5%)	13 (6.5%)	40 (20.0%)	201

As depicted in Table 5.17 above, the majority of respondents (63.5%-85.1%) agreed that nurses advocate for patients during the provision patient care. Only 11.4%-21.8% disagreed, while 3.5%-14.7% were undecided. The differences in population as explained above, result from response disparity

The second factor of the patient care variable examined patient care process and data is presented in Table 5.18.

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Table 5.18   Factor Analysis of Patient Care: Patient Care Process

PATIENT CARE PROCESS DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• **Patient care is documented using "SOAPIE"**	141 (71.9%)	7 (3.6%)	48 (24.5%)	196
• **Patient care is monitored through regular check of vital signs**	127 (64.5%)	11 (5.6%)	59 (29.9%)	197
• **Privacy is key in patient care**	130 (65.3%)	11 (5.6%)	58 (29.9%)	199
• **Patients are given first priority as compared to nurse's needs**	140 (70.4%)	19 (9.5%)	40 (20.1%)	199
• **Unit uses nursing process effectively while providing patient care**	102 (50.7%)	7 (3.5%)	92 (45.8%)	201
• **Unit practises patient allocation rather than task allocation**	119 (59.5%)	16 (32.5%)	65 (32.5%)	200
• **Nurses act as patient advocates**	150 (75.4%)	7 (3.5%)	42 (21.1%)	199

Data on the preceding Table indicate that a reasonable majority, (50.7%-71.9%), agreed about the patient care process. However, it is worth noting that effective use of the nursing process was only marginally agreed upon by 50.7% while 45.8% disagreed. Patient allocation rather than task allocation was agreed upon by 59.5%, with 32.5% disagreeing. There was a minimal number, (3.5% - 9.5%) being undecided. Here too, the differences in population reflect disparity in responding to items.

The third and the final factor of the variable patient care, assessed standards of care, as reflected in the Table below.

Table 5.19   Factor Analysis of Patient Care: Practice Standards

FACTOR 3 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Patient records reflect current nursing practice standards	126 (63.3%)	10 (5.0%)	63 (31.7%)	199
• Standards of care are consistent with what students are taught	106 (54.1%)	12 (6.1%)	78 (39.8%)	196
• Unit has care standards that guide patient care activities	133 (67.5%)	14 (7.1%)	50 (25.4%)	197

Table 5.19 above indicates that a moderate majority, 54.1%-67.5% agreed about the standards of care. On the other hand, 25%-39% of the respondents disagreed that standards of care were acceptable, while between 5% and 7% percent were undecided. The differences in population resulted from differences in responses.

VIEWS ABOUT STAFFING

The third of the major study variable was staffing. As explained previously, one main factor, learner support, and two minor ones were extracted, lecturer availability and willingness to assist were extracted. Tables that follow present data on staffing.

Table 5.20   Factor Analysis of Staffing: Learner Support

FACTOR 1 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Setting is adequately staffed to support learning	86 (42.6%)	9 (4.5%)	107 (53.0%)	202
• Qualified nurses support learning	107 (53.5%)	15 (7.5%)	78 (39.0%)	200
• Setting is staffed with appropriate allied health personnel to support learning	94 (47.5%)	25 (12.6%)	79 (39.9%)	198
• Setting staffed with medical personnel to support learning	94 (46.8%)	12 (6.0%)	95 (47.3%)	201
• Nursing staff collaborate with lecturers to select learning experiences	129 (65.1%)	15 (7.6%)	54 (27.3%)	198

Data in the Table above indicate that there were mixed views about learner support. Between 42.6% and 65.1% agreed about learner support especially on "qualified nurses' support and collaborate to select learning experiences." On the other hand, 53.0% disagreed with adequate staffing, while between 39.9% to 47.3% were neither agreeing nor disagreeing.

The next factor, which resulted from regrouping the remaining items after extraction of the first factor was, lecturer availability. The Table that follows presents data on this factor.

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Table 5.21   Factor Analysis of Staffing: Lecturer availability

FACTOR 2 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Lecturers are available i.e. guide student learning in clinical settings	21 (61.1%)	5 (2.5%)	72 (36.4%)	198
• Lecturers are available to evaluate students	130 (65.0%)	7 (3.5%)	63 (31.5%)	200

As shown in the table above, there is an agreement about availability of lecturers in the clinical area. About 61% agreed that lecturers were available to guide student learning, while 65% agreed that lecturers were only available to evaluate students. In both cases the undecided were only minimal, at 2.5%-3.5% and the disagreeing ranged from 31.5% - 36.4%. Here too, variation in population resulted from response disparity.

The last factor examined staff willingness to assist students. The findings are presented in Table 5.22 below.

Table 5.22   Factor Analysis of Staffing: Willingness to Assist

FACTOR 3 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Staff willing to assist	131 (65.2%)	9 (4.5%)	61 (30.5%)	201
• Staff too busy to assist learning	87 (43.3%)	9 (4.5%)	105 (52.2%)	201

Data in Table 5.22 above indicate that 65.2% agreed about staff willingness to assist students in clinical learning. About 52.2% disagreed that staff was too busy to assist students, while only 43.3% agreed and 4.5% were undecided. On the other hand, 30.5% disagreed that staff is willing to assist, while only 4.5% were undecided.

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5.3.3 PERCEPTIONS ON NURSE MANAGERS' COMMITMENT

Nurse Managers' Commitment was the fourth variable, which consisted of sixteen items. Factor analysis extracted three factors namely, creating conducive environment, team building process and nurse managers' involvement in student learning, which examined components of the main variable. Data is presented in tables that follow.

Table 5.23 **Factor Analysis of Nurse Managers' Commitment: Creating Conducive Environment**

FACTOR 1 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Nurse Manager devotes time to teaching students	57 (28.6%)	17 (8.5%)	125 (62.85)	199
• Nurse Manager has unit programme for teaching students	49 (24.5%)	12 (6.0%)	139 (69.5%)	200
• Nurse Manager is flexible to student time in the clinical setting	133 (66.2%)	22.(10.9%)	46 (22.9%)	201
• Nurse Manager ensures safe environment for patient care	117 (58.8%)	12 (6.0%)	70 (35.2%)	199
• Nurse manager's role models care to staff and students	115 (57.8%)	15 (7.5%)	69 (34.7%)	199
• Nurse Manager co-ordinates the team to provide care	162 (80.6%)	6 (3.0%)	33 (16.4%)	1201
• Nurse Manager checks on adequacy of resources for provision of patient care	123 (61.2%)	11 (6.5%)	67 (33.3%)	201

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Data presented in Table 5.23 reflect that there was generally an agreement that the nurse manager is committed to creating a conducive learning environment. Details are shown by the following breakdown:

- *Being flexible to students and lecturers time in the setting had 66.2% agreeing while 22.9% disagreed and 8.5% were undecided.*

- *Ensuring safe environment for patient care had 58.8%agreeing while 35.2% disagreed and 6% were undecided.*

- *Role modeling care to staff and students had 57.8% agreeing and 34.2% disagreed, while 7.5% were undecided*

- *Co-ordinating team to provide care to patients had 80.6%agreeing and 16.4% disagreed, while 3.0% were undecided.*

- *Checking on adequacy of resources for patient care had 61.2% agreeing while 33.3% disagreed and 6.55 were undecided.*

On the other hand, Nurse managers devoting time to teaching students had 62.5% disagreeing, with only 28.6% agreeing and 8.5% undecided. For Nurse Managers having unit programme for teaching students, 69.5% disagreed, and only 24.5% agreed.

The second part of the Nurse Manager's responsibility was team building. This part constituted factor 2 of Nurse Manager's commitment, and consisted of five (5) items. Data on factor 2 is presented in Table 5.24.

Table 5.24   Factor Analysis of Nurse Manager's Commitment: Team Building

FACTOR 2 DESCRIPTOR	AGREE	UNDECIDED	DISAGREE	N =
• **Nurse Manager counsels students on problems related to clinical learning**	139 (69.1%)	12 (6.0%)	50 (24.9%)	201
• **Nurse Manager checks for adequacy of resources for clinical teaching**	140 (69.7%)	10 (5.0%)	51 (25.3%)	201
• **Nurse Manager takes rounds with students to teach them to check standards of care**	104 (53.3%)	26 (13.3%)	65 (33.3%)	195
• **Nurse Manager coordinates the team to work together in teaching students**	121 (60.8%)	9 (4.5%)	69 (34.7%)	199
• **Nurse Manager counsels staff on problems related to clinical teaching and learning**	117 (58.2%)	19 (9.5%)	65 (32.3%)	201

As reflected by data in Table 5.24 above, there was a general agreement that nurse managers in clinical settings studied, were committed to team building. More than 50% (53.3%-69.7%) in all items comprising factor 2, agreed that nurse managers were committed to team building. However, a significant number also disagreed with Nurse Manager's commitment to team building. The disagreement varied from item to item, although most of them congregated around the 30% (24.9 %, 32.3%, 33.3%, and 34.7%). Discrepancies in population resulted from disparities in responses as explained above.

The third and last factor in Nurse Manager's commitment examined the extent to which the Nurse Manager is actively involved in teaching students. Data is presented in Table 5.25 below.

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Table 5.25   **Factor Analysis of Nurse Manager's Commitment: Involvement in Students' Teaching**

FACTOR 3 DESCRIPTIONS	AGREE	UNDECIDED	DISAGREE	N =
• **Nurse Manager feels clinical teaching is the work of lecturers**	66 (33.0%)	22 (11.0%)	112 (56.0%)	200
• **Nurse Manager is too busy to attend to students**	85 (42.3%)	20 (9.9%)	96 (47.8%)	201
• **Nurse Managers attach great importance to student learning**	120 (59.7%)	14 (7.0%)	67 (33.3%)	201
• **Nurse Manager orientates students to the clinical unit**	177 (87.6%)	5 (2.5%)	20 (9.9%)	202

Table 5.25 above reflects that only 33.0% of the respondents agreed that the Nurse Managers feel clinical teaching was the work of lecturers, 11.0% were undecided while 56.0% disagreed. The second item, nurse manager is too busy to attend to students, had respondents split, 42.3% agreed and 47.8% disagreed while 9.9% were undecided. For the item Nurse Manager attaches great importance to student learning, 59.7% agreed, 33,3% disagreed while only 7.0% were undecided. A Majority of 87.6% agreed that nurse manager orientates students to the clinical unit, 9.9% disagreed and 2.5% were undecided. Again the difference in population reflects disparity in responding to items.

5.3.5   PERCEPTIONS ON INTERPERSONAL RELATIONSHIPS

The last major variable was interpersonal relationships, which had 14 items factored into 3 clusters as explained in 5.3.0 earlier and presented in Table 5.6. The factors were conducive relationships, non-conducive relationships and comfort relationships.

Analysis of interpersonal relationships using these factors is presented in the tables that follow:

Table 5.26   Factor Analysis of Interpersonal Relationships: Conducive

Relationships

FACTOR 1 DESCRIPTIONS	AGREE	UNDECIDED	DISAGREE	N =
• Unit is a happy environment for both staff and patients	110 (55.0%)	15 (7.5%)	75 (37.5%)	200
• All staff in the unit feel part of the team	137 (68.8%)	20 (10.1%)	42 (21.1%)	199
• Nurse manager explains instructions coming from the higher level in the unit	140 (70.3%)	30 (15.1%)	29 (14.6%)	199
• Students are allowed to ask questions.	167 (83.9%)	9 (4.5%)	23 (11.6%)	199
• The ward/ clinic treats students as individuals rather than just students	118 (60.2)	10 (5.1%)	68 (34.7%)	196
• Students' questions are answered satisfactorily	150 (74.6%)	8 (4.0%)	43 (21.4%)	201
• Ward/ clinic shifts allow students to gain the widest possible experience.	168 (85.3%)	11 (5.6%)	18 (9.1%)	197

As indicated in Table 5.26 above, 55% - 85.3% agreed that the environment facilitates conducive interpersonal relationships. Those disagreeing ranged from 9% - 37.5% while only 4.0%-15% were undecided. Once again discrepancies resulted from disparity in responses.

The next factor grouped items, which together assessed for non-conducive relationships. Data is presented in Table 5.27 below:

Table 5.27 **Factor Analysis of Interpersonal Relationships: Non conducive Relationships**

FACTOR 2 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N =
• Nurse Manager regards students as workers rather than learners	102 (50.7%)	8 (4.0%)	91 (45.3%)	201
• Nurse Manager expects students to provide care on their own without supervision	92 (45.5%)	7 (3.5%)	102 (50.7%)	201
• Student nurses learn more form other students rather than staff	69 (34.8%)	17 (8.6%)	112 (56.6%)	198
• Students are expected to obey registered nurses without asking questions	67 (33.3%)	15 (7.5%)	119 (59.2%)	201
• Only doctors answer students' questions satisfactorily	83 (41.5%)	14 (7.0%)	103 (51.5%)	200

Data in Table 5.27 above indicate that 50.7% of the nurse managers regard students as workers rather than learners. On other items, agreement was between 33.3%-45.5%. For most of the items 50.7%-59.2% disagreed that interpersonal relationships are non-conducive to learning. On only one item, respondents agreed. Those undecided ranged between 3.5%-8.6%. Once more discrepancies in population resulted from disparities in responding to the questions.

The last factor addressed comfort relationships and had two items. Findings are presented below.

Table 5.28   Factor Analysis of Interpersonal Relationships: Comfort Relationships

FACTOR 3 DESCRIPTORS	AGREE	UNDECIDED	DISAGREE	N=
• Patients are given time to rest in between activities	89 (44.7%)	12 (6.0%)	98 (49.2%)	199
• The unit has many routines which disturb patients	115 (57.8%)	28 (12.6%)	59 (29.6%)	199

Findings in Table 5.28 indicate that the majority of respondents 57.8% agreed that interpersonal relationships are conducive to patient comfort. The undecided made up 12.6%, while 29.6% disagreed on item 1. For the second item 44.7% agreed that unit routines disturb patients. Only 6.0% were undecided, while 49.2% disagreed with the statement.

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5.4 CROSS TABULATIONS

5.4.0 Introduction

The next step of quantitative data analysis compared responses by cross tabulation of selected demographic variables with the five study variables. Chi-square was then applied to determine the significance of the association. Only significant findings are reported and are indicated by p value ≤ of 0.05.

5.4.1 Cross tabulation of clinical setting by position. Findings are presented below.

Table 5.29   Perceptions of Clinical Setting by Position

VARIABLE DESCRIPTOR	STUDENT	STAFF/NM	LECTURER	P=	N =
Organization of unit is conducive					
• Agree	40 (44.9%) -	39 (65.0%) 2 (3.3%)	22 (52.4%) 2 (4.8%)		
• Undecided					
• Disagree	49 (55.1%)	19 (31.7%)	18 (42.9%)	0.028	191
Patient populations are adequate	54 (60.0%)	46 (76.7%)	27 (62.8%)		
• Agree	2 (2.2%)	5 (8.3%)	-		
• Undecided	36 (37.8%)	9 (15.0%)	16 (37.2%)	0.006	193
• Disagree					
Length of patient stay is adequate					
• Agree	53 (58.9%) -	44 (72.1%) 6 (9.8%)	27 (65.9%) 3 (7.3%)		
• Undecided	36 (41.1%)	11 (18.0%)	11 (26.8%)	0.011	191
• Disagree					
Wide range of experiences available					
• Agree	46 (52.3%)	44 (72.1%)	27 (62.8%)		
• Undecided	2 (2.3%)	4 (6.6%)	-		
• Disagree	40 (45.5%)	13 (21.3%)	16 (37.2%)	0.016	192

Data presented in Table 5.29, reflect that the majority of the respondents agreed that clinical settings were conducive to learning, while a few disagreed. The agreements, though spread out among the three components of the sample, showed that students were on the low 44.1% - 60% range.

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On the other hand, staff/ nurse managers' agreements ranges were 65% - 76.7%. The nurse lecturer ranges were 52.4% - 65.9%. While (55.1%) of the students disagreed with only one item, *"organization of units was conducive to learning."*

For other items, student agreements were up to 45.5%, while nurse managers ranges were 15% - 31.7% and nurse lecturers were 26.8% - 42.9%. On the whole 50%- 77% of the respondents agreed with most of the items, and 15% - 46% disagreed.

However, 55% of the students disagreed with 1 item, "organization of the unit is conducive to learning". The differences among the groups were significant at p values reflected on table 5.29.

5.4.2 Cross Tabulation of Clinical Setting by Type of Setting. Findings are presented in Table 5.30 below.

Table 5.30 <u>**Perceptions of Clinical Setting by Type of Setting**</u>

CLINICAL SETTING: TYPE	CLINIC	D/HOSP	REF/HOSP	T/INSTITUTE	P=	N =
Space adequate						
• Agree	15 (53.6%)	14 (25.0%)	49 (65.3%)	16 (55.2%)		
• Undecided	-	1 (1.8%)	1 (1.3%)	-		
• Disagree	13 (46.4%)	41 (73.2%)	25 (33.3%)	13 (44.8%)	0.001	188
Resources available						
• Agree	13 (46.4%)	9 (16.1%)	48 (63.2%)	11 (37.9%)		
• Undecided	1 (3.6%)	4 (7.1%)	2 (2.6%)	1 (3.4%)		
• Disagree	14 (50.0%)	43 (76.8%)	25 (34.2%)	17 (58.6%)	0.000	188
Range of experiences available						
• Agree	19 (67.9)	21 (36.8%)	55 (74.3%)	18 (58.1%)		
• Undecided	2 (7.1%)	1 (1.8%)	4 (5.4%)	-		
• Disagree	7 (25.0%)	35 (61.4%)	15 (20.3%)	13 (41.9%)	0.000	190
Variety patient conditions available						
• Agree	23 (82.1%)	31 (55.4%)	66 (86.8%)	21 (67.7%)		
• Undecided	-	2 (3.6%)	-	-		
• Disagree	5 (17.9%)	23 (41.1%)	10 (13.2%)	10 (32.3%)	0.002	191

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CLINICAL SETTING: TYPE	CLINIC	D/HOSP	REF/HOSP	T/INSTITUTE	P=	N =
Reference material provided • Agree • Undecided • Disagree	13 (46.4%) - 15 (53.6%)	13 (23.2%) 5 (8.9%) 38 (67.9%)	39 (52.0%) 4 (5.3%) 32 (42.7%)	6 (20.0%) - 24 (80.0%)	0.001	189
Adequate patient populations • Agree • Undecided • Disagree	23 (82.1%) 1 (3.6%) 4 (14.3%)	25 (43.9%) 2 (3.5%) 30(52.6%)	55 (73.3%) 4 (5.3%) 16 (21.3%)	20 (64.5%) - 11 (35.5%)	0.001	191

Most of the respondents (52% - 86.8%) agreed that referral hospitals were conducive learning settings. For the district hospital, 52.6% - 76.8% disagreed with all but one item. These include; adequate space, resource availability and available range of learning experiences, provision of reference materials and adequate patient populations. However, 55.4% agreed that a variety of patient conditions were available at district hospitals. For the clinics, 53.6% agreed that space was adequate, 67.9% agreed that a range of experiences were available, while 82.1% agreed that patient populations were adequate.

Nevertheless, 50% and 53.6% disagreed that resources were available and that reference materials were provided respectively. Most of the respondents' perceptions at the training institutions did not differ much from the clinics'. But perceptions about district and referral hospitals differed significantly at p values reflected in Table 5.30.

5.4.3   Cross Tabulation of Patient Care/Practice standards by age.   Findings on the extent of associations are presented below.

Table 5.31   <u>**Perceptions on Patient Care/Practice Standards by Age**</u>

PATIENT CARE DESCRIPTORS	24-30 YRS	31-40 YRS	41 YRS +	P	N =
Patient care is monitored … • **Agree** • **Undecided** • **Disagree**	51 (47.7%) 6 (7.5%) 48 (44.9%)	49 (87.5%) 3 (5.4%) 4 (7.1%)	23 (79.3%) - 6 (20.7%)	0.000	192
Patient care is documented • **Agree** • **Undecided** • **Disagree**	66 (61.1%) 4 (3.7%) 38 (35.2%)	48 (87.3%) 2 (3.6%) 5 (9.1%)	25 (86.2%) - 4 (13.8%)	0.001	192
Privacy is key in patient care • **Agree** • **Undecided** • **Disagree**	60 (55.0%) 7 (6.4%) 42 (38.5%)	42 (75.0%) 3 (5.4%) 11 (19.6%)	24 (82.8%) 1 (3.4%) 4 (13.8%)	0.020	194
Patient care is safe organized and holistic … • **Agree** • **Undecided** • **Disagree**	84 (75.0%) 1 (0.9%) 27 (24.1%)	43 (76.8%) 6 (10.7%) 7 (12.5%)	22 (75.9%) 2 (6.9%) 5 (17.2%)	0.027	197
Patients participate in own care • **Agree** • **Undecided** • **Disagree**	98 (87.5%) - 14 (12.5%)	46 (83.6%) 4 (7.3%) 5 (9.1%)	23 (79.3%) 3 (10.3%) 3 (10.3%)	0.033	196
Patient needs are a priority compared to nurses needs • **Agree** • **Undecided** • **Disagree**	67 (60.9%) 10 (9.1%) 33 (30.0%)	46 (83.6%) 4 (7.3%) 5 (9.1%)	24 (82.8%) 3 (10.3%) 2 (6.9%)	0.005	194

Findings in Table 5.31 above indicate that the majority of respondents in different age groups agreed that patient care/ practice standards were acceptable and therefore make clinical learning environment conducive. However, agreement levels differed among the age groups. For the age group 24- 30 years, agreement was in the range of 55.0% - 87.5%, the 31- 40 years were 75% - 87.5% and the 41+ years were 75.9% - 86.2%.

The disagreements for all the age groups were all below 50%. On the other hand the age group 24- 30 years differed with the other groups on one item "patient care is monitored," for which 47.7% agreed and 44.9% disagreed. The differences among the groups were significant as reflected by p values in Table 5.31. The differences in population are a result of the disparity in responding to items as has already been explained.

5.4.4 Cross Tabulation of Patient Care/Practice standards by gender.   Data is presented in the table below.

5.4.5   Table 5.32   Perceptions of Patient Care/ Patient Standards by Gender

VARIABLE DESCRIPTORS	MALE %	FEMALE %	P	N =
Privacy is key to patient care				
• Agree	47 (52.2%)	82 (75.9%)		
• Undecided	7 (7.8%)	4 (3.7%)		
• Disagree	36 (40.0%)	22 (20.4%)	0.002	198
Patient needs are a priority				
• Agree	54 (60.7%)	85 (78.0%)		
• Undecided	7 (7.8%)	12 (11.0%)		
• Disagree	28 (31.5%)	12 (11.0%)	0.001	198
Patient care is organized				
• Agree	67 (73.6%)	83 (75.5%)		
• Undecided	1 (7.8%)	10 (9.0%)		
• Disagree	23 (25.3%)	17 (15.5%)	0.016	201
Nurses relate therapeutically with patients				
• Agree	59 (64.8%)	87 (80.6%)		
• Undecided	7 (7.7%)	6 (5.6%)		
• Disagree	25 (27.5%)	15 (13.8%)	0.037	199
Patients are given adequate information				
• Agree	44 (49.4%)	80 (74.8%)		
• Undecided	20 (22.5%)	9 (8.4%)		
• Disagree	25 (28.1%)	18 (16.8%)	0.000	196

VARIABLE DESCRIPTORS	MALE %	FEMALE %	P	N =
Patients participate in own care				
• Agree	78 (85.7%)	92 (84.4%)		
• Undecided	-	7 (6.4%)		
• Disagree	13 (14.3%)	10 (9.2%)	0.030	200
Patient care is monitored				
• Agree	45 (50.6%)	81 (75.7%)		
• Undecided	6 (6.7%)	5 (4.7%)		
• Disagree	38 (42.7%)	21 (19.6%)	0.001	196

Table 5.32 presents findings on crosstabulations of patient care/ practice standards by gender. The findings reveal that while the majority of both male (49.4% -85.7%) and female (74.8% - 84.4%) agreed with all patient care descriptors, there were some variations in agreement levels. Male respondents had low agreement levels compared to the females who were in the seventies and eighties. Although only 14.3% - 40.0% of the males and 9.2% - 20.4% of the females disagreed with all items, here too, the level of disagreements varied. The differences in the perceptions of male and female respondents were significant at p values reflected in Table 5.32.

5.4.5 Cross Tabulation of Patient Care/Practice Standards by Qualification.

Findings are presented below.

Table 5.33 **Perceptions of Patient Care/ Practice Standards by Qualification**

PATIENT CARE DESCRIPTORS	SRN/POST- BASIC DIPLOMA	BASIC DEGREE/ MSN	P	N =
Patient care standards are consistent with what students are taught				
• Agree	37 (72.5%)	12 (28.6%)		
• Undecided	3 (5.9%)	3 (7.1%)	0.000	93
• Disagree	11 (21.6%)	27 (64.3%)		
Setting has practice standards to guide patient care				
• Agree	45 (84.9%)	20 (48.8%)		
• Undecided	2 (3.8%)	3 (7.3%)		
• Disagree	6 (11.3%)	18 (43.9%)	0.000	94
Patient records reflect current nursing care standards				
• Agree	45 (81.8%)	18 (45.0%)		
• Undecided	2 (3.6%)	3 (7.5%)		
• Disagree	8 (11.3%)	19 (47.5%)	0.000	95
Privacy is a key in patient care				
• Agree				
• Undecided	52 (94.5%)	25 (59.5%)		
• Disagree	1 (1.8%)	3 (7.1%)		
	2 (3.6%)	14 (33.3%)	0.0001	97
Patient needs are given priority				
• Agree	50 (92.6%)	30 (71.4%)		
• Undecided	3 (5.6%)	6 (14.3%)		
• Disagree	1 (1.9%)	6 (14.3%)	0.0165	96
Patient care is individualized				
• Agree	52 (94.5%)	26 (63.4%)		
• Undecided	2 (3.6%)	4 (9.8%)		
• Disagree	1 (1.8%)	11 (26.8%)	0.003	96
Care is safe organized and holistic				
	49 (89.1%)	24 (57.1%)		
• Agree	3 (5.5%)	7 (16.7%)		
• Undecided	3 (5.5%)	11 (26.2%)	0.0013	97
• Disagree				
Nurses relate therapeutically with patients				
• Agree	49 (89.1%)	27 (65.9%)		
• Undecided	1 (1.8%)	6 (14.6%)		
• Disagree	5 (9.1%)	8 (19.5%)	0.012	96

PATIENT CARE DESCRIPTORS	SRN/POST- BASIC DIPLOMA	BASIC DEGREE/ MSN	P	N =
Nurses act as patients' advocate				
• Agree	54 (98.2%)	28 (68.3%)		
• Undecided	-	3 (7.3%)		
• Disagree	1 (1.8)	10 (24.4%)	0.002	96
Patients are given adequate information				
• Agree	48 (87.3%)	21 (50.9%)		
• Undecided	1 (1.8%)	6 (14.3%)		
• Disagree	6 (10.9%)	15 (35.7%)	0.002	97
Ward/ unit uses nursing process effectively while providing care				
• Agree	40 (72.7%)	18 (43.9%)		
• Undecided	3 (5.5%)	2 (4.9%)		
• Disagree	12 (21.8%)	21 (51.2%)	0.010	96

Data as reflected on the Table above, indicate that there were significant differences in the perception of patient care by qualifications. Respondents with basic and post basic diplomas, otherwise known as state registered nurses (SRNS), consistently agreed with patient care descriptors while those with basic and post basic degrees disagreed, on the following:

For patient care standards were consistent with what students were taught, 72.5% diploma nurses, agreed, against 21.6% who disagreed. On the other hand 64.3% degree holders disagreed while only 28.6% of the same qualification agreed,
- *The setting has practice standards that guide patient care, had 84.9% diploma nurses agreeing compared to 11.3% who disagreed, and 48.8% degree nurses agreed when compared to 43.9% who disagreed.*
- *For patients records reflect current nursing care standards, 81.8% of the diploma holders agreed against 14.5%, while 47.5% degree holders disagreed, against 45.0% who agreed.*
- *Privacy was key in patient care was agreed for by 94.5% diplomats, and 59.5% degree nurses, while 3.6% and 33.6% disagreed respectively.*
- *Patient needs were given priority, was another descriptor where 92.6% diploma holders agreed, while 71.4% of the degree holders also agreed.*
- *For patient care is individualized, there was also a vast disparity between diploma holders, of whom 94.5% agreed, compared to degree holders of whom 64.4% also agreed. Disagreements were 1.8% for diploma holders compared to 26.8% for degreed respondents.*

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- *There were also some disparity of agreements to care is safe, organized and holistic, with 89.1% diploma holders agreeing, against 57.1% of degree holders.*
- *For nurses relate therapeutically with patients, distribution of agreement was 89.1% of diploma holders against 65.9% of degree nurses.*
- *Nurses acting as patient's advocate, once again 98.2% of diploma nurses agreed, while 68.3% of degree nurses disagreed.*
- *Patients are given adequate information, was agreed on by 87.3% diploma nurses against 50.0% of degree nurses, who also agreed*
- *For the unit uses nursing processes effectively, 72.7% of diploma holders agreed against 43.9% degree nurses who also agreed. The remaining 51.1% of the degree nurses disagreed.*

It is important to note that while both diploma and degree holders seemed to agree on most descriptors of patient care, they however differed in some of the items as well as in their levels of agreement. The degree holders appeared not sure most of the time. The differences are significant at p values reflected in Table 5.33

5.4.6 Cross Tabulation of Patient Care by Experience: Findings are presented in the table below.

Table 5.34   Perception on Patient Care by Experience

VARIABLE DESCRIPTOR	0-5 YRS	6-15 YRS	≥ 16 YRS+	P	N =
Patient care is monitored					
	47 (48.0%)	47 (83.9%)	32 (86.5%)		
• Agree	7 (7.1%)	3 (5.4%)	-		
• Undecided	44 (44.9%)	6 (10.7%)	5 (13.5%)	0.000	191
• Disagree					
Patient care is documented using "SOAPIE"					
• Agree	60 (60.6%)	46 (85.2%)	32 (86.5%)		
• Undecided	4 (4.0%)	1 (1.9%)	2 (5.4%)	0.001	190
• Disagree	35 (35.4%)	7 (13.0%)	3 (8.1%)		

VARIABLE DESCRIPTOR	0-5 YRS	6-15 YRS	≥ 16 YRS+	P	N =
Privacy is key in patient care					
• Agree	55 (55.0%)	42 (75.0%)	31 (83.8%)		
• Undecided	6 (6.0%)	2 (3.6%)	2 (5.4%)	0.008	193
• Disagree	39 (39.0%)	12 (21.4%)	4 (10.8%)		
Patient needs are given priority					
• Agree	62 (61.4%)	45 (80.4%)	31 (86.1%)		
• Undecided	8 (7.9%)	6 (10.7%)	3 (8.3%)	0.002	193
• Disagree	31 (30.7%)	5 (8.9%)	2 (5.6%)		
Patient care is safe organized and holistic					
• Agree	78 (75.7%)	41 (73.2%)	28 (75.7%)		
• Undecided	-	7 (12.5%)	3 (8.1%)		
• Disagree	25 (24.3%)	8 (14.3%)	6 (16.2%)	0.007	196
Patients participate in own care					
• Agree	91 (88.3%)	43 (78.2%)	32 (86.5%)		
• Undecided	-	4 (7.3%)	3 (8.1%)		
• Disagree	12 (11.7%)	8 (14.5%)	2 (5.4%)	0.040	195
Nurses act as patient advocates					
• Agree	68 (66.7%)	46 (52.1%)	32 (88.9%)		
• Undecided	4 (3.9%)	2 (3.6%)	1 (2.8%)	0.046	194
• Disagree	30 (29.4%)	8 (14.3%)	3 (8.3%)		

Findings on the preceding Table 5.34 reveal significant differences among respondents according to years of experience. Although the majority of the group members agreed with most of the items, on patient care, those who agreed differed from group to group. The 0- 5 years of experience group agreements ranged from 48.0% - 88.3%. The 6- 15 years who agreed were between 73.2% - 85.2%, while the 16+ years of experience who agreed were between 75.7% - 88.9%.

While all the three groups agreed, it would be important to note the 0- 5 years of experience were very modest, with most of the items at 48.0%, 55.0% and the 60's. only 2 were at the 70's and 80's. On the contrary, all the disagreements for the three groups were below 50%. However, the 0- 5 years of experience had higher disagreements, compared to the other two groups. The differences among the three groups were significant at p values reflected in Table 5.34.

5.4.7 Cross Tabulation of Patient Care by Position. Results of this tabulation are Presented in Table 5.35.

Table 5.35   Perception of Patient Care by Position

DESCRIPTORS	STUDENT	N/MANAGER	LECTURER	P	N =
Unit uses nursing process effectively					
• Agree	34 (37.8%)	45 (75.0%)	18 (41.9%)		
• Undecided	2 (2.2%)	4 (6.7%)	1 (2.3%)		
• Disagree	54 (60.0%)	11 (18.3%)	24 (55.8%)	0.000	193
Patient are is monitored					
• Agree	37 (43.5%)	57 (93.4%)	30 (24.2%)		
• Undecided	7 (8.2%)	2 (3.3%)	1 (10.0%)		
• Disagree	41 (48.2%)	2 (3.3%)	12 (21.8%)	0.003	189
Patient care is documented using "SOAPIE"					
• Agree	51 (59.3%)	55 (93.2%)	31 (72.1%)		
• Undecided	4 (4.7%)	1 (1.7%)	2 (4.7%)		
• Disagree	31 (36.0%)	3 (5.7 %)	10 (23.3%)	0.001	188
Privacy is key in patient car					
Patient care is individualized	64 (71.1%)	58 (95.1%)	25 (59.9%)		
• Agree	4 (4.4%)	1 (1.6%)	5 (11.9%)		
• Undecided	22 (24.4%)	2 (3.3%)	12 (28.6%)		
• Disagree				0.0002	193

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DESCRIPTORS	STUDENT	N/MANAGER	LECTURER	P	N =
Patient care is safe, organized and holistic					
• Agree	66 (73.3%)	55 (90.2%)	23 (53.5%)		
• Undecided	-	3 (4.9%)	7 (16 .3%)		
• Disagree	24 (26.7%)	3 (4.9%)	13 (30.2%)	0.000	194
Nurses act as patients' advocate					
• Agree	57 (64.8%)	59 (96.7%)	28 (66.7%)		
• Undecided	4 (4.5%)	1 (1.6%)	2 (4.8%)		
• Disagree	27 (30.7%)	1 (1.6%)	12 (28.6%)	0.0001	191
Patients participate in own care					
• Agree	78 (86.7%)	56 (93.3%)	30 (69.8%)		
• Undecided	-	2 (3.3%)	4 (9.3%)		
• Disagree	12 (13.3%)	2 (3.3%)	9 (20.9%)	0.023	193
The client/ patient records reflect current nursing practice standards	56 (62.2%)	50 (83.3%)	16 (39.0%)		
• Agree	2 (2.2%)	3 (5.0%)	3 (7.3%)		
• Undecided	32 (35.6%)	7 (11.7%)	22 (53.7%)	0.000	191
• Disagree					
The ward/ clinic practises patient allocation rather than task allocation					
• Agree	56 (62.2%)	38 (63.3%)	21 (50.0%)		
• Undecided	3 (3.3%)	9 (15.0%)	4 (9.5%)		
• Disagree	31 (34.4%)	13 (21.7%)	17 (40.5%)	0.040	192
Nurses relate therapeutically With patients/ clients in various conditions	59 (66.3%)	55 (91.7%)	29 (62.8%)		
• Agree	5 (5.6%)	2 (3.3%)	5 (11.6%)		
• Undecided	25 (28.1%)	3 (5.0%)	11 (25.6%)	0.001	192
• Disagree					
Patients are given adequate information about their own care					
• Agree	48 (55.8%)	52 (85.2%)	22 (51.2%)		
• Undecided	20 (23.3%)	3 (4.9%)	5 (11.6%)		
• Disagree	18 (20.9%)	6 (9.8%)	16 (37.2%)	0.000	190

DESCRIPTORS	STUDENT	N/MANAGER	LECTURER	P	N =
Nursing care reflects practice standards consistent with what students are taught					
• Agree	51 (57.3%)	43 (75.4%)	9 (21.4%)		
• Undecided	3 (3.4%)	5 (8.8%)	2 (4.8%)		
• Disagree	35 (39.3)	9 (15.8%)	31 (73.8%)	0.000	188
Ward/ clinic has practice standards which guide patient care					
• Agree	61 (68.5%)	52 (91.2%)	17 (39.5%)		
• Undecided	8 (9.0%)	3 (5.3%)	3 (7.0%)		
• Disagree	20 (22.5%)	2 (3.5%)	23 (53.5%)	0.000	189

Data reflected in Table 5.35 indicate that while the three groups of students, nurse managers and lecturer agreed with most of the items on patient care, they however differed in the levels of agreement. For the student, while majority agreed with most items, the level of agreement differed from other groups. The agreement levels for this group ranges were 37.8% - 86.7%. The nurse managers on the other hand, had the highest agreement levels, ranging between 75.0% - 96.7%. The nurse lecturers were moderate like the students. The agreement levels for this group were 39.0% - 72.1%.

The disagreement levels for nurse managers were very low, ranging between 1.6%-21.7%, while those for students and nurse lecturers were 13.3% - 60.0% and 19.0% - 55.8% respectively. It is very important to note that 60.0% of the students and 55.8% of the nurse lecturers disagreed on the effective use of the nursing process by the clinical units. The differences among the groups were significant at p values reflected in Table 5.35.

Table 5.36   Perceptions on Patient care by Type of Setting

PATIENT CARE DESCRIPTORS	CLINIC	DISTRICT HOSPITAL	REFERRAL HOSPITAL	TEACHING INSTITUTION	P	N =
Patient care standards • Agree • Undecided • Disagree	17 (65.4%) - 9 (34.6%)	32 (60.4%) 5 (9.4%) 16 (30.2%)	47 (61.8%) 5 (6.6%) 24 (31.6%)	6 (19.4%) 1 (3.2%) 24 (77.4%)	0.000	186
Unit has practice standards • Agree • Undecided • Disagree	22 (84.6%) 2 (7.7%) 2 (7.7%)	39 (72.2%) 2 (3.7%) 13 (24.1%)	58 (76.3%) 6 (7.9%) 12 (15.8%)	10 (32.3) 3 (9.7%) 18 (58.1%)	0.000	187
Patient records reflect current practice standards • Agree • Undecided • Disagree	22 (78.6%) 1 (3.6%) 5 (17.9%)	34 (60.7%) - 22 (39.3%)	53 (69.7%) 4 (5.3%) 19 (25.0%)	11 (37.9%) 3 (10.3%) 15 (51.7%)	0.009	189
Patient care is safe organized and holistic • Agree • Undecided • Disagree	23 (82.1%) 1 (3.6%) 4 (14.3%)	45 (78.9%) 1 (1.8%) 11 (19.3%)	60 (78.9%) 2 (2.6%) 14 (18.4%)	16 (51.6%) 5 (16.1%) 10 (32.3%)	0.013	192

Data as reflected in Table 5.36 above, indicates that there is consistent agreement by respondents about patient care standards. Agreements ranged between 65.4% - 84.6% for the clinic, 60.4% - 78.9% for district hospitals and 61.8% - 78.9% for the referral hospitals. On the contrary, the majority of those at training/ teaching institutions disagreed on most items. The disagreements ranged between 32.3% - 77.4, while the disagreements for other settings were; 7.7% - 34.6% for clinics, 19.3% - 39.3% for district hospitals and 15.8% - 31.6% for referral hospitals. The differences among these settings were significant at p values shown in Table 5.36

5.4.8 Cross Tabulation of Staffing Inputs by Age. Data is presented below.

Table 5.37 <u>**Perceptions of Staffing Inputs by Age**</u>

VARIABLE DESCRIPTORS	24-30 YRS	31-40 YRS	41+ YRS	P	N =
Qualified nurses support student learning					
• Agree	41 (36.9%)	41 (73.2%)	22 (78.6%)		
• Undecided	9 (8.1%)	5 (8.9%)	-		
• Disagree	61 (55.0%)	10 (17.9%)	6 (21.4%)	0.000	195
Nurses collaborate in selecting learning experiences					
• Agree	69 (62.2%)	34 (64.2%)	24 (82.8%)		
• Undecided	5 (4.5%)	9 (17.0%)	1 (3.4%)		
• Disagree	37 (33.3%)	10 (18.9%)	4 (13.8%)	0.006	193
Nurses willing to guide and supervise students					
• Agree	62 (55.9%)	43 (76.8%)	23 (79.3%)		
• Undecided	5 (4.5%)	3 (5.4%)	1 (3.4%)		
• Disagree	44 (39.6%)	10 (17.9%)	5 (17.2%)	0.022	196
Lecturers are available only to evaluate students					
• Agree	80 (72.1%)	27 (48.2%)	11 (40.7%)		
• Undecided	2 (1.8%)	2 (3.6%)	1 (3.7%)		
• Disagree	29 (26.1%)	27 (48.2%)	15 (55.6%)	0.006	194

Data presented in Table 5.37 above indicate that the majority of respondents agreed with most of the items on staffing inputs. Once again, agreements were varied from age group to the other. The age group 24- 30 years agreements ranged from 36.9% - 72.1%, for the age group 31- 40 years, agreement was between 48.2% - 76.8%, while for the 41+ years it was 40.7% - 82.8%. As can be seen from the same Table, the disagreements also varied by age groups. The age group 24- 30 years had 55.0% disagreeing that qualified nurses support student learning. For the rest of the items, 26.1% - 39.6% disagreed in the same age group. Another 55.6% of the 41+ years disagreed that lecturers were available only to evaluate students. The differences among age groups were significant at p values reflected in Table 5.37.

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5.4.9 Cross Tabulation of Staffing Inputs by Gender. Findings are presented in table that follow.

Table 5.38   Perceptions of Staffing Inputs by Gender

VARIABLE DESCRIPTOR	MALE	FEMALE	P	N =
Qualified nurses support students • **Agree** • **Undecided** • **Disagree**	 32 (36.0%) 8 (9.0%) 49 (55.1%)	 74 (67.3%) 7 (6.4%) 29 (26.4%)	 0.000	 199
Nurses are willing to collaborate • **Agree** • **Undecided** • **Disagree**	 56 (61.5%) - 35 (38.5%)	 72 (67.9%) 15 (14.2%) 19 (17.9%)	 0.000	 197
Nurses are willing to guide and supervise students • **Agree** • **Undecided** • **Disagree**	 45 (50.0%) 3 (3.3%) 42 (46.7%)	 85 (77.3%) 6 (5.5%) 19 (17.3%)	 0.000	 200

Table 5.38 reflects that most (50-61.5%), of the males agreed with two items. The majority (67.3-77.3%) of the females agreed with all staffing inputs. On the other hand 46.7% - 55.1% of the male respondents disagreed, while only 17.3% - 26.4% of the females disagreed. The differences between male and female respondents were significant at p values indicated in Table 5.38

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5.4.10 Cross Tabulation of staffing Inputs by Qualification. Findings are presented in the table below.

Table 5.39   Perceptions of Staffing Inputs by Qualification

VARIABLE DESCRIPTOR	SRN/POST BASIC DIPLOMAS	BSN/ BED/ MSN/ MED/ MPH	P	N =
Qualified nurses support student learning				
• Agree	49 (89.1%)	24 (58.5%)		
• Undecided	1 (1.8%)	5 (12.2%)		
• Disagree	5 (9.1%)	12 (29.3%)	0.002	96
Lecturers are available to guide student learning				
• Agree	29 (53.7%)	34 (81.0%)		
• Undecided	2 (3.7%)	1 (2.3%)		
• Disagree	23 (42.6%)	7 (16.7%)	0.019	96

As shown in Table 5.39 above, the majority of respondents, both diploma and degree holders, agreed that qualified nurses support students' learning and that lecturers were available to guide students learning. However, as with previous findings, the agreement levels varied. The diploma holders had 53.7% - 89.1% agreeing, while 58.5% - 81.0% of the degree holders agreed. The disagreements also varied, with 9.1% - 42.6% for diploma holders and 6.7% - 29.3% for degree holders. The differences were significant at p values in Table 5.39.

5.4.11 Cross Tabulation of Staffing Input by Experience. Data is presented below.

Table 5.40   **Perceptions of Staffing Inputs by Experience**

VARIABLE DESCRIPTORS	0-5 YRS	6-15 YRS	16+ YRS	P	N =
Qualified nurses support student learning					
• Agree	37 (36.3%)	39 (69.6%)	30 (83.3%)		
• Undecided	9 (8.8%)	5 (8.9%)	1 (2.8%)		
• Disagree	56 (54.9%)	12 (21.4%)	5 (13.9%)	0.000	194
Nurses are willing to guide and supervise students					
• Agree	56 (54.9%)	41 (73.2%)	30 (81.1%)		
• Undecided	4 (3.9%)	2 (3.6%)	3 (8.1%)		
• Disagree	42 (41.2%)	13 (23.2%)	4 (10.8%)	0.008	195
Lecturers are available only to evaluate					
• Agree	75 (73.5%)	26 (47.3%)	17 (48.6%)		
• Undecided	2 (2.0%)	2 (3.6%)	1 (2.9%)		
• Disagree	25 (24.5%)	27 (49.1%)	17 (48.6%)	0.009	192

Data in Table 5.40 reflect that the 0-5 years of experience agreed with two items and disagreed with one. About 24.5% - 54.9% disagreed that qualified nurses support student learning, were willing to guide and supervise students. Most of the group 6-15 years of experience, on the other hand, agreed (47.3% - 73.2%) that qualified nurses supported students' learning, were willing to guide students and supervise students and the lecturers were available to evaluate students. A range of 48.6% - 83.3% of the 16+ years of experience also agreed with the above items. However, for second and third item, disagreements varied a lot among the different experience levels. The differences were significant at p values reflected in Table 5.40.

5.4.12 Cross Tabulation of Staffing Input by Position. Findings are presented in the table that follows.

Table 5.41   Perceptions of Staffing Inputs by Positions

VARIABLE DESCRIPTOR	STUDENTS	STUDENT NURSE/ NURSE MANAGER	LECTURER	P	N =
Qualified nurses support students					
• Agree	27 (30.3%)	54 (88.5%)	24 (57.1%)		
• Undecided	9 (9.0%)	2 (3.3%)	5 (11.9%)		
• Disagree	54 (60.7%)	5 (8.2%)	13 (31.0%)	0.000	192
Unit staffed with qualified allied professionals					
• Agree	38 (42.7%)	39 (66.1%)	14 (33.3%)		
• Undecided	14 (15.7%)	7 (11.9%)	4 (9.5%)		
• Disagree	37 (41.6%)	13 (22.0%)	24 (57.1%)	0.003	190
Nurses collaborate to select learning experiences					
• Agree	56 (62.2%)	44 (75.9%)	23 (54.8%)		
• Undecided	4 (4.4%)	9 (15.5)	2 (4.8%)		
• Disagree	30 (33.3%)	5 (8.6%)	17 (40.5%)	0.000	190
Nurses are willing to guide and supervise students					
• Agree	48 (53.9%)	55 (90.2%)	24 (55.8%)		
• Undecided	4 (4.5%)	2 (3.3%)	2 (4.7%)		
• Disagree	37 (41.6%)	4 (6.6%)	17 (39.5%)	0.000	193
Lecturers available only to evaluate					
• Agree	64 (71.9%)	34 (57.6%)	18 (42.9%)		
• Undecided	1 (1.1%)	4 (6.8%)	-		
• Disagree	24 (27.0%)	21 (35.6%)	24 (57.1%)	0.001	190

Findings reflected in Table 5.41 above reveal that although the majority of respondents agreed with staffing inputs, levels of agreement differed according to position. Between 53.9%-71.9% of the students agreed that nurses collaborate to select learning experiences, were willing to guide and supervise students, and that lecturers were only available to evaluate students. About 27.0% - 60.7% of the students disagreed.

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Most nurse managers 57.6% - 88.5% agreed with all items, with only 6.6% - 35.6% disagreeing. A smaller number of the nurse lecturers (54.5% - 57.1%) agreed with three items, while 57.7% disagreed that clinical units were staffed with qualified allied professionals, and that lecturers were available only to evaluate students. Responses among these groups were significantly different at p values shown in Table5.41.

5.4.13 Cross Tabulation of Nurse Managers' Commitment by Age. Findings are presented below

Table 5.42 <u>**Perceptions of Nurse Managers' Commitment by Age**</u>

VARIABLES	24-30	31-40	40 YRS+	P	N =
Nurse Manager flexible to student time in setting					
• Agree	58 (51.8%)	47 (85.5%)	25 (86.2%)		
• Undecided	17 (15.2%)	4 (7.3%)	-		
• Disagree	37 (33.0%	4 (7.3%)	4 (13.8%)	0.000	196
Nurse Manager has ward program for teaching students					
	19 (17.0%)	19 (33.9%)	11 (39.3%)		
• Agree	4 (3.6%)	3 (5.4%)	3 (10.7%)		
• Undecided	89 (79.5%)	34 (60.7%)	14 (50.0%)	0.011	196
• Disagree					
Nurse Manager devotes time to teaching students					
• Agree	23 (20.5%)	18 (33.3%)	15 (53.6%)		
• Undecided	3 (2.7%)	10 (18.5%)	3 (10.7%)		
• Disagree	86 (76.8%)	26 (48.1%)	10 (35.7%)	0.000	194
Nurse Manager feels teaching is the work of lecturer					
• Agree	28 (25.2%)	20 (36.4%)	16 (55.2%)		
• Undecided	12 (10.8%)	5 (9.1%)	3 (10.3%)		
• Disagree	71 (64.0%)	30 (54.4%)	10 (34.5%)	0.036	195
Nurse Manager ensures safe environment for patient care					
• Agree	43 (38.4%)	49 (90.7%)	22 (78.6%)		
• Undecided	4 (3.6%)	4 (7.4%)	2 (7.1%)		
• Disagree	65 (58.0%)	1 (1.9%)	4 (14.3%)	0.000	194

VARIABLES	24-30	31-40	40 YRS+	P	N =
Nurse Manager counsels staff					
• Agree	62 (55.4%)	37 (66.1%)	16 (57.1%)		
• Undecided	4 (3.6%)	6 (10.7%)	8 (28.6%)		
• Disagree	46 (41.1%)	13 (23.2%)	4 (14.3%)	0.000	196
Nurse Manager checks on adequacy of facilities and equipment for patient care					
• Agree	49 (44.1%)	51 (91.1%)	19 (65.5%)		
• Undecided	8 (7.2%)	-	3 (10.3%)		
• Disagree	54 (48.6%)	5 (8.9%)	7 (24.1%)	0.000	196

As reflected in Table 5.42 above, 58.0% - 79.5% of the respondents in the age group 24-30 years disagreed with four of the nurse managers' commitment descriptors, while just over 50% (51.8% - 55.4%) agreed with three items. This age group particularly disagreed that nurse managers had ward programmes for teaching students, that nurse managers devote time to teaching students and that nurse managers feel teaching is the work of lecturers. On the item nurse managers ensure safe environment for patient care, 58.0% disagreed. The same age group however agreed that nurse managers were flexible to students' time in clinical settings, and that nurse managers counsel staff.

The age group 31- 40 years on the other hand agreed (66.1% - 91.1%) with four items. These were that nurse managers were flexible to students' time in the clinical area, they ensured safe environment for patient care, counsel staff and checked on adequacy of facilities for patient care. About 54.5% - 60.7% however disagreed that nurse managers had programs for teaching students and that nurse managers feel teaching was the work of lecturers. The majority of the 41+ years (53.6% - 86.2%) on the contrary agreed with all but one item on nurse manager's commitment.

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The only item they disagreed with was that nurse managers had ward programs for teaching students. The differences among the age groups were significant at p values reflected on Table 5.42.

5.4.14 Cross Tabulation of Nurse Manager's Commitment by Gender. Data is presented in the table below.

Table 5.43   **Perceptions of Nurse Managers' Commitment by Gender**

VARIABLES DESCRIPTORS	MALE	FEMALE	P	N =
Nurse Manager flexible to student time in setting				
• Agree	47 (51.6%)	85 (78.0%)		
• Undecided	12 (13.2%)	10 (9.2%)		
• Disagree	32 (35.2%)	14 (12.8%)	0.000	200
Nurse Manager devotes time to teaching				
• Agree	17 (18.7%)	40 (37.4%)		
• Undecided	3 (3.3%)	13 (12.1%)		
• Disagree	71 (78.0%)	54 (50.5%)	0.000	198
Nurse manager role models care				
• Agree	41 (46.1%)	73 (67.0%)		
• Undecided	5 (5.6%)	10 (9.2%)		
• Disagree	43 (48.3%)	26 (23.9%)	0.001	198
Nurse Manager ensures safe environment				
• Agree	28 (31.1%)	89 (82.4%)		
• Undecided	5 (5.6%)	6 (5.6%)		
• Disagree	57 (63.3%)	13 (12.0%)	0.000	198
Nurse manager counsels staff				
• Agree	50 (54.9%)	66 (60.6%)		
• Undecided	3 (3.3%)	16 (14.7%)		
• Disagree	38 (41.8%)	27 (24.8%)	0.003	200
Nurse Manager counsels students				
• Agree	56 (61.5%)	82 (75.2%)		
• Undecided	4 (4.4%)	8 (7.3.7%)		
• Disagree	31 (34.1 %)	19 (17.4%)	0.022	200

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VARIABLES DESCRIPTORS	MALE	FEMALE	P	N =
Nurse Manager checks on adequacy of facilities and equipment for patient care				
• Agree	42 (46.2%)	80 (73.4%)		
• Undecided	4 (4.4%)	7 (6.4%)		
• Disagree	45 (49.5%)	22 (20.2%)	0.000	200
Nurse Manager co ordinates team work for patient care				
• Agree	61 (67.8%)	100 (90.9%)		
• Undecided	4 (4.4%)	2 (1.8%)		
• Disagree	25 (27.8%)	8 (7.3%)	0.000	200
Nurse manager coordinates team to teach				
• Agree	42 (46.7%)	79 (73.1%)		
• Undecided	1 (1.1%)	7 (6.5%)		
• Disagree	47 (52.2%)	22 (20.4%)	0.000	198

The findings above indicate that males' perceptions were mixed, while females agreed with most of the descriptors of nurse managers' commitment. Seventy eight (78.0%), 63.3%and 52.2%of the males disagreed that nurse managers devoted time to teaching that nurse managers ensured safe environments for patient care and that nurse managers coordinate teams for teaching respectively. The majority of the female respondents (60.6% – 90.9%) agreed with most of the items, except one, that nurse managers devoted time to teaching. The differences between males and females were significant at p values as indicated in Table 5.43.

5.4.15 Cross Tabulations of Nurses Manager's Commitment by Position. Data is

presented below.

Table 5.44 <u>**Nurse Manager's Commitment by Position**</u>

VARIABLES	STUDENT	STAFF/NURSE MANAGER	LECTURER	P	N =
Nurse Manager orientates students					
• Agree	76 (84.4%)	59 (96.7%)	34 (79.1%)		
• Undecided	2 (2.2%)	2 (40.0%)	1 (2.3%)		
• Disagree	12 (13.3%)	-	8 (18.6%)	0.024	194
Nurse Manager has ward program for teaching					
• Agree	16 (17.8%)	29 (49.2%)	4 (9.3%)		
• Undecided	3 (3.3%)	5 (8.5%)	4 (9.3%)		
• Disagree	71 (78.9%)	25 (42.4%)	35 (81.4%)	0.000	192
Nurse Manager devotes time to teaching					
• Agree	16 (17.8%)	31 (52.5%)	9 (21.4%)		
• Undecided	3 (3.3%)	9 (15.3%)	5 (11.9%)		
• Disagree	71 (78.9%)	19 (32.2%)	28 (66.7%)	0.000	191
Nurse manager feel teaching is work of lecturers					
• Agree	24 (27.0%)	19 (31.7%)	22 (51.2%)		
• Undecided	7 (7.9%)	8 (13.3%)	5 (11.6%)		
• Disagree	58 (65.2%)	33 (55.0%)	16 (37.2%)	0.035	192
Nurse Manager attaches importance to student learning					
• Agree	47 (52.2%)	51 (85.0%)	19 (44.2%)		
• Undecided	5 (5.6%)	3 (5.0%)	5 (11.6%)		
• Disagree	38 (42.2%)	6 (10.0%)	19 (44.2%)	0.000	193
Nurse Manager role models care					
• Agree	45 (51.1%)	52 (86.7%)	16 (37.2%)		
• Undecided	3 (3.4%)	2 (3.3%)	7 (16.3%)		
• Disagree	40 (45.5%)	6 (10.0)	20 (46.5%)	0.000	191
Nurse Manager ensures safe environment					
• Agree	34 (37.8%)	56 (93.3%)	26 (63.4%)		
• Undecided	1 (1.1%)	2 (3.3%)	7 (17.1%)		
• Disagree	55 (61.1%)	2 (3.3%)	8 (19.5%)	0.000	191

VARIABLES	STUDENT	STAFF/NURSE MANAGER	LECTURER	P	N =
Nurse manager counsels staff					
• Agree	50 (55.6%)	48 (78.7%)	14 (33.3%)		
• Undecided	4 (4.4%)	7 (11.5%)	8 (19.0%)		
• Disagree	36 (40.0%)	6 (9.8%)	20 (47.6%)	0.000	193
Nurse Manager counsels students					
• Agree	57 (63.3%)	52 (86.7%)	23 (53.5%)		
• Undecided	5 (5.6%)	4 (6.7%)	3 (7.0%)		
• Disagree	28 (31.1%)	4 (6.7%)	17 (39.5%)	0.001	193
Nurse Manager checks on adequacy of facilities and equipment for patient care					
• Agree	34 (38.2%)	58 (95.1%)	26 (60.5%)		
• Undecided	7 (7.9%)	1 (1.6%)	3 (7.0%)		
• Disagree	48 (53.9%)	2 (3.3.)	14 (32.6%)	0.000	193
Nurse Manager coordinates team for patient care					
• Agree	63 (70.8%)	60 (98.4%)	34 (79.1%)		
• Undecided	2 (2.2%)	-	2 (4.7%)		
• Disagree	24 (27.0%)	1 (1.6%)	7 (16.3%)	0.000	193
Nurse manager coordinates team for teaching					
• Agree	49 (55.1%)	52 (88.1%)	19 (44.2%)		
• Undecided	1 (1.1%)	4 (6.8%)	4 (9.3%)		
• Disagree	39 (43.8%)	3 (5.1%)	20 (46.5%)	0.000	191

Findings in the table above reflect that majority (58.9% - 78.9% of the students disagreed with five of the nurse managers' commitment descriptors. Staff/ nurse managers agreed with almost all of the descriptors. Nurse lecturers on the other hand had mixed views. Specifically, most students disagreed that nurse managers had ward programs for teaching, devoted time to teaching, felt teaching was the work of lecturers, that nurse managers ensured safe environment for patient care and that nurse managers checked adequacy of facilities and equipment for patient care.

Another majority (51.1% - 84.4%) of the students however agreed that nurse managers orientated students, attached importance to students learning, role modelled

care, counselled staff, counselled students and coordinated the team for both patient care and for teaching. An overwhelming majority of the staff/ nurse managers, (52.5% - 98.4%) however, agreed with all but two of the nurse managers' commitment descriptors, while an additional 52.5% agreed that nurse managers devoted time to teaching. Descriptors they disagreed with were that nurse managers felt teaching was the work of lecturers, and that the nurse manager had programs for teaching.

The nurse lecturers also agreed with some items and disagreed with others. A moderate majority (51.2% - 79.1%) agreed, with most items, while another 66.7% - 81.4% disagreed with two items, that nurse managers had ward programs for teaching and that nurse managers devoted time to teaching.

The differences are significant at p values as reflected in Table 5.44 above.

5.4.16 Cross Tabulation of Nurse Managers' Commitment by Qualification. Findings are presented in the table that follow.

Table 5.45   Perception of Nurse Managers Commitment by Qualification

VARIABLE DESCRIPTOR	SRN/PBDIP	BSN/MSN	P	N =
Nurse manager feel teaching is work of lecturers				
• Agree	17 (31.5%)	24 (57.1%)		
• Undecided	8 (14.5%)	4 (9.5%)		
• Disagree	29 (53.7%)	14 (33.3%)	0.041	96
Nurse Manager attaches importance to student learning				
• Agree	42 (77.8%)	22 (52.4%)		
• Undecided	4 (7.4%)	4 (9.5%)		
• Disagree	8 (14.8%)	16 (38.1%)	0.023	96

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VARIABLE DESCRIPTOR	SRN/PBDIP	BSN/MSN	P	N =
Nurse Manager role models care • Agree • Undecided • Disagree	45 (81.8%) 3 (5.5%) 7 (12.7%)	20 (48.8%) 5 (12.2%) 16 (39.0%)	0.002	96
Nurse Manager checks on adequacy of facilities for patient care • Agree • Undecided • Disagree	50 (90.9%) 1 (1.8%) 4 (7.3%)	30 (71.4%) 2 (4.8%) 10 (23.8%)	0.043	97
Nurse manager counsels staff • Agree • Undecided • Disagree	40 (72.7%) 8 (14.5%) 7 (12.7%)	19 (46.3%) 7 (17.1%) 15 (36.6%)	0.013	96
Nurse Manager co-ordinates team for teaching • Agree • Undecided • Disagree	44 (81.5%) 4 (7.4%) 6 (11.1%)	23 (56.1%) 4 (9.8%) 14 (34.1%)	0.016	95

Data on perceptions of nurse manager's commitment by qualification reveal significant differences between basic and post basic diploma holders and basic and postgraduate degree holders (BSN/MSN). The majority of the diploma holders (72.7% - 90.9%) agreed with most of the nurse managers' commitment descriptors. These included, nurse managers attached importance to students learning, role modelled care, checked on adequacy of facilities for patient care, coordinated the team for teaching and counselled staff. Only 53.7% disagreed that nurse managers felt teaching was the work of lecturers. The degree holders (52.4% - 71.4%) agreed with similar items as diploma holders, but had mixed perceptions on two. These were nurse manager's role modelled care and nurse managers counsels staff. The differences between these groups were significant as shown in table 5.45.

5.4.17 Cross Tabulation of Nurse Managers' Commitment by experience. Data is

presented in the table below

Table 5.46   <u>Perceptions of Nurse Managers' Commitment by Experience</u>

VARIABLES	0-5 YRS	6-15 YRS	16 YRS+	P	N =
Nurse Manager is flexible to students time					
• Agree	54 (52.4%)	42 (76.4%)	35 (94.6%)		
• Undecided	16 (15.5%)	6 (10.9%)	-		
• Disagree	33 (32.0%)	7 (12.7%)	2 (5.4%)	0.000	195
Nurse Manager has ward program for teaching					
• Agree	18 (17.5%)	16 (29.1%)	15 (41.7%)		
• Undecided	3 (2.9%)	4 (7.3%)	5 (13.9%)		
• Disagree	82 (79.6%)	35 (63.6%)	16 (44.4%)	0.00	194
Nurse Manager devotes time to teaching students					
• Agree	20 (19.4%)	18 (33.3%)	18 (50.0%)		
• Undecided	3 (2.9%)	8 (14.8%)	6 (16.7%)		
• Disagree	80 (77.7%)	28 (51.9%)	12 (33.3%)	0.000	193
Nurse manager feel teaching is work of lecturers					
• Agree	27 (26.5%)	25 (45.5%)	14 (37.8%)		
• Undecided	10 (9.8%)	3 (5.5%)	8 (21.6%)		
• Disagree	65 (63.7%)	27 (49.1%)	15 (40.5%)	0.012	194
Nurse Manager role models care					
• Agree	52 (51.0%)	39 (70.9%)	23 (62.2%)		
• Undecided	5 (4.9%)	5 (9.1%)	3 (8.1%)		
• Disagree	45 (44.1%)	11 (20.0%)	11 (29.7%)	0.042	194
Nurse Manager ensures safe environment					
• Agree	40 (38.8%)	47 (87.0%)	30 (83.3%)		
• Undecided	2 (1.9%)	5 (9.3%)	3 (8.3%)		
• Disagree	61 (59.2%)	2 (3.7%)	3 (8.3%)	0.000	193
Nurse manager counsels staff					
• Agree	55 (53.4%)	34 (60.7%)	24 (66.7%)		
• Undecided	3 (2.9%)	7 (12.5%)	8 (22.2%)		
• Disagree	45 (43.7%)	15 (26.8%)	4 (11.1)	0.000	195
Nurse Manager co-ordinates team for patient care					
• Agree	72 (70.6%)	52 (92.9%)	34 (91.9%)		
• Undecided	2 (2.0%)	1 (1.8%)	1 (2.7%)		
• Disagree	28 (27.5%)	3 (5.4%)	2 (5.4%)	0.001	195

VARIABLES	0-5 YRS	6-15 YRS	16 YRS+	P	N =
Nurse manager coordinates team for teaching					
• Agree	56 (54.9%)	40 (74.1%)	24 (64.9%)		
• Undecided	2 (2.0%)	5 (9.3%)	2 (5.4%)		
• Disagree	44 (43.1%)	9 (16.7%)	11 (29.7%)	0.007	193

As reflected in Table 5.46 above, respondents with 0-5 years of experience have disagreed with most of the descriptors, differing with other experience levels. Specific items they differed with were that 79.6% disagreed that nurse managers had ward programs for teaching, for nurse managers devoted time to teaching, 77.7% in same experience level disagreed. While, 63.7% disagreed that nurse managers felt teaching was the work of lecturers. Conversely, 51.0% - 70.6% of the same experience level agreed that nurse managers were flexible to students' time in the clinical area; role modelled care, counselled staff and coordinated the teams for both patient care and teaching. Another 59.2% of the same experience level disagreed that nurse managers ensured safe environment.

The majority (60.7% - 92.9%) of the 6- 15 years of experience agreed with most of the nurse managers' commitment descriptors. However, they disagreed that nurse managers had ward programs for teaching (63.6%) and that nurse managers devoted time to teaching (51.4%). But were not sure on nurse managers felt teaching was the work of lecturers.

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Most of the 16+ years of experience (50% - 94.6%) also agreed with nurse managers' commitment descriptors. However, they seemed not sure on nurse managers feeling teaching was the work of lecturers.

The differences among the three groups were significant at p values reflected Table 5.46.

5.4.18 Cross Tabulation of Nurse Managers Commitment by Type of Setting. Findings are presented in the next table.

Table 5.47   Perceptions of Nurse Manager's Commitment by Type of Setting

VARIABLES DESCRIPTORS	CLINIC	D/ HOSPITAL	R/ HOSP	T/ INS	P	N =
Nurse Manager has ward program for teaching						
• Agree	6 (21.4%)	12 (21.4%)	27 (36.0%)	3 (9.7%)		
• Undecided	3 (10.7%)	3 (5.4%)	2 (2.7%)	4 (12.9%)		
• Disagree	19 (67.9%)	41 (73.2%)	46 (61.3%)	24 (77.4%)	0.048	190
Nurse Manager does rounds with students						
• Agree	11 (45.8%)	35 (61.4%)	44 (59.5%)	8 (26.7%)		
• Undecided	7 (29.2%)	8 (14.0%)	6 (8.1%)	3 (10.0%)		
• Disagree	6 (25.0%)	14 (24.6%)	24 (32.4%)	19 (63.3%)	0.001	185
Nurse Manager counsels students						
• Agree	18 (64.3%)	38 (67.9%)	61 (80.3%)	13 (41.9%)		
• Undecided	2 (7.1%)	3 (5.4%)	3 (3.9%)	4 (12.9%)		
• Disagree	8 (28.6%)	15 (26.8%)	12 (15.8%)	14 (45.2%)	0.017	191
Nurse Manager checks on adequacy of facilities for patient care						
• Agree	22 (78.6%)	40 (71.4%)	58 (76.3%)	13 (41.9%)		
• Undecided	-	4 (7.1%)	2 (2.6%)	4 (12.9%)		
• Disagree	6 (21.4%)	12 (21.4%)	16 (21.1%)	14 (45.2%)	0.011	191

VARIABLES DESCRIPTORS	CLINIC	D/ HOSPITAL	R/ HOSP	T/ INS	P	N =
Nurse manager counsels staff						
• Agree	18 (64.3%)	32 (56.1%)	54 (71.1%)	8 (26.7%)		
• Undecided	4 (14.3%)	5 (8.8%)	3 (3.9%)	7 (23.3%)		
• Disagree	6 (21.4%)	20 (35.1%)	19 (25.0%)	15 (20.0%)	0.001	191
Nurse Manager coordinates team for teaching						
• Agree	20 (71.4%)	30 (54.5%)	54 (72.0%)	14 (45.2%)		
• Undecided	1 (3.6%)	2 (3.6%)	1 (1.3%)	5 (16.1%)		
• Disagree	7 (25.0%)	23 (41.8%)	20 (26.7%)	12 (38.7)	0.009	189

Table 5.47 above reflects that although percentages are not that high, there are significant differences in how nurse managers were perceived in referral hospitals, district hospitals, clinics and training institutions. Majority of the respondents 61.3% - 77.4%, across settings disagreed that nurse managers had programs for teaching. About 59.5% - 61.4% agreed that nurse managers took rounds with students for district and referral hospitals, while 63.3% at training institutions disagreed for nurse manager, does ward rounds with students.

On whether nurse manager's counsel students, 46.9% from referral hospitals agreed and 43.6% agreed that nurse managers checked adequacy of facilities and equipment for patient care at referral hospitals. Lastly 45.8% agreed that nurse managers at referral hospitals coordinated teams for teaching. The differences between referral hospitals and other types of settings were significant as reflected by the significance level in table 5.47

5.4.19 Cross Tabulation of Interpersonal Relations by Age. Data is presented in the table below.

Table 5.48   Cross Tabulation of Interpersonal Relationships by Age

VARIABLE: INTERPERSONAL	24-30 YRS	31-40 YRS	41YRS+	P	N =
Nurse Manager explains instructions from above					
• Agree	68 (61.3%)	43 (79.6%)	25 (86.2%)		
• Undecided	19 (17.1%)	7 (13.0%)	4 (13.8%)		
• Disagree	24 (21.6%)	4 (7.4%)	-	0.009	194
All staff in the unit feel part of the team					
• Agree	67 (60.4%)	43 (79.6%)	25 (86.2%)		
• Undecided	12 (10.8%)	3 (5.6%)	3 (10.3%)		
• Disagree	32 (28.8%)	8 (14.8%)	1 (3.4%)	0.012	194
The unit is a happy environment for both patients and staff					
• Agree	41 (36.6%)	43 (79.6%)	22 (75.9%)		
• Undecided	11 (9.8%)	2 (3.7%)	2 (6.9%)		
• Disagree	60 (53.6%)	9 (16.7%)	5 (17.2%)	0.000	195
Patients are given enough time to rest					
• Agree	50 (45.0%)	38 (70.4%)	23 (73.9%)		
• Undecided	14 (12.6%)	5 (9.3%)	5 (17.2%)		
• Disagree	47 (42.3%)	11 (20.4%)	1 (24.1%)	0.000	194
The unit has too many rituals					
• Agree	40 (35.7%)	29 (53.7%)	17 (58.6%)		
• Undecided	3 (2.7%)	4 (7.4%)	5 (17.2%)		
• Disagree	69 (61.6%)	21 (38.9%)	7 (24.1%)	0.000	195
Students are expected to obey registered nurses instructions					
• Agree	56 (50.0%)	5 (9.1%)	6 (20.7%)		
• Undecided	5 (4.5%)	4 (7.3%)	4 (13.8%)		
• Disagree	51 (45.5%)	46 (83.6%)	19 (65.5%)	0.000	196
Nurse manager regards students as workers					
• Agree	73 (65.2%)	17 (30.9%)	10 (34.5 %)		
• Undecided	3 (2.7%)	3 (5.5%)	2 (6.9%)		
• Disagree	36 (32.1%)	35 (63.6%)	17 (58.6%)	0.000	196
Nurse manager expects students to provide care					
• Agree	72 (64.3%)	9 (16.4%)	9 (31.0%)		
• Undecided	2 (1.8%)	3 (5.5%)	2 (6.9%)		
• Disagree	38 (33.9%)	43 (78.2%)	18 (62.1%)	0.000	196

VARIABLE: INTERPERSONAL	24-30 YRS	31-40 YRS	41YRS+	P	N =
Student nurses learn more from other students					
• Agree	50 (45.5%)	10 (18.2%)	6 (21.4%)		
• Undecided	11 (10.0%)	3 (5.5%)	3 (10.4%		
• Disagree	49 (44.5%)	42 (76.4%)	19 (67.9%)	0.001	193
Unit shifts allow students to gain experience					
• Agree	96 (87.3%)	44 (83.0%)	24 (82.8%)		
• Undecided	1 (0.9%)	5 (9.4)	4 (13.8%)		
• Disagree	13 (11.8%)	4 (7.5%)	1 (3.4%)	0.018	192
Students are allowed to ask questions					
	84 (76.4%)	52 (94.5%)	26 (89.7%)		
• Agree	7 (6.4%)	-	2 (6.9%)		
• Undecided	19 (17.3%)	3 (5.5%)	1 (3.4%)	0.021	194
• Disagree					
Students questions are answered satisfactorily					
• Agree	77 (68.8%)	45 (81.8%)	26 (89.7%)		
• Undecided	2 (1.8%)	5 (9.1%)	-		
• Disagree	33 (29.5%)	5 (9.1%)	3 (10.7%)	0.001	196
Only doctors answer student nurses questions					
• Agree	70 (63.0%)	9 (16.4%)	2 (6.9%)		
• Undecided	9 (8.1%)	4 (7.3%)	-		
• Disagree	32 (28.8%)	42 (76.4%)	27 (93.1%)	0.000	195

Data as presented in Table 5.48 above reveal that age group 24-30 years responded differently from other age groups on most items. However, the three age groups agreed with interpersonal relations descriptors for five items. For these items "nurse managers explained instructions from above offices, 61.3% - 86.2% agreed, all staff in the unit felt part of the team, another 60.4% - 86.2% agreed. An overwhelming majority (86.7 – 87.3%) agreed that unit shifts allowed students to gain experience.

Another 76.4% - 94.5% across age groups agreed that students were allowed to ask questions, while 68.8% - 89.7% agreed that students' questions were answered satisfactorily.

Contrary to the above responses however, there were some differences on perceptions of interpersonal relations described by the rest of the items. The age groups 31- 40 years and 41+ years further agreed that the unit was a happy environment for both patients and staff (75.9% - 79.6%), that patients were allowed enough time to rest (70.4%- 79.3%) and that units had too many routine rituals (53.7% - 58.6%). The same age groups however, disagreed that students were expected to obey registered nurses without questions (65.5% - 83.6%), that nurse managers regarded students as workers rather than learners (58.6% - 63.6%), that nurse managers expected students to provide care without supervision (62.1% - 78.2%), that they learn more from other students rather than from staff (67.9% - 76.4%) and that only doctors answer students questions satisfactorily (76.4% - 93.1%).

The age group 24- 30 years, on the other hand differed with the last two age groups in that they agreed or disagreed on different items. This particular age group (53.6%) disagreed that the unit was a happy environment for both patients and staff. Sixty- one (61.6%) disagreed that the unit had too many rituals. While 50.0% agreed that students were expected to obey registered nurses' instructions without questions and 65.2% agreed that nurse managers regarded students as workers. Furthermore, 64.3% agreed that nurse managers expected students to provide care without supervision, while 63.1% agreed that only doctors answer students' questions satisfactorily.

The differences among the three age groups were significant as reflected by p values in Table 5.48.

5.4.20 Cross Tabulation of Interpersonal Relations by Gender. Findings are presented in the following table 5.49

Table 5.49   Perceptions of Interpersonal Relations by Gender

VARIABLE DESCRIPTOR	MALE	FEMALE	P	N =
All staff in the unit feel part of the team				
• Agree	49 (54.4%)	88 (81.5%)		
• Undecided	11 (12.2%)	9 (8.3%)		
• Disagree	30 (33.3%)	11 (10.2%)	0.000	198
The unit is a happy environment for both patients and staff				
• Agree	30 (33.0%)	79 (73.1%)		
• Undecided	9 (9.9%)	6 (5.6%)		
• Disagree	52 (57.1%)	23 (21.3%)	0.000	199
Patients are given enough time to rest				
• Agree	41 (45.6%)	73 (67.6%)		
• Undecided	11 (12.2%)	14 (13.0%)		
• Disagree	38 (42.2%)	21 (19.4%)	0.001	198
The unit has too much routines				
• Agree	33 (36.3%)	55 (51.4%)		
• Undecided	4 (4.4%)	8 (7.5%)		
• Disagree	54 (59.3%)	44 (41.1%)	0.036	198
Students are expected to obey registered nurses				
• Agree	49 (53.8%)	18 (16.5%)		
• Undecided	5 (5.5%)	10 (9.2%)		
• Disagree	37 (40.7%)	81 (74.3%)	0.000	200
Nurse manager regards students as workers				
• Agree	56 (61.5%)	45 (41.3%)		
• Undecided	3 (3.3%)	5 (4.6%)		
• Disagree	32 (35.2%)	59 (54.1%)	0.016	200
Nurse manager expects students to provide care				
• Agree	56 (61.5%)	35 (32.1%)		
• Undecided	3 (3.3%)	4 (3.7%)		
• Disagree	32 (35.2%)	70 (64.2%)	0.000	200

VARIABLE DESCRIPTOR	MALE	FEMALE	P	N =
Unit shifts allow students to learn • Agree • Undecided • Disagree	 79 (87.8%) 1 (1.1%) 10 (10.1%)	 88 (83.0%) 10 (9.4%) 8 (7.5%)	 0.033	 196
Students are allowed to ask questions • Agree • Undecided • Disagree	 65 (73.0%) 7 (7.9%) 17 (19.1%)	 101 (92.7%) 2 (1.8%) 6 (5.5%)	 0.000	 198
Students questions are answered satisfactorily • Agree • Undecided • Disagree	 64 (70.3%) - 27 (29.7%)	 85 (78.0%) 8 (7.3%) 16 (14.7%)	 0.002	 200
Only doctors answer student nurses questions satisfactorily • Agree • Undecided • Disagree	 51 (56.0%) 7 (7.7%) 33 (36.3%)	 31 (28.7%) 7 (6.5%) 70 (64.8%)	 0.000	 199

Data in table 5.49 reveal significant differences among perceptions of interpersonal relations by gender. Both male (54.4%) and females (81.5% agreed that all staff in the unit felt part of the team. Fifty-seven percent (57.1%) of the males disagreed that the unit was a happy environment for both patients and staff and 73.1% females agreed. For both descriptors the differences between males and females were significant at p 0.000. For the item patients were given enough time to rest in between activities, 67.6% females agreed. The differences between males and females for these descriptors were significant at p 0.001. Fifty nine percent (59.3%) of the males disagreed that the units had too many routine rituals, against 51.4% females who agreed, differing significantly at p 0.036

On the contrary, 53.8% of the males agreed that students were expected to obey registered nurses' instructions without question, while 74.3% of the females disagreed. Another 61.5% of males agreed that nurse managers regard students as workers, against 64.2% females who disagreed. Sixty one percent (61.5%) of males agreed that nurse managers expect students to provide care without supervision, while 64.28.6% females disagreed. The differences between males and females on all of these items were significant at the levels reflected in table 5.49.

In the next three items, both male and female respondents agreed with the descriptors. Majority of the males (87.8%) and females (83.0%) agreed that unit shifts allow students to gain the widest possible experiences. Seventy three percent (73.0%) of the males and 92.7% of the females agreed that students were allowed to ask questions. A further 70.3% of the males and 78.6 of the females agreed that student's questions were answered satisfactorily. Finally, 56.0% of the males agreed that only doctors answer student's questions satisfactorily, while 64.8% of the females disagreed. All the differences among males and females were significant at p levels reflected in table 5.49.

5.4.21 Cross Tabulation of Interpersonal Relations by Qualification. Findings are presented below.

Table 5.50   Perceptions of Interpersonal Relationships by Qualification

VARIABLE	SRN/PBDIP	BSN/MSN	P	N =
Nurse manager explains instructions from above				
Agree	51 (94.4%)	29 (70.7%)		
Undecided	2 (3.7%)	9 (22.0%)		
Disagree	1 (1.9%)	3 (7.3%)	0.007	95
Nurse manager expects student nurse to provide care				
Agree	6 (11.1%)	15 (35.7%)		
Undecided	3 (5.6%)	2 (4.8%)		
Disagree	45 (83.3%)	25 (59.7%)	0.014	96

There were only two items, which showed significant differences by qualification (refer to table 5.50 for p values). These were nurse managers explain instructions coming from above, where 94.4% of diploma holders and 70.0% of the degree holders disagreed. For the item nurse managers expected students nurses to provide care without supervision 83.3% of the diploma holders and 59.7% of the degree nurses disagreed. Although both of these two groups agreed with one item and disagreed with the other, their levels of agreement/ disagreements were significant at p values reflected in Table 5.50.

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5.4.22 Cross Tabulation of Interpersonal Relationships by Position. Findings are presented below.

Table 5.51   Perceptions of Interpersonal Relationships by Position

VARIABLE	STUDENTS	STAFF/ N/MANAGER	LECTURER	P	N =
Nurse manager explains instructions from above					
• Agree	52 (58.4%)	55 (93.2%)	28 (65.1%)		
• Undecided	17 (19.1%)	1 (1.7%)	11 (25.6%)		
• Disagree	20 (22.5%)	3 (5.1%)	4 (9.3%)	0.000	191
All staff in the unit feel part of the team					
• Agree	50 (56.2%)	53 (88.3%)	29 (69.0%)		
• Undecided	9 (10.1%)	2 (3.3%)	7 (16.7%)		
• Disagree	30 (73.2%)	5 (8.3%)	6 (14.3%)	0.000	191
The unit is a happy environment for both patients and staff	30 (33.3%)	54 (90.0%)	23 (54.8%)		
• Agree	8 (8.9%)	1 (1.7%)	4 (9.5%)		
• Undecided	52 (37.8%)	5 (8.3%)	15 (35.7%)	0.012	192
• Disagree					
Patients are given enough time to rest					
• Agree	38 (42.7%)	44 (74.6%)	31 (72.1%)		
• Undecided	10 (11.2%)	8 (13.6%)	4 (9.3%)		
• Disagree	41 (46.1%)	7 (11.9%)	8 (18.6%)	0.006	191
The unit has too much routines	31 (34.4)	29 (50.0%)	24 (55.8%)		
• Agree	2 (2.2%)	5 (8.6%)	5 (11.6%)		
• Undecided	57 (63.3%)	24 (41.4%)	14 (32.6%)	0.004	191
• Disagree					
Students are expected to obey registered nurses					
• Agree	51 (56.7%)	4 (6.7%)	11 (25.6%)		
• Undecided	4 (4.4%)	5 (8.3%)	5 (11.6%)		
• Disagree	35 (38.9%)	51 (85.0%)	27 (62.8%)	0.006	193
Nurse managers regard students as workers rather than learners	59 (65.6%)	14 (23.3%)	24 (55.8%)		
• Agree	2 (2.2%)	3 (5.0%)	2 (4.7%)		
• Undecided	29 (32.2%)	43 (71.7%)	17 (39.5%)	0.000	193
• Disagree					

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VARIABLE	STUDENTS	STAFF/ N/MANAGER	LECTURER	P	N =
Nurse manager expects students to provide care					
• Agree	64 (71.1%)	4 (4.6%)	19 (44.2%)		
• Undecided	1 (1.1%)	2 (3.3%)	3 (7.0%)		
• Disagree	25 (27.8%)	54 (90.0%)	21 (48.8%)	0.002	193
Student nurses learn more from other students					
• Agree	41 (46.1%)	8 (13.3%)	16 (38.1%)		
• Undecided	8 (9.0%)	4 (6.7%)	4 (9.5%)		
• Disagree	40 (44.9%)	48 (80.0%)	22 (52.4%)	0.000	191
Unit shifts allow students to gain wide experience					
• Agree	78 (86.7%)	47 (82.5%)	37 (86.0%)		
• Undecided	-	7 (12.3%)	4 (9.3%)		
• Disagree	12 (13.3%)	3 (5.3%)	2 4.78%)	0.007	190
Students are allowed to ask questions					
• Agree	67 (75.3%)	59 (98.3%)	36 (85.7%)		
• Undecided	6 (6.7%)	-	3 (7.1%)		
• Disagree	16 (18.0%)	1 (1.7)	3 (7.1%)	0.001	191
Students questions are answered satisfactorily					
• Agree	59 (65.6%)	52 (86.7%)	33 (76.7%)		
• Undecided	1 (1.1%)	5 (8.3%)	2 (4.7%)		
• Disagree	30 (33.3%)	3 (5.0%)	8 (18.6%)	0.002	193
Only doctors answer student nurses questions satisfactorily	61 (67.8%)	8 (13.6%)	11 (25.6%)		
• Agree	8 (8.9%)	1 (1.7%)	5 (11.6%)		
• Undecided	21 (23.3%)	50 (84.7%)	27 (62.8%)	0.000	192
• Disagree					

Perceptions of interpersonal relationships by position indicate that students consistently differed with either lecturers or nurse managers on most items. To start with, 58.4% of the students, 93.2% of the staff/ nurse managers and 60.1% of the lecturers agreed that nurse managers explained instructions coming from high offices. Similarly, 56.2% of the students, 88.3% of the nurse managers and 69.0% of the lecturers agreed that all staff in the unit felt part of the team.

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The differences among the groups for both items were significant at p value 0.000. Fifty-seven (57.8%) of the students further disagreed the unit was a happy environments for both patients and staff, while 90.0% and 54.8% of staff and lecturers agreed respectively. A further 74.6% of the nurse managers and 72.1% of the lecturers agreed that patients were given enough time to rest, while 50% of the nurse managers and 55.8% of the lecturer agreed that units had too many rituals.

On the other hand, 56.7% of the students agreed that, they (students) were expected to obey registered nurses' instructions without asking questions, when 85.0^ of the nurse managers and 62.8% of the lecturers disagreed. Sixty- five percent (65.6%) of the students and 55.8% of the lecturers agreed that nurse managers regarded students as workers, rather than learners, while 71.7% of the nurse managers disagreed. A further 71.1% of the students agreed that nurse managers expected them (students) to provide care without supervision against 90.0% of the nurse managers who disagreed. Moreover, 80.0% of the nurse managers and 52.4% of the lecturer disagreed that students learn more from other students rather than staff. The differences among students and the other groups on these items were all significant at the p levels reflected on table 5.51

For the next three items, the majority of students, nurse managers and lecturers agreed with the descriptors. Above eighty percent (86.7%) students, 82.5% nurse managers and 86.0% lecturers agreed that the unit shifts allowed students to gain the widest possible experiences. Another 75.3% of the students, 98.3% of the nurse managers and 85.7% of the lecturers agreed that students were allowed to ask questions, while 65.6% of the students, 86.7% of the nurse managers and 76.7% of the lecturers agreed

that students' questions were answered satisfactorily. For the last item, 67.8%

students agreed that only doctors answered students' questions satisfactorily, while

84.7% of the nurse mangers and 62.8% of the lecturer disagreed. The differences

among students and the other groups on these items were all significant at the p levels

reflected on table 5.51.

5.5 QUALITATIVE DATA

5.5.0 Introduction

This section was preceded by the quantitative data analysis, which involved the use of descriptive statistics. The currents section focuses on qualitative data analysis in which narrative words are used to portray the respondents' descriptions

The qualitative data allow the researcher to "collect data on numerous aspects for the situation in order to construct a complete picture," (Mouton & Marais, 1993: 205). Since each individual experiences every situation differently, the approach is suitable in this study as ... *"it assumes that subjectivity is essential for the understanding of human experiences"* (Burns & Grove, 1993: 28).

Qualitative data were not subjected to vigorous qualitative analysis procedures. The reason being that, where expressed views were related to specific questions, not much variation was expected. The main purpose for soliciting these expressions was to validate quantitative findings through method triangulation, and provide richer details, Miles and Huberman (1994). Thus the researcher was open to new lines of thinking and allowed new ideas to provide fresh insight into the problem being studied, in order to "draw conclusions about what constituted the truth," Polit and Hungler (1997:305).

Respondents decided to volunteer for additional information as and when they chose. The differences in population were therefore a result of disparity in total responses for each broad area.

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5.5.1 Descriptions of Units Organisation and Space as they Affect Learning. Data is presented in Table 5.52 below.

Table 5.52   <u>Descriptions of units, which are non-conducive to learning</u>

UNIT DECRIPTIONS	FREQUENCY COUNTS			
	STUDENTS	LECTURERS	NURSE/ MANAGERS	TOTAL/ %
• There is no privacy for patient care. Other patients see and hear what is done on others, patients are uncomfortable	8	10	4	22 (26.8%)
• Some unist are too small, over-crowded and congested. It is difficult to accommodate staff, patients and students, and therefore hindering learning	10	20	20	50 (61.0%)
• There is no space for students belongings	3	4	3	10 (12.2%)
Total	21 (25.6%)	34 (41.5%)	27 (32.9%)	82 (100%)

Data in the preceding Table depicts that a total of eighty-two (82) respondents expressed concern about unit organisation and inadequacy of space as a factor contributing to the non-conducive clinical learning environment. Twenty-two 22(26.8%) of the respondents were concerned that "there is no privacy for patient care, that other patients just see and hear what happens to other patients, making patients uncomfortable."

The majority, 50(61%), described clinical units as "too small, overcrowded and congested," making it difficult to accommodate both staff, patients and students, and thus hindering clinical learning. The concern seemed to be equally worrisome for nurse lecturer's (20) and nurse managers (20), while students were the lowest at 10. Lastly 10(12.2%) raised the issue relating to no space for storing student's belongings. This issue appeared to be of equal concern among the respondents as shown by responses per group in Table 5.52.

5.5.2 Descriptions of learning experiences and how they affect learning.

Table 5.53.   Descriptions of experiences which do not foster learning.

EXPERIENCE DECRIPTIONS	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGERS	TOTAL/ %
• Seriously ill and interesting cases are referred out. •	9	10	5	24 (20.7%)
• There is lack of variety of experiences in most settings which only deal with common conditions, e.g. TB, HIV/AIDS.	11	12	11	34 (29.3%)
• There were no surgical and advanced nursing procedures in most settings, students only learned theoretically	9	9	2	20 (17.2%)
• Patient-student ratios are problematic, not enough patients for a large number of students	12	13	13	38 (32.8%)
Total	41 (35.4%)	44 (37.9%)	31 (26.7%)	116 (100%)

The findings presented in Table above indicated that the 116 respondents who addressed this issue of learning experiences were not happy.

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Out of the total who raised these concerns, 44 (37.9%) were lecturers, 41 (35.9%) were students while 31 (26.7%) were nurse managers. The concerns centred around two main factors, which were *"lack of variety of learning experiences in most settings, and patient-student ratio problems"* where there were many students for inadequate patient populations.

However, respondents expressed specific aspects of these main concerns as:

- *"Seriously ill and interesting cases are referred out (20.7%);*
- *Twenty- nine (29.3%) were concerned about lack of variety of learning experiences in most cases, which forced students to deal only with common conditions such as HIV/ AIDS and TB;*
- *Seventeen (17.2%) described most settings as lacking surgical and advanced nursing procedures thus led students only to learn theoretically;*
- *Lastly, 38 (32.8%) were concerned about patient-student ratios being problematic as there were not enough patients for the large number of students.*

Next, respondents expressed their views on curriculum requirements impacting on clinical learning.

5.5.3 Descriptions of curriculum requirements, which impede clinical learning. Data is presented in Table 5.54 below.

Table 5.54   Curriculum requirements impeding clinical learning

REQUIREMENT DESCRIPTIONS	FREQUENCY COUNTS			
	STUDENTS	**LECTURERS**	**NURSE/ MANAGERS**	**COUNT**
• There are too many year 2 procedures, they are repeat year 1, no time to practice and master skills, it is like going to the unit just for procedures and end up being scolded by lecturers for not finishing and being accused by clinical nurses for being procedure orientated	43	5	2	50 (62.5%)
• Year 2 is loaded with course work, no time for practice, there is too much class in year 2 and not much time for practice	10	4	1	15 (18.75%)
• Clinical time is too short, there is no time for lecturers to teach, clinical staff criticise students as procedure orientated	5	10	0	15 (18.75%)
Total	58 (72.5%)	19 (23.8%)	3 (3.8)	80 (100%)

As data above indicates, 80 respondents described curriculum issues, which impede clinical learning, and they include:

> *"Too many procedures for year 2, even repeating those done in year 1 and there was no time to practise and master skills." Students ended up being scolded for not finishing procedures in time by lecturers or accused of being procedure orientated by clinical nurses. Second year was described as loaded with coursework, denying students time to practice clinical skills.*

Clinical time was described as too short, depriving students contact with lecturers Out of the eighty who expressed this concern, 58 (72.5%) were students, while only 19 (23.8%) were nurse lecturers, and 3(3.8%) were nurse managers. Respondents then shifted to resource adequacy and availability as they affect learning.

5.5.4 Descriptions of resource concerns, which impede clinical learning. Data is presented in the table below.

Table 5.55   **Resource concerns impeding learning.**

RESOURCE DESCRIPTIONS	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Resources not adequate for patient care; some units depend on students' equipment's.	8	8	4	20 (27.8%)
• Resources not enough for students learning. Students end up improvising. Some equipment's are reserved for use by qualified staff only.	15	11	10	36 (50.0%)
• Some equipment's are not available in certain settings, although non-availability is said not to be serious.	3	5	8	16 (22.2%)
Total	26	24	22	72 (100.0%)

As per data presented in Table 5.55 above, respondents raised concerns regarding non-adequacy of resources for patient care. They described resources as:

> *"Not adequate for patient care, and that some units (or settings) depend on students' equipment's such as thermometers, stethoscopes and sphygmomanometers. Resources were also not enough for students' learning. Students ended up improvising in order to learn, while some equipment was reserved for use by qualified staff.*

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Out of a total of 72 respondents who raised these concerns, 26 (36.1%) were students, 24 (33.3%) were nurse lecturers while 22 (30.6%) were nurse managers.

5.5.5 Expressed opinions on status of reference materials. Respondents then raised issues regarding status of reference materials in clinical settings. Data are presented in Table 5.56 below.

Table 5.56 <u>**Descriptions of Status of Reference Materials**</u>

REFERENCE MATERIAL DESCRIPTIONS	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• No guiding policies, procedures or guidelines to follow in clinical units.	0	0	0	0 (0%)
• No reference/ reading materials in clinical units e.g. books, but only booklets and newsletters.	8	9	8	25 (45.5%)
• Some reference materials, which are available, are not accessible to students.	5	5	0	10 (18.2%)
• Few up-to-date books circulate among staff and students.	0	0	10	10 (18.2%)
• Only old books are available.	2	3	5	10 (18.2%)
Total	15 (27.3%)	17 (30.9%)	23 (41.8%)	55 (100.1%)

Data presented on Table 5.56 above indicates that fifty-five (55) respondents raised some concerns about reference materials. Out of the fifty- five, 15 (27.8%) were students, 17 (30.9%) were lecturers while 23 (41.8%) were nurse managers. Concerns raised included: "there were no guiding policies, procedures and guidelines in most of the clinical units."

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"There were no reference/ reading materials in clinical units such as books, but only booklets and newsletters. Some few available reference materials were not accessible to students, however nurse managers stated that only "old books were available and a few up-to-date ones which circulate among staff and students.

5.5.6   Expressed views on staffing and its impact on clinical learning were described next. Findings are presented in the table that follows.

Table 5.57   Descriptions of Staffing Situation, and its impact on clinical learning.

STAFFING DESCRIPTIONS	FREQUENY COUNTS			
PART 1	STUDENTS	LECTURERS	N/ MANAGERS	TOTAL/ %
• Shortages of qualified nurses/ staff deny students supervision, guidance.	4	6	5	15 (36.6%)
• Shortage of qualified nurses impedes support for students.	0	4	6	10 (24.4%)
• Inadequate staff deprives students role modelling.	0	2	3	5 (12.2%)
• Inadequate clinical nurses result in students supervised by juniors.	0	4	7	11 (26.8%)
Total	4 (9.8%)	16 (39.0%)	21 (51.2%)	41 (100.0%)

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STAFFING DESCRIPTIONS	FREQUENY COUNTS			
PART 2	STUDENTS	LECTURERS	N/ MANAGERS	TOTAL/ %
• Allied health staff never assists students even when adequate in number.	4	5	0	9 (31.0%)
• Few medical staff limits time for input in teaching.	2	4	5	11 (37.9%)
• The general shortage of doctors, lecturers and clinical nurses negatively affect learning.	0	5	4	9 (31.0%)
Total	6 (20.7%)	14 (48.3%)	9 (31.0%)	29 (100.0%)

As reflected by the table above, 70 respondents described the staffing situation and its negative impact on learning. The situation was described in two parts. The first description focused on shortage of clinical nurses. The situation was described as:

- Shortage of qualified nurses denies students the supervision, guidance and support, impedes support for students, deprives students role modelling, and result in students being supervised by junior members of staff. A total of forty- one (41) respondents raised these concerns. Out of these, 21(51.2%) were nurse managers, 16(39.0%) were nurse lecturers, while only 4(9.8%) were students.

The second issue raised was directed to the multi-disciplinary team. The allied health staff was described as:

- Never assisting students even when adequate in number. Shortage of "medical staff was said to limit time for their input in teaching," and "the general shortage of doctors, lecturers and clinical nurses was described as "negatively affected learning." Twenty-nine (29) respondents expressed these concerns, and 14(48.3%) were lecturers, 9(31.0%) were nurse managers, while 6(20.7%) were students.

5.5.7 Next, respondents addressed patient care/practice standards as a determinant of a conducive clinical learning environment (CLE). Data are presented in Table 5.58 below.

Table 5.58   **Description of patient care standards and their impact on clinical learning**

DESCRIPTION OF CARE STANDARDS	FREQUENCY COUNTS			
PART 1	**STUDENTS**	**LECTURERS**	**N/ MANAGERS**	**TOTAL/ %**
• Qualified nurses do not role model good care standards for students e.g. poor, aseptic techniques for sterile procedures.	8	11	4	23 (14.9%)
• What students are taught is not practiced in the clinical area.	5	5	2	12 (7.8%)
• Students are taught nursing process but do not see it being practiced in the clinical settings.	4	2	4	10 (6.5%)
• Sometimes vital signs are not recorded, reflecting that they were not checked.	0	0	4	4 (2.6%)
• There is no consistency and uniformity in documenting a monitoring care.	4	25	13	42 (27.3%)
• In such settings, students are denied role modelling in documentation.	5	4	6	15 (9.7%)

DESCRIPTION OF CARE STANDARDS	FREQUENCY COUNTS			
PART 1	STUDENTS	LECTURERS	N/ MANAGERS	TOTAL/ %
• Clinical Nurses only use "SOAPIE" format when students do management role practicum, and are directing care.	6	6	8	20 (13.0%)
• Nursing staff has problems in the use of nursing processes, especially nursing diagnosis and rationale.	0	5	5	10 (6.5%)
• No privacy, curtains provided but not used. Patients hear and see procedures done on other patients.	3	5	0	8 (5.2%)
• Clinical nurses do not practice according to current standards, do not use clinical protocols.	2	2	1	5 (3.3%)
• Students not able to provide quality care on their own, they lack skills	5	0	0	5 (3.2%)
Total	42	65	47	154 (100.0%)

CONTINUATION   OF   TABLE 5.58

DESCRIPTION OF CARE STANDARDS	FREQUENCY COUNTS			
PART 2	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Clinical nurses need to read to keep up to date current standards.	5	2	10	17 (56.7%)
• No written standards for patient care, therefore nothing guides care.	0	4	3	7 (23.3%)
• Where standards are available, they are not consistently used.	0	3	3	6 (20.0%)
Total	5	9	16	30 (100.0%)

Data reflected in Table 5.58 indicate that one hundred and fifty- four (154) respondents raised their views on patient care standards. The majority described the actual patient care practices, which do not support student learning. Out of the hundred and fifty- four (154) respondents, 42 (27.3%) were students, 65 (42.2%) were lecturers, while 47 (30.5%) were nurse managers.

Some of the descriptions of the standards, which were described as non-conducive to learning:

- *Qualified nurses do not role model good care standards, they use poor aseptic techniques for sterile procedures,*
- *What students are taught, is not practised in the clinical units,*
- *Sometimes vital signs are not recorded, reflecting that they were never checked,*
- *There is no consistency and uniformity in monitoring and documenting patient care,*
- *No privacy is provided, although curtains are available, they are not used, patients hear and see procedures done on others.*

- *The second part of the table described some factors, which contributed to poor patient*

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- *care standards. A total of 30 respondents expressed their views on this issue. Sixteen*
- *16(53.3%) were nurse managers, 9(30%) were nurse lecturers while only 5(16.7%)*
- *were students. They identified that "clinical nurses needed to read in order to keep up-*
- *to-date with the current trends of care, that there were no written standards of care that*
- *guide patient care; and that where standards were available, they were not consistently*
- *used."*

5.5.8 Respondents expressed their views on the role of lecturers in clinical teaching.

Findings are presented below.

Table 5.59   <u>**Descriptions of the role of the lecturer and its impact on clinical**</u>

<u>**learning.**</u>

DESCRIPTIONS OF LECTURER NON-AVAILABILITY	FREQUENCY COUNTS			
PART 1	**STUDENT**	**LECTURER**	**N/ MANAGERS**	**TOTAL/ %**
• Too many procedures making it difficult, lecturers only teach when they evaluate students, as a result. Some lecturers only go to clinical area to evaluate students otherwise they don't go.	8	4	6	18 (38.3%)
• High student-lecturer ratios make it difficult for lecturers to be always available.	0	10	3	13 (27.7%)
• Every time a lecturer is with a group of students, the rest are without supervision.	0	5	0	5 (10.6%)
• Lecturers leave students alone in clinical settings even when clinical nurses are busy.	4	2	5	11 (23.4%)
Total	12 (25.5%)	21 (44.7%)	14 (29.8%)	47 (100.0%)

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CONTINUATION   OF   TABLE 5.59

DESCRIPTIONS OF LECTURER NON-AVAILABILITY	FREQUENCY COUNTS			
PART 2	STUDENT	LECTURER	N/ MANAGERS	TOTAL/ %
• Both lecturers and clinical staff must do clinical teaching.	3	4	5	12 (28.6%)
• Lecturers must take 60% of clinical teaching since clinical nurse are fully accountable for patient.	0	0	5	5 (11.9%)
• Lecturers must assist students to finish procedures, and not "yell" at them and be more involved in clinical teaching.	10	0	0	10 (23.8%)
• Should be there to respond to students' questions, and guide learning especially when clinical nurse are busy.	5	0	0	5 (11.9%)
• Lecturers have both classroom and clinical teaching responsibilities, and so not always available (due to high classroom load).	0	6	4	10 (23.8%)
Total	18 (42.9%)	10 (23.8%)	14 (33.3%)	42 (100.0%)

Table 5.59 above indicates that perceptions on the role of the lecturer in clinical teaching were described in two parts. For part 1, forty-seven respondents participated, and 21(44.7%) were nurse lecturers, 14(29.8%) were nurse managers and 12(25.5%) were students.

The descriptions of why lecturers were not always available included:

- *Too many procedures, make it difficult for lecturers, they teach only when they evaluate students,*
- *High student-lecturer ratios make it difficult for lecturers to be always available.*
- *Lecturers are with many groups of students at the same time, so cannot be always present.*

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- *Every time the lecturer is with one group, the rest are without supervision.*
- *Therefore lecturers are forced to leave students alone even when clinical nurses are busy. "*

The second part of the table presented descriptions of what the lecturer should do it the clinical settings. Forty-two (42) respondents described the role. Eighteen 18 (42.9%) were students, 14(33.3%) were nurse managers, while 10(23.8%) were lecturers. Their descriptions included the following:

- *Clinical teaching must be done by both lecturers and clinical staff.*
- *Lecturers must take 60% of clinical teaching since clinical nurse are fully accountable for patient care.*
- *Lecturers must be more involved in clinical teaching and assist students to finish procedures, instead of yelling at them.*
- *They should be more available to respond to students' questions.*
- *But due to high classroom load, and other clinical teaching, and other clinical teaching responsibilities, they are not always available, thus making the lecturer unavailable to guide, support and supervise clinical learning.*

5.5.9 The respondents then described the role of clinical staff, which was perceived to be not conducive to clinical learning. Findings are presented in Table 5.60 below.

Table 5.60   Descriptions of non-conducive role of clinical staff

DESCRIPTIONS OF NON-CONDUCIVE ROLE	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Clinical nurses do not actively seek to teach, guide and evaluate students.	2	3	0	5 (5.3%)
• Clinical nurses do not role model, correct nursing care for students. This negates anything students are taught.	8	7	4	19 (20.0%)

DESCRIPTIONS OF NON-CONDUCIVE ROLE	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Clinical nurses are not willing/ reluctant or claim to be busy, they do not assist student. They are stingy.	6	5	5	16 (16.8%)
• Clinical nurses do not give feedback about the student's performance.	3	2	0	5 (5.3%)
• Clinical nurses are not concerned with student discipline. They leave disciplinary action for lecturers even when the wrong action was committed in the clinical unit. This leads to role overload for lecturers	0	15	0	15 (15.8%)
• Clinical nurses feel teaching is the responsibility of lecturers, as they themselves are busy with patient care.	5	9	8	22 (23.2%)
Total	30 (31.6%)	44 (46.3%)	21 (22.1%)	95 (100.0%)

Findings presented in Table 5.60 above reflect that there were ninety-five (95) respondents who described the role of clinical staff as non-conducive to learning. Out of these, 44(46.3%) were lecturers, 30(31.6%) were students, while only 21(22.1%) were nurse managers. Descriptions used included the following narratives:

- *Clinical nurses do not actively seek to teach, guide and evaluate students. They do not role model correct nursing care for students, thus negating what students were taught. Some feel teaching is the role of the lecturers as they are too busy.*
- *Clinical nurses are not concerned with student discipline; they leave disciplinary action for the lecturers, even when the wrong was committed in the clinical unit.*
- *Some clinical nurses do not teach because they do not read to keep up-to-date, so they feel threatened by students who know more.*

- *Most clinical nurses also did "not giving students feedback and were reluctant to teach or assist students.*

5.5.10 Subsequently, respondents described interpersonal relationships. The relationships grouped into two categories, of those conducive and those non-conducive to clinical learning. The following two Tables present findings.

Table 5.61   Descriptions of conducive clinical interpersonal relationships

DESCRIPTIONS OF CONDUCIVE RELATIONSHIPS	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Student and staff relationships are cordial, they are free to ask questions when they feel like it.	0	0	5	5 (10.6%)
• Students questions are answered satisfactorily by both doctors and clinical nurses, if one is not sure, they do research and give feedback	0	0	7	7 (14.9%)
• Students are given time to learn, not just to work, and are treated as individuals.	0	0	5	5 (10.6%)
• Majority of staff understands that they have to supervise students, but staff shortage interferes with their work plans.	1	2	5	8 (17.0%)
• Clinical teaching is responsibility of clinical staff but they lack motivation. Most clinical nurses do not expect students to work without supervision.	5	7	10	22 (46.8%)
Total	6 (16.8%)	9 (19.1%)	37 (68.1%)	52 (100.0%)

As indicated in the table above, a total of forty- seven (47) respondents described interpersonal relationships as conducive.

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The majority of these 32 (68.1%) were nurse managers while only 9 (19.1%) were lecturers and 6 (12.8%) were students. Some of the descriptions used to denote conducive relationships included:

- Relationships are cordial, students are free to ask questions; their questions are answered satisfactorily; if one is not sure, they do research and give students feedback.
- Students are given time to learn, not just to work, and are treated as individuals.
- Majority of staff understand that they have to supervise students, but staff shortages interfere with their work plans, most do not expect students to work without supervision.

Furthermore, clinical staff was described as "positive about teaching, but get caught up in own duties," although they regarded clinical teaching as their responsibility, they were said to be "lacking motivation."

Contrary to the findings above, majority of the respondents described interpersonal relationships as non-conducive to clinical learning. The findings are presented in table 5.62.

Table 5.62   Descriptions of non-conducive clinical interpersonal relationships

DESCRIPTIONS OF NON-CONDUCIVE RELATIONSHIPS	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Some staff members are not motivated or interested in teaching and supervising students.	3	4	8	15 (16.7%)
• Nurse managers complain about students not behaving properly.	0	0	2	2 (2.2%)
• There is no collaboration between lecturers and clinical staff. This lack of collaboration hampers students' learning.	4	7	6	17 (18.9%)

DESCRIPTIONS OF NON-CONDUCIVE RELATIONSHIPS	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Nurse managers threaten to chase students out of units if they do not help with patient care; there is minimal interaction; nurse managers were not interested in student learning.	6	7	0	13 (14.4%)
• Students were not learning anything from clinical nurses, but aimed at completing procedures in time.	6	0	0	6 (6.7%)
• Clinical nurses expected students to help with patient care, but lecturers expected them to finish procedures.	5	0	0	5 (5.6%)
• Lecturers scolded students if they did not finish procedures.	4	0	0	4 (4.4%)
• Clinical staff left most patient care activities to students.	6	7	0	13 (14.4%)
• There were conflicting orders that confused students.	4	0	0	4 (4.4%)
• Some clinical nurses rarely supervised or monitored events in units, patient care suffered.	3	8	0	11 (12.3%)
Total	41 (45.6%)	33 (36.7%)	16 (17.8%)	90 (100.0%)

Data presented in the above Table reveals that ninety (90) respondents described the non-conducive relationships. The majority were students, 41(45.6%) and lecturers 33(36.7%). The nurse managers were only 16(17.8%).

When students and lecturers were added together (45.6% + 36.7%) an overwhelming majority of 82.3% who described interpersonal relationships as non-conducive to learning, were in nursing education, while 17.8% were in nursing service. The descriptions included:

- Some clinical staff members were not motivated or interested in teaching and supervising students, they leave patient care to students alone, rarely do they supervise or monitor events in their units.
- Clinical nurses expect students to help with patient care, lecturers expect students to finish procedures, lecturers scold students if they do not finish in time; thus lecturers and clinical nurses give conflicting instructions and confuse students.
- Nurse managers complain about students not behaving properly, threaten to chase away students if they do not help with patient care and are not interested in students learning.
- There is no collaboration between lecturers and clinical staff and thus hampers student learning.

The non conducive relationships therefore appeared to fall into categories such as "not motivated/ interested to teach," expecting students to work instead of learning and giving conflicting instructions, "nurse manager not making students part of the team" and lack of collaboration between lecturers and clinical staff."

5.5.11 The last description focused on the role of the nurse manager in clinical learning. Descriptions categorised the role into two, those conducive and those non-conducive to learning. Findings are presented in tables 5.63 and 5.64 hereunder.

Table 5.63   Descriptions of conducive roles of the nurse manager

DESCRIPTIONS OF CONDUCIVE ROLES	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Most nurse managers accommodate students' learning but designate junior staff to precept them.	2	4	3	9 (15.3%)
• Nurse managers emphasise close supervision of students, but do not ensure it is done adequately.	3	5	0	8 (13.6%)
• Some nurse managers are committed to teach, but workload is too much, does not allow time to teach.	0	4	6	10 (16.9%)
• They are ready when requested to present topics to students.	0	5	5	10 (16.9%)
• They assign and request staff to assist students.	0	0	5	5 (8.5%)
• Others do their best to facilitate for student learning and create conducive environment.	0	7	10	17 (28.8%)
Total	5 (8.5%)	25 (42.4%)	29 (49.1%)	59 (100.0%)

As reflected in Table 5.62 above, a total of fifty-nine (59) participants described the role of the nurse-manager as conducive to learning.

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The majority of these, 29(49.2%) were nurse-managers themselves. On the other hand, 25(42.4%) were lectures while only 5(8.5%) were students. Descriptions used were as follows:

- Most nurse managers accommodate students' learning but designate junior staff to precept them, they emphasise close supervision of students, but do not ensure that it is done, some are committed to teach but their work load is too much, and does not allow.
- Some nurse managers assign and request staff to assist students, they are ready when requested to present topics to students, and do their best to facilitate for students' learning, and to create a conducive environment.

Although the above described the role as conducive, very few (8.5%) of the students were party to these descriptions.

Lastly, eighty-one (81) respondents described the non -conducive role of the nurse manager. Findings are presented in the Table 5.64.

Table 5.64   Descriptions of nurse manager's role which are not conducive to learning

DESCRIPTIONS OF NON-CONDUCIVE MANAGERS ROLE	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Nurse managers neglect students, they do not make them part of the team.	2	4	0	6 (7.4%)
• Nurse managers assist students only when challenged by lecturers.	0	3	2	5 (6.2%)
• Nurse managers never assist students or role model care.	4	6	2	12 (14.8%)
• Most nurse managers never check standards of care provided; they are not in touch with activities of their units.	5	5	0	10 (12.3%)

DESCRIPTIONS OF NON-CONDUCIVE MANAGERS ROLE	FREQUENCY COUNTS			
	STUDENT	LECTURER	N/ MANAGER	TOTAL/ %
• Nurse managers are too busy to bother about students.	3	4	0	7 (8.6%)
• Nurse managers do not participate in student teaching; they say it is not their duty.	6	11	2	19 (23.5%)
• Sometimes they are reluctant to delegate qualified staff to assist students.	2	3	2	7 (8.6%)
• Not all nurse managers are engaged in activities, which reflect commitment to teaching students.	3	2	0	5 (6.2%)
• Most feel they do not have obligation for student learning.	0	5	5	10 (12.4%)
Total	25 (30.9%)	43 (53.0%)	13 (16.1%)	81 (100%)

Table 5.64 above reveals that eighty-one (81) respondents described the role of nurse managers as non-conducive. The majority 43 (53.0%) were lecturers, 25 (30.9%) were students while only 13 (16.0%) were nurse managers. Some of the descriptions of the nurse managers' non-conducive role were:

• Nurse managers neglect students, they do not make them part of the team, they assist students only when challenged by lecturers and never role model care for students.
• Not all nurse managers were engaged in activities, which reflect their commitment to student learning, did not participate in student teaching, were too busy to bother about students or reluctant to delegate staff to assist them.
• Most nurse managers never checked standards of care provided and were not in touch with activities of their units.

It is interesting to note the contrast between nurse managers, on one side, and lecturers and students on the other. As previously indicated in Table 5.63 above, 49.2%) of the nurse managers described their role as conducive.

The same observation was made with the non-conducive clinical interpersonal relationships, where students and lecturers constituted 82.3%, against 17.8% nurse managers. Likewise, 42.3% of the lecturers and 31,6% of the students (a total of 72.9%) described the role of clinical staff as non-conducive against 22.1% of the nurse managers.

5.5.12   CONCLUSION

Qualitative and quantitative approaches were blended in the investigation of this research project. The findings seemed to be complementary, especially when data is cross- tabulated and responses of individual groups within the sample become evident. Significant differences were found in how the three groups perceived the clinical learning environment. Qualitatively, most students and lecturers expressed dissatisfaction regarding the conduciveness of the settings, while a few nurse managers believed the contrary.

The results correlate with those of Netshandama-Funyufunyu (1997: 90-91) and Mhlongo (1994: 117) who found that nurse managers (unit sisters) were interested in clinical teaching. However, their role was hampered by, "lack of resources, shortage of staff, too many students, overcrowded units/ wards and non-involvement of lecturers," thus rendering the clinical learning environment non-conducive.

This chapter has presented study findings, focusing on reliability testing, factor analysis and cross-tabulation of demographic and quantitative data. Lastly, the chapter presented qualitative findings. The following and the last chapter will focus on discussion of findings with a view to draw conclusions and come up with recommendations.

CHAPTER 6

DISCUSSION OF FINDINGS, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1.0 INTRODUCTION

The previous chapter dealt with data analysis, where both qualitative and quantitative methods were utilized to derive study findings. This chapter will focus on discussion of the study findings and conclusions drawn from the study. Limitations inherent in the conduct of this project were described and recommendations presented. Various clinical learning settings were explored for their conduciveness for the educational preparation of student nurses. Through the use of a questionnaire, which consisted of closed ended and open-ended parts, nursing students, nurse lecturers and nurse unit managers expressed their views on the status of the clinical learning environment. The findings on the views of these three groups were cross-tabulated to determine if there were any significant differences in their perception of the clinical learning environment.

6.1.1 PURPOSE OF THE STUDY

The purpose of this study project as described in chapter 1, was to identify and describe factors in the current clinical learning environment used for nursing students, with a view to identifying and proposing strategies to nurture those which facilitate, while improving those that impede learning.

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To this end therefore, the project aimed to:

- Determine and describe factors in the clinical settings, otherwise known as clinical learning environment (CLE) which were perceived by students, lecturers and nurse managers to facilitate learning,

- Identify and describe those factors perceived by students, lecturers and nurse managers as impeding learning.

- Determine and describe the differences in the facilitative and impeding factors as perceived by students, lecturers and nurse managers.

- Determine the extent to which clinical learning environments facilitate or impede learning for student nurses in Botswana.

6.2.2 LIMITATIONS OF THE STUDY

The study was conducted amidst a lot of limitations, which included:

- The study used only year II nursing students from the then five health training institutions, which were training general nursing students. The first year students were excluded on the premise that they had not gained enough experience to enable them to form opinions about the conduciveness of the clinical learning environment. The year III students, on the other hand were excluded, because they do internship the whole year, with minimal contact with lecturers, their learning experiences were structured differently and they therefore did not meet the inclusion criteria. The views of students expressed in this study therefore may not necessarily represent the views of the entire nursing students:

- One nursing college had just started training general nursing students, and had no second year students. It was therefore excluded as it did not meet the set criteria by then.

- The study was conducted over a long time, (1998-2000) by the time the project was completed; some findings may be no more valid.

- Data collection tool allowed for the undecided column for when respondents were not sure. Most of the time, a few respondents may be undecided. However, when cross-tabulations were done, the few who were undecided would become 100%, thus distorting significant levels. Readers are therefore cautioned to bear this in mind when interpreting the significant values.

- The researcher had planned to conduct observation of study settings in order to collect first hand information and verify, that which was reported by respondents. However, facility management felt uncomfortable with this technique. It was therefore left out in order to respect the rights of the subjects. This exclusion is viewed as a limitation, which may reduce the validity of the findings.

- The study sample consisted of only second year nursing students, lecturers and nurse unit-managers. Exclusion of other members of the interdisciplinary team, may bias study findings.

- Clinical settings used especially in clinics were conveniently picked; they may therefore not be representative of the clinics in the country used for student clinical learning.

- Question items 4.10 and 5.4 had very low clarity levels indicating that they were not clear. Respondents may have had difficulty understanding them and responses given may not be a true reflection of the situation.

- Staffing had four items with reliability coefficient of .2676 and interpersonal relationships had 2 items at .2761, both of these were below the acceptable .70 and therefore may not have been very reliable.

6.2 DISCUSSION OF FINDINGS

The findings of this study are discussed according to the research questions found in section 1.7 of chapter one. However, before the study findings are discussed a summary of demographic findings is reviewed. The researcher believes that these demographic findings form the basis for discussing both quantitative and qualitative findings.

6.2.1 Demographic (data) findings

Participants of the study consisted of student nurses, nurse lecturers and nurse managers, proportionally selected into the sample. Although a total of 240 questionnaires were sent out, the returned questionnaires were 202, making a response rate of 84%. Findings reveal that of those who returned questionnaires, 56.9% were in the age range 24-30 years, 27.7% were among the 31-40 years while only 15.4% were 41 years and above. The logical explanation was that the majority of participants 46.2% were students who start training in their early 20s.

Furthermore, data indicate that participants had worked in various clinical and training settings, held different positions, had varied work experiences, and belonged to both male and female gender categories.

Study variables were therefore cross- tabulated against these demographic factors to determine the differences in perceptions of the clinical learning environment.

6.2.2   Data Collection Instrument

Data was collected using a self-developed instrument, which consisted of three (3) parts. Part 1 solicited demographic data, part 2 requested for study data through a close-ended self-report Likert type scale. The last part was an open area, which requested participants to freely express their own opinions, feelings and experiences in the form of comments. The close-ended questions were tested for reliability, using Chronbach alpha. Findings revealed that most items had a reliability index above the acceptable level of .70 (LoBiondo-Wood & Harber 1994:374, Polit & Hungler 1997:297, Burns & Grove 1993:339).

Validity was verified through factor analysis of all items in the 5 subscales, making up the instrument. Factor loading cut off of .30, (Burns & Grove, 1994: 542) was used as a reference point. The majority of factors loaded above .50, except 5, which loaded between .35707 and .49963.

6.2.3   SUMMARY OF MAIN STUDY FINDINGS

6.2.3.1 Summary of Factors which were Perceived to Facilitate Clinical Learning

Space/Unit organization

- *Acceptable Unit organization, 53.3%,*
- *Adequate, space 51.5%,*

Care Standards:

- *Resource availability and accessibility to students,*

- *Adequate staffing with qualified staff and their participation*

- *Appropriate and quality patient care by nurses 57.1-67.5%,*

- *Acceptable quality patient care role modelled 57.8%,*

- *Acceptable care standards 50.7-75.4%,*

- *Patient comfort relationships and advocacy 63.5-85.1%,*

Availability of learning experiences:

- *Clinical learning experiences available*

Role of Clinical Teache/Lecturer:

- *Availability and involvement in teaching and learnersupport 53.5%*

- *Willingness tosupport and assist learners 65.2%,*

- *Collaboration between lecturers and clinical staff 65.1%,*

- *Quide and supervise learning,*

- *Role model appropriate care,*

- *Provides positive feedback to learners 65.0%*

- *Lecturers available to teach and support learners 61-65.0%*

- *Conducive relationships among staff and students*

Nurse manager's commitment:

- *Nurse managers are involved in teaching*

- *Nurse managers create learning environment 66.2%,*

- *Nurse managers role model care 57.8%,*

- *Nurse managers ensure safe environment 58.8%,*

- *Nurse managers provide resourses 61.2%,*

- *Nurrse managers coordinate care 80.6%.*

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Team building:

- Nurse managers lead the team,
- *Build and include students in the team,*
- Create conducive team relationships 55.0-85.3%
- Foster staff-client relationships 49.2-57.8%.

Interestingly, the same factors were also identified as impeding learning and therefore needing improvement. Respondents particularly expressed dissatisfaction with the following factors, which were expected but were not adquately occurring/available.

6.2.3.2 Factors perceived to impede clinical learning included:

- *Resource inadequacy, and inaccessibility to students 51.3-55.8%,*
- *Non availability of space for students' belongings 58.5%,*
- *Inappropriate use of nursing process 50.0-71.9%,*
- *Inadequate/shortage of staffing 53.o%,*
- *Inadequate learning experiences*
- *Non-conducive relationships 50.7-59.2%*
- *Inaduate collaboration between education and service,*
- *Inappropriate care role modelled,*
- Inadquate learner support, and
- Inadquate nurse managers' commitment.

In order to determine if there were any significant differences in the facilitative and impeding factors as perceived by students, lecturers and nurse managers, the above findings were cross tabulated with demographic variables.

Chi-square test was used to determine the significance of the differences. All findings <0.05 were considered significant (Polit & Hungler, 1997: 361, SPSS version 6.1.2 1993).

6.2.4 Findings on Cross Tabulation

6.2.4.1 Clinical setting by position

The students disagreed with one description of the clinical setting, therefore significantly differing with both nurse lecturers and nurse managers. The significant level was p0.028. Although students agreed with the rest of the items, they were on the low range compared to nurse managers and lecturers. On the other hand, they were higher than the other two groups on items disagreed upon. This led the researcher to conclude that students were not quite happy with clinical settings. The specific areas with which students were unhappy included descriptions such as:

- *Non conducive organization of the unit*
- *Inadequate patient populations*
- *Inadequate length of time of patient stay*
- *Limited learning experiences*

Comparing clinical settings by the type of setting seemed to support student views that most settings were not conducive to learning. Findings on this comparison are presented as follows:

6.2.4.2 Clinical setting by type of setting

Results of a chi-square test indicated that referral hospitals were significantly different from district hospitals as teaching clinical settings. Respondents agreed that the referral hospital as clinical learning settings provided factors, which facilitated learning, while on the other hand district hospitals provided only some of them.

The factors mainly found in referral hospitals and either lacking or inadequate in district facilities were:

- *Adequate space,*
- *Resource availability,*
- *Range of experiences available,*
- *Variety of patient conditions available,*
- *Reference materials available, and*
- *Adequate patient populations.*

Even though students and lecturers seemed to agree with some items, here too, their agreements were far too low compared to the nurse managers' responses. It would appear that these respondents had concerns about some of the clinical settings.

These findings appear to be in agreement with the views of students above, who perceived most clinical settings as non-conducive. There are only two referral hospitals used in the study (and these are the only two available in the country), against many other types of settings. This then may mean that the majority of the clinical settings do not provide environment conducive to learning.

In order to verify these findings, respondents provided qualitative descriptions of the clinical settings in the form of narratives, as presented below:

- *Some units are too small, overcrowded, and congested; it is difficult to accommodate staff, patients, and students. This type of setting and its organization hinder learning.*
- *There is no privacy for patient care, other patients hear and see what is being done on others, and this makes patients uncomfortable.*
- *There is no space for students' belongings.*

It was interesting to note that out of the eighty-two who volunteered to respond to open ended question, 25.6% were students, 32.9% lecturers, while 41.8% were nurse managers. All these therefore were in agreement about factors in clinical settings, which impede learning. This finding validated the quantitative ones above.

Furthermore, one hundred and sixteen (116) respondents described experiences in these settings as not conducive to learning. Descriptions are presented as narratives direct from respondents below:

- *Most settings lack variety, only deal with common conditions like HIV/AIDS and tuberculosis.*
- *Seriously ill and interesting cases are referred out.*
- *No surgical and advanced nursing procedures in most settings, students only learn these theoretically.*
- *Patient-student ratios are problematic; there are not enough inpatients for large numbers of students.*

The above observations seem to negate the findings of Mirtel-Bruce (1992) that acquisitions of clinical skills require practice. Where experiences are not available, it is impossible to practise. Respondents equally shared this view. Students made

(35.4%), lecturers (37.9%) and nurse managers (26.7%). Based on the findings above, one can therefore conclude that respondents of this study perceived most clinical settings used for students learning as not providing the necessary factors, which facilitate learning. Clinical settings were therefore not conducive to clinical learning in this context.

The findings seem to support those by Perese (1996:281), who observed that among other things, "diversity of learning opportunities and direct involvement with patients" was one of the positive factors influencing student clinical learning. With the same breath, lack of diversity of learning opportunities deny students direct involvement in patient care, and therefore hinder cinical learning.

More findings were cross-tabulated to further test for significant differences. Patient care was therefore tested against respondents by age, gender, qualification, years of experience, position and the type of setting. Findings are presented below:

6.2.5   Patient Care/Practice Standards

6.2.5.1 Patient Care/Practice Standards by age

• Findings reveal that most (55.0%-87.5%) of the age 24-30 years, which consist of 56.9% of the students (figure 4.1) differed significantly (p0.000-0.033) with both the age group 31-40 years and the 41+ years. Respondents appeared to perceive patient care standards as one of the key factors in a clinical learning environment.

- The contention here was that for the clinical learning environment to be conducive for learning, appropriate patient care must be role modelled by qualified staff, Reilly & Oermann (1992), Wilson (1994) and Forthergill-Bourbonnais & Higuchi (1995). Contrary to this view though, students who although agreed, were concerned about poor patient care standards, and seemed unhappy that although activities were agreed to as occurring. The following areas were not satisfactory:

  - *Patient needs being given priority,*
  - *Patient care documention,*
  - *Privacy in patient care,*
  - *Patient care being organized and holistic,*
  - *Patients participating in their own care, and*
  - *Monitoring of patient care.*

It would appear that the male respondents were also not happy with some of the patient care standards, and cross-tabulating the findings by gender revealed significant differences. Even those items agreed upon by male respondents, the agreement levels were lower than by females.

6.2.5.2 Patient Care/Practice Standards by Gender

- The marginal number of male respondents (49.4%-64.8%) and 74.8%-80.6% of the females agreed that:

  - *Privacy is key to patient care,*
  - *Patient needs are given priority,*
  - *Patient care is individualized,*
  - *Nurses relate therapeutically with patients,*
  - *Patients were given adequate information about their care.*

However, when compared to the female respondents, the males seemed very unsure about the above patient care descriptors. One can therefore deduce that they were uncomfortable because even though some of the care activities were done, they were not satisfactory. Unlike the above, both males and females were quite confident about the two items that; patient care was safe, organized and holistic, 73.6% males and 75.5% of the females agreed. For patients participate in their own care, 85.7% of the males agreed against 84.4% of the females. In such comparable responses, the researcher believes findings may represent the true perception of all respondents.

A further testing against demographic variables revealed even more startling information. When tested against qualification, the following revelation became apparent.

6.2.5.3 Patient Care Standards by Qualification

The responses of diploma holders and those of degree holders were significantly different (p0.000-0.016). The majority of diploma holders (72.7%-98.2%) agreed with all patient care descriptions. On the other hand, some of the degree holders (28.6%-71.4%) also agreed with the same descriptions. However, those who agreed were very few compared to diploma holders. This did cast doubt in the mind of the researcher about how confident they were. Another section of degree holders 43.9%-64.3% disagreed on some items similar to those raised, under age and gender.

In addition to the concerns raised under age and gender above, the degree respondents were concerned, and disagreed with the following patient care standard descriptions, that:

- *Patient care standards were consistent with what students were taught,*
- *Settings had practice standards to guide patient care,*
- *Patient records reflected current nursing care standards, and*
- *Units utilized nursing process effectively while providing care.*

Furthermore, testing the above factors against respondents' years of experience verified the findings above.

6.2.5.4 Patient Care Standards by Experience

Once again significant differences were observed when a chi-square was used to test for differences in perception of patient care standards by respondents of differing years of experience.

Most of the respondents (48%-88.3%) with 0-5 years of experiences, who happened to be mostly students, while agreed with some descriptors, appeared ambivalent about patient care standards. Of particular interest was the fact *that patent care was not monitored, documented, safe, organized and holistic, that privacy was not provided when giving care nor priority given to patient needs, and that patients were not given adequate information to make informed decisions about their own care.* The 0-5 years of experience were also disagreed that units used nursing process effectively. The significant levels ranged from p0.00 to p0.008.

It is ironic for some standards of care to be perceived as not acceptable in clinical settings used for students learning. If students are to be competent qualified practitioners upon completion of their training, they should learn from those role modelling and providing appropriate and quality care, and effectively using an acceptable nursing practice model 'the nursing process.'

This view is consistent with those expressed by previous researchers, Attridge (1996:406-412), who alluded to the need to have *"committed clinical role models who are practicing desirable role with success"*. In agreement with this view, Slimmer, Wendt and Martinkus (1990:127-132) attributed the *"quality of nursing service to the quality of nursing education."* According to Dunn & Hansford (1997:1299-1306), both nursing education and nursing practice *"have to collaborate to improve nursing education in order to train competent nurses to provide quality patient care."*

6.2.5.5 Patient Care Standards by Position

Significant differences were also found between nurse managers on one hand and students and lecturers on the other. Students and lecturers, although agreed with most items, were adamant that patient care standards were not up to acceptable quality. Based on this seemingly uncertainty, all disagreed responses by $\geq 30\%$ were taken as confirmation of dissatisfaction. Incidentally in this case, it became clear that students were particularly dissatisfied with:

- *The use of nursing process by clinical nurses, which was ineffective,*
- *Not monitoring, documenting or individualizing patient care,*

- *Failure to provide privacy, not giving adequate information nor give priority to patient needs by clinical nurses,*
- *Nurses not advocating for patients, nor allowing them opportunity to participate in their own care,*
- *Patient care that was not safe organized and holistic,*
- *Units used task allocation instead of patient allocation,*
- *Nursing care that did not reflect standards consistent with what students were taught, and,*
- *Units had no practice standards to guide patient care.*

On the basis of the significant differences observed when comparing patient care standards by age, qualification, experience and position, one can deduce that on the whole, students who happen to constitute majority of the 24-30 years, 0-5 years experience and also bear student position were 2-3 times more dissatisfied with patient care standards. This difference may be attributed to the fact that the quality of patient care is one of the key factors in the creation of clinical learning environment, and students who are very fresh with theory are quick to pick up inappropriate practices.

These findings are in support of the view by Mogotlane & Alexander (1996), who observed that material taught in class should be relevant to what students see as the reality of practice. Put in words, clinical practice must be consistent with what students are taught.

The type of setting however also contributed to patient care standards. Most of the respondents, including students agreed that referral hospitals provided better quality care, with significant levels of difference from other settings ranging between p0.000 to p0.013.

The reason for this discrepancy may be due to the fact that referral hospitals are staffed with various types of specialist personnel and resources of all types are concentrated there. Respondents of health Training facilities however perceived this differently.

6.2.5.6 Patient Care Standards by Type of Setting

Comparison of clinical setting by position (5.29) above indicated that nurse managers differed with both students and lecturers. They were concerned about the *"non conducive organization of units, inadequate patient populations, inadequate length of time of patient stay, and limited learning experiences"*. Conversely, comparison by the type of settings (Table 5.30) did reveal that referral hospitals provide better factors, which were conducive for learning. Such factors were identified as *"adequate and organized space, available resources, and wide range of learning experiences, variety of patient conditions, adequate patient populations, as well as provision of reference materials"*.

One can therefore conclude that referral hospitals were better placed to provide quality care and contribute to the formation of conducive learning environment. However comparison of patient care by type of setting revealed that, while clinics, district and referral hospitals were perceived to provide appropriate care. Majority of respondents from training institutions (lecturer) disagreed (51.7%-77.4%) with most items and agreed with only one. They disagreed that:

- *Patient care standards were consistent with what students were taught,*
- *Units had practice standards,*
- *Patient records reflect current practice standards.*

However, they agreed (51.6%) that patient care is safe, organized and holistic, while 32.3% of same group disagreed. to the research; this finding is in contradiction to others above in most of the students and lecturers, as well as degreed nurses expressed concern.

As with other findings, respondents elaborated on their perception by way of expressing their opinions, experiences and feelings in general comments.   One hundred and eighty four (184) respondents described patient care standards as poor and not conducive to learning.   Invariably, respondents were all reasonably represented. Out of the total 184, 40.2% were lecturers, 34.2% nurse managers, while 25.6% were students. Descriptions used in narrative form are presented below:

- *Qualified nurses do not role model good care standards, they use poor aseptic technique for sterile procedures,*
- *What students are taught is not practised in the clinical settings, for example, vital signs are sometimes not recorded, reflecting that they were not checked,*
- *There is no consistency and uniformity in monitoring an documenting patient care,*
- *No privacy is provided, although curtains are available around each bed, they are not used, patients hear and see procedures done on others.*

In addition, respondents described what they believed contributed to poor standards of care. Narratives of such descriptions included the following:

- *Clinical nurses do not read to keep up to date with current trends in patient care,*
- *There are no written standards to guide patient care, in most settings,*
- *Where some kinds of standards exist, they are not consistently used.*

On the whole therefore, all participants of this study seem to agree that patient care standards are perceived to be a key factor in clinical learning. Nevertheless, they are deplorable, and thus rendering clinical learning environment non conducive.

6.2.6   Staffing Implications on Clinical Learning Environment

The role of staffing in creating a conducive clinical learning environment cannot be over emphasized. Several literature reviewed, suggested that staffing is one of the key factors in creating a conducive clinical learning environment, (Quinn 1995, Dunn & Burnett 1995, Reilly & Oermann 1992 and Wilson 1994).

Findings of the current study were tested against age, gender, years of experience, nursing qualifications and position. Significant differences were observed by each comparison and details are presented next.

6.2.7.1 Staffing Inputs by age

Comparison by age revealed that the 24-30 years group while agreeing with most items differed significantly ($p0.000-0.022$) with other age groups. This particular age group, who incidentally are mostly students (see figures 5.1 and 5.4), were dissatisfied with staffing inputs in clinical learning. They thus disagreed with descriptions that

- *Qualified nurses supported student learning,*
- *Clinical nurses collaborated in selecting learning experiences,*
- *Nurses were willing to guide and supervise students,*
- *For lecturers were only available to evaluate students, the age group 24- 30 years agreed, while others disagreed.*

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6.2.7.2 Staffing inputs by gender

Staffing inputs by gender revealed significant differences between male and female respondents, at p0.000. The male respondents disagreed with one description of staffing inputs, while only moderately agreed on the other two. The female counterparts however agreed with all three descriptors. Discrepancy in perceptions were observed in areas such as:

- *Qualified nurses support student learning,*
- *Nurses were willing to collaborate in selecting learning experiences.*
- *Nurses are willing to guide and supervise students.*

Even when male respondents agreed, those who disagreed were still too many to be ignored, these included 38.5%-46.7% of the males who disagreed. The differences between males and females were significant at p0.000, as indicated in Table 5.38.

It should be noted that male respondents and the age group 24-30 years disagreed on the same factors, which they both perceived to be not occurring and therefore hampering clinical learning.

6.2.7.3 Staffing input by qualification

Strangely though, when staffing inputs were crossed by qualifications, diploma holders (who were also predominantly nurse managers) significantly (0.002-0.019) differed with degree nurses (mostly lectures). More importantly, their perceptions differed from those noted above.

Diploma nurse seemed to agree (89.1%) that qualified nurses supported students learning and just above 50% agreed that lecturers were available to guide student learning.

On the other hand, also just over 50% of the degree holders agreed that qualified nurses supported students learning, while majority, 81.1%, agreed that lecturers were available to guide student learning. It would appear here that each of the groups was protecting their territories, of nurse lecturer availability and clinical nurses' support.

6.2.6.4 Staffing inputs by experience

Furthermore, staff inputs were tested against years of experience and position. These yielded similar findings as for age and gender. Fifty- four (54.9%) of the respondents with 0-5 years of experience, disagreed that qualified nurses supported student learning, 51.9%- 73.5% also agreed that nurses were willing to guide and supervise students and that lecturers were only to evaluate students.

This group is mostly made up of students. Conversely, 69.6% of the 6- 15 years of experience, and 83.3% of the 16+ years of experience, agreed that nurses support students. Another 73.2% of the 6- 15 years of experience and 81.1% of the 16+ years of experience agreed that nurses were willing to guide and supervise students. Here too, majority were either nurse managers or lecturers. While 73.5% of the 0- 5 years of experience, who were mostly students, agreed that lecturers were only available to evaluate them, the nurse managers and lecturers were ambivalent on this issue with 47.3% - 48.6% agreeing and 48.6% - 49.1% disagreeing.

6.2.6.5 Staffing inputs by position

Findings by position also showed that while most of the respondents in all positions agreed with a number of items, the nurse managers differed with both students and lecturers. Most students disagreed that qualified nurses support learning, both lecturers and students disagreed that units were staffed with qualified allied professionals. These findings were similar to those stated prevviously.

6.2.6.6 Staffing situation and its impact on clinical learning : Quantitative Findings

- When respondents qualitatively addressed staffing and its implications on clinical learning, they looked at three aspects, which were staffing situation, the role of the nurse lecturer in clinical learning, and the role of clinical staff. These are therefore discussed below in that order.

- **Staffing situation**

Seventy participants (70) volunteered their opinions, feelings and experiences on staffing situation and its' impact on clinical learning. Out of these, thirty (42.9%) were nurse managers, another thirty (42.9%) were lecturers, and ten (14.2%) were students. Their descriptions focused on shortage of qualified staff, especially nurses and its' impact on clinical learning.

The situation was described as:

- *Shortage of qualified nurses and staff deny students supervision, guidance and support. Thus shortages of qualified nurses impede support for students.*
- *Inadequate staffing deprives students role modeling and result in students being supervised by the junior members of staff.*
- *The general shortage of doctors, lecturers and clinical nurses negatively affect clinical learning. Few medical staff have limited time for input in clinical teaching.*
- *Allied health staff never assist students even when they were adequate in number.*

The problems of staffing are not unique to Botswana. Farrington and Cutcliffe (1998:675) observed that there were *"clear indications that shortage of staff across all registered professions may dominate health care provision in the 21st century."*

- **The role of the lecturer**

Eighty- nine (89) respondents openly commented on the role of the lecturers and its' impact on clinical learning. They either described factors, which make this role to be non conducive to learning, or suggested ways to make the role more supportive and facilitative to clinical learning. Their descriptive narratives are presented below:

- *Too many procedures make it difficult, lecturers only teach when they evaluate students,*
- *High student-lecturer ratios make it difficult for lecturers to be always available. Every time a lecturer is with one group, other groups are left without supervision.*

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- *Lecturers have both classroom and clinical teaching responsibilities, and so are not always available due to high class-room load, as a result some lecturers only go to the clinical area to evaluate students, otherwise they don't go,*
- *Lecturers leave students alone in clinical settings even when clinical nurses are busy.*

Based on the findings, the role of the nurse lecturers in clinical teaching seem to be *"overloaded and confusing, resulting in conflict"* (Mundt 1997:309-316, and Burton 1998: 283). This leads the researcher to conclude that there is a need to explore the role of nurse lecturers as perceived by lecturers themselves in Botswana context, in more depth.

Patterson (1994:349) previously identified this problem, and proposed that, *"there was a need to explore the perspectives of nurse lecturers in clinical teaching."*

In order to improve the impact of the lecturers' role in clinical learning, the following suggestions were forwarded, that:

- *Both lecturers and clinical nurses must do clinical teaching. Even so, nurse lecturers should take 60% of clinical teaching since clinical nurses are fully accountable for patient care.*
- *Lecturers must assist students to finish procedures, and not "yell" at them. They must be more involved in clinical teaching.*
- *Lecturers must be there to respond to students' questions, and guide learning, especially when clinical nurses are busy.*

These findings seem to echo those from previous studies. Mundt (1997: 309-316) stated that a *"new approach to clinical instruction by a team of clinical teachers should be composed of faculty and clinical experts"*.

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An amazing observation was that students (31.5%), lecturers (42.8%) and nurse managers (31.5%) expressed concern about the staffing situation and its negative impact on clinical teaching, resulting in non- conducive clinical learning environment. Equally, the three groups were not satisfied with lecturers' involvement.

- **The role of clinical staff**

Ninety-five (95) respondents, composed of all the components of the sample raised serious concerns about the participation of clinical staff in clinical learning/teaching. Although active involvement and participation of clinical staff in clinical teaching was ide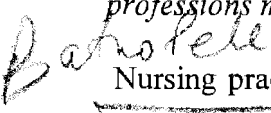ntified as an important factor (Mundt 1997, Attridge 1996), it would appear that this was not the case in this study. The role of clinical staff was therefore perceived as non- conducive to clinical learning. The majority (46.3%) were lecturers, while 31.6% were students, and only 22.1% were nurse managers. This finding is consistent with quantitative findings. Most nurse managers differed significantly with students and lecturers about staffing and its implications in clinical learning. Below is summary of negative descriptions of clinical nurses role:

- *Clinical nurses do not actively seek to teach, guide, and evaluate students, they do not role model correct nursing care for students, some feel teaching is the role of lecturers, as they are too busy.*
- *Clinical nurses are not concerned with students' conduct, they leave disciplinary action for lecturers even when the wrong action was committed in the clinical unit.*
- *Some clinical nurse do not teach because they do not read and keep up to date, so they feel threatened by students who know more.*
- *Clinical nurses do not give students feedback about their performance, some are reluctant to assist or answer students' questions.*

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The researcher is forced to conclude that the students, lecturers, and nurse managers, perceived clinical nurses as key players in clinical learning. However, the findings strongly suggest that what is expected from them is not occurring, thus rendering the clinical learning environment non conducive to learning.

The conclusion one draws on staffing, and its impact on clinical learning is that there are acute shortages of all categories of staff. This results in the students being denied input by doctors, clinical nurses or even lecturers. Shortage of staffing is not a problem unique to Botswana only. Farrington & Cutliffe (1998:675) observed that there were *"clear indications that shortages of staff across all the registered health professions may dominate health care provisions during the 21st century."* Nursing practice dictates the need for *"know how knowledge which is embedded in clinical practice."* However, it also became clear that some staff members, particularly clinical nurses were reluctant or not willing to guide, supervise or assist students and did not keep up-to-date with current knowledge as shown by the above narratives. In such situations, clinical nurses cannot survive the demands of their sophisticated clientelle, including the nursing students.

6.2.7 Perceptions on Nurse Managers Commitment

In order to determine how committed the nurse unit managers were to clinical teaching, a chi-square test was applied to determine significant differences by age, gender, position, nursing qualification, nursing experience and the type of setting.

6.2.7.1 Nurse Managers Commitment by age

Significant differences were observed in the age group 24-30 years, with p values ranging from 0.000 to 0.036. The majority of this age group (58.0% - 79.5%) disagreed with most of the descriptions of the nurse managers' commitment. Most of the age group 31- 40 years (66.1% - 91.1%) and 53.6% - 86.2% of the 41+ years agreed with most of the descriptors. Areas of concern, particularly for the 24- 30 age group, for which they disagreed, were

- *Nurse manager has ward program for teaching students,*
- *Nurse manager devotes time to teaching students,*
- *Nurse manager feels teaching is the work of lecturers,*
- *Nurse manager ensures safe environment for patient care.*

For the item nurse managers checked for adequacy of resources for patients care, this age group was ambivalent, with 44.1% agreeing and 48.6% disagreed. The other intersting finding was that respondents in all the three age groups disagreed that the nurse manager had a ward program for teaching students.

It is also worth noting that for one of the disagreed for items "nurse manager feels teaching is the work of lecturers" implied that actually nurse managers feel clinical teaching is part of their responsibility. This finding is consistent with those by Netshandama-Funyufunyu (1997: 94) who found that nurse managers like "on spot teaching of students, teaching patient care, doing informal teaching and being role model for students". The findings also confirm those by Mhlongo (1994:115-117) who found that nurse managers (unit sisters) considered clinical teaching part of their responsibility.

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However, the disturbing observation was that even though nurse managers were seen to have a role in clinical teaching and creating conducive learning environment, it appears that actually they did not effectively perform this role as revealed by the findings above.

Nurse managers commitment was further compared by position, which included students, nurse managers and lecturer.

6.2.7.2 Nurse Managers Commitment by Gender

On further cross-tabulating findings by gender, the following observations were made; that:

- *Most of the male respondents disagreed that nurse manager devotes time to teaching,*
- *Nurse manager ensured safe environment for patient care,*
- *Nurse manager coordinated teams for teaching.*

While male respondents agreed with females on other items, they still were few compared to females.

6.2.7.3 Nurse Managers Commitment by position

Most of the students (53.9%-78.9%) disagreed that the nurse manager is committed to clinical teaching- learning. Majority of the nurse managers (52.5% - 95.1%) agreed with most of the items. On the other hand, nurse lecturers (51.2% - 79.1%) agreed with six items, while 66.7% - 81.4%, disagreed with two.

For the rest of the items, nurse lecturers seemed not sure about nurse manager's commitment. Factors of particular concern raised by the students and nurse lecturers were:

- *Nurse manager having no ward program for teaching students,*
- *Nurse manager not devoting time to teach,*
- *Nurse manager feeling teaching was the work of lecturer*
- *Nurse manager not attaching importance to student learning,*
- *Nurse manager not role modeling care,*
- *Nurse manager not ensuring safe environment for patient care,*
- *Nurse manager checking on adequacy resources for patients care*
- *Nurse manager coordinating team for teaching.*

6.2.7.4 Nurse Managers Commitment by Qualification

The female respondents appeared to have similar perceptions of nurse managers' commitment with diploma holding nurses, who also happened to constitute the bulk of the nurse unit managers. Diploma holders (53.7%) disagreed that "nurse managers feel teaching is the work of lecturers". On the other hand majority (72.7% - 90.9%) agreed that:

- *Nurse managers attached importance to student learning,*
- *Nurse manager role modeled care,*
- *Nurse manager checked adequacy of resources and facilities for patient care, and*
- *Nurse manager coordinated team for teaching and counseled staff.*

Conversely, degree-holding nurses, the bulk of whom were lecturers, were marginal. While 46.3% - 57.1% agreed with all descriptions of nurse manager's commitment, 71.4% agreed with only one item.

The percentages of those agreeing against the 33.3% - 39.0% who disagreed was not convincing when compared with their counterparts holding diploma qualification. It would seem therefore that the age 24-30 years, the students, the male respondents, the 0-5 years of experience, and the degree qualified nurses were dissatisfied with nurse managers commitment to creating a conducive clinical learning environment, and therefore failing to facilitate clinical learning. The female respondents and diploma-qualified nurses on the other hand seemed happy about the nurse manager's commitment. The majority of the respondents agreed with nurse manager's commitment across settings.

However, those at training institutions disagreed with three items and were non-commited for the rest. Interestingly though, respondents across settings, all disagreed that nurse managers had ward programs for teaching. This finding was consistent for all variables.

The findings above were qualitatively verified. Responses to the general comments revealed that 59 participants described the role of the nurse manager as conducive to learning. The majority of these (49.2%) were nurse managers themselves. The descriptions of the conducive role of the nurse manager included the following:

- *Most nurse managers accommodated student's learning, they designated staff to precept them, emphasized close supervision of students and were committed to teach, although their workload does not always allow them,*

- *Nurse managers assigned and requested staff to assist students, were ready when requested to present topics to students, and did their best to facilitate for students' learning and create conducive environment.*

Once again these findings on nurse managers' commitment, confirm those by Mhlongo (1994) & Netshandama-Funyufunyu (1997), that nurse managers perceived clinical teaching and creation of a coducive clinical learning environment as part of their responsibility. This observation also confirmed those of Twinn and Davies (1996:181) who found that some of the *"senior ward sisters described themselves as having more responsibility for organizing placements rather than direct student supervision."*

On the contrary, supervisors in the community settings at the grade of ward sister described teaching and supervision of students as their direct responsibility.

Orton, Prowse and Millen (1993:182), agreed with the finding and noted that *"qualified staff, especially the unit manager, controls the management of the unit as well as role models nursing practice."*

The non-conducive role of the nurse manager however became even clearer when the qualitative narratives were compared with quantitative findings. A total of eighty-one respondents who volunteered to provide additional general information, were dissatisfied about the nurse managers commitment. The eighty-one (81), were made up to 53% nurse lecturers, 30% students and 16% nurse managers themselves. Some of the descriptions used included the following narratives:

- *Nurse managers neglect students, they do not make them part of the team, they assist students only when challenged by lecturers, they never role model care for students.*
- *Not all nurse managers are engaged in activities, which reflect their commitment to students learning, they do not participate in teaching, are too busy to bother about students, and are reluctant to delegate staff to assist.*

- *Most nurse managers never check the standards of care provided, and are not in touch with activities of their units. Most feel they do not have obligation for students' learning.*

These findings were in concert with those by Bezuidenhout, Koch and Netshandama (1998:46-52) who contented that, *"while acknowledged the efforts of the ward managers in creating and maintaining the learning environment, students were dissatisfied about several aspects that appeared lacking in the clinical environment such as good interpersonal relations support. "*

6.2.7.5 Nurse Managers Commitment by experience

The above findings were also identified when testing differences by years of experience. The 0-5 years of experience, who are mostly students disagreed (59.2%-79.6%) that nurse managers were committed to clinical learning. A moderate number of 53.9% - 57% agreed with some items, while 70.6% agreed with one item. Majority of the 6- 15 years of experience (60.7% - 92.9%) and 50% - 94.6% of the 16+ years of experience agreed with most of the items. Findings were therefore similar to those by position in 6.2.7.3.

6.2.6.7 Nurse Manager's Commitment by Type of Setting

The key finding here was that nurse managers in all settings did not have ward/ unit programs for teaching. Respondents in training facilities disagreed with all descriptors of nurse manager's commitment, while those in other settings, agreements were very low and seemed in doubt.

Qualitative data did confirm that indeed nurse manager's, while recognized as key in creating and maintaining conducive clinical learning environment. They were infact failing to execute this responsibility satisfactorily.

6.2.8 Perceptions on Interpersonal Relationships

Findings on interpersonal relationships were also correlated with age, gender, qualification, and position. Significant differences were noted when a chi-square was applied.

6.2.8.1 Interpersonal Relations by Age

The three age groups although agreed on most items responded differently on others and the difference were significant at values of p0.000 to p0.021. Specific items which seemed to cause concern particularly for the 0- 5 years of experience were that:

- *Nurse managers did not have ward programs for teaching*
- *Nurse managers did not devote time to teaching*
- *Nurse managers felt teaching was the work of lecturers.*
- *Nurse managers were not ensuring a safe environment for patient care.*

The three groups however, agreed on the rest of the items, although the 0- 5 years of experience were still low.

These findings were again corroborated when comparing findings tested for differences by gender.

6.2.8.2 Interpersonal Relations by gender

The majority of male respondents (55.1%-73.9%) disagreed with the same factors disagreed for by the age group 24-30 years above, and also agreed with negative ones, agreed for by the same age group. Similarly, most of the female respondents disagreed with those factors disagreed for by the male folks that:

- *Students are expected to obey registered nurses without questions,*
- *Nurse manager's regarded students as workers rather than learners and expected them to prvide care without spervision,*
- *The unit was a happy environment for both patients and staff,*
- *Patients were given enough time to rest,*
- *Unit had too many routine rituals,*
- *Only doctors answered students' questions satiafactorily.*

However, female respondents also disagreed that "nurse managers expected students to provide care without supervision, students were expected to obey registered nurses' instructions without questions, and that only doctors answered students' questions satisfactorily". These responses contradicted those of males, who agreed on all the three, as shown above. This may be explained by the fact that historically nursing has been a female profession. Although this is changing, the majority of managers are still female. Similar observations were made when comparing findings with qualifications. The differences between male and female respondents were significant as reflected on Table 5.49.

6.2.8.3 Interpersonal Relations by Qualification

The diploma holders (94.4%) and the degree nurses (70.7%) agreed that, nurse managers explained instructions coming form above. For the item nurse managers expected student nurses to provide care without supervision, 83.3% of the diploma nurses disagreed against 59.7% of the degree nurses who also disagreed. While the groups were in agreement in these items, percentages differed. Here too, it is important to note that the majority of diploma holders are also nurse managers who may be defending their position, while the majority of the degree holders are lecturers, who may be a bit too critical.

6.2.8.4 Interpersonal Relations by position

A further comparison was done by position. As with the rest of the findings, the three groups differed significantly (at p0.000 to p0.012) from each other on interpersonal relationships. Majority of the three groups (56.2% - 93.2%) agreed with five of the twelve items

- *Nurse managers explain instructions coming from above,*
- *All staff in the unit feel part of the team,*
- *Patients are given enough time to rest,*
- *Students are allowed to ask questions,*
- *Students' questions are answered satisfactorily.*

However, students differed significantly with other positions on items which seemed to reflect poor interpersonal relations.

They agreed that:

- *Students weree expected to obey registered nurses without questions,*
- *Nurse managers expected them (students) to provide care without supervision,*
- *They (students) learned more from other students,*
- *Only doctors answeedr their questions satisfactorily".*

However agreeing on the last item was contradictory, since students (65.6%) had also agreed that staff answered their questions satisfactorily.

On the whole therefore, the findings indicate overwhelming similarities in the perception of interpersonal relationships which are viewed as non-conducive to clinical learning by the age group 24-30 years, the male respondents, students, and degree nurses (lecturers). All of these participants believed that those relationships, which are expected to facilitate clinical learning, are not occurring, while those that impede learning were present. Those which were identified as conducive to learning but which were not always occurring were:

- *Nurse managers explained instructions from above,*
- *All staff in the unit felt part of the team,*
- *Patients were given enough time to rest,*
- *Unit shifts allowed students to gain wide experiences,*
- *Students were allowed to ask questions,*
- *Students questions were answered satisfactorily,*
- *Unit was a happy environment for patients and staff.*

On the other hand, other factors were found to exist which impeded learning and therefore were perceived not to create a conducive environment for clinical learning, these included the following:

- *Students were expected to obey registered nurses instructions without questions,*
- *Nurse managers expected students to provide care without supervision,*
- *Nurse managers regarded students as workers rather than learners,*
- *Students learned more from other students rather than staff, and*
- *Only doctors answered students' questions satisfactorily.*

The qualitative findings verified the above observations through the following descriptions of non-conducive relationships:

- *Some clinical staff members were not motivated or interested in teaching and supervising the students, they leave patient care to students alone, rarely supervise or monitor events in the units.*
- *Clinical nurses expected students to help with patient care, while lecturers expected students to finish procedures, and scolded them if they did not finish in time. They gave conflicting instructions which confused students.*
- *There was no collaboration between lecturers and clinical staff (education and service), and this hampered clinical learning.*
- *Nurse managers complained about students not behaving properly. They threatened to chase them away if they did not help with patient care, they were not interested in student learning, but just working.*

Ironically fifty-two (52) respondents described the interpersonal relationships as conducive to learning. The majority of these 37 (71.2%) were nurse managers, while only 9 (17.3%) were lecturers and 6 (11.5%) students.

The narratives that described what was perceived to be relationships that were conducive to clinical learning included:

-   *Relationships are cordial, students are free to ask question, their questions are answered satisfactorily, and if one is not sure, they do research and give students feedback.*
-   *Students are given time to learn, not just to work, and are treated as individuals".*
-   *Majority of staff understand that they have to supervise students, but staff shortages interfere with their work plans, most do not expect students to work without supervision.*

One may conclude from the above findings then that the majority of respondents found interpersonal relationships not conducive to clinical learning. However, a few of the respondents especially nurse managers believed otherwise. This finding is in contradiction to observations made by previous researchers. Simonson (1996:100) argued that one of the critical elements in creating a conducive learning environment was humanism during provision of patient care and treatment of students during clinical placements. Simonson (1996:100) concluded that there was a *"need for faculty and administration to have caring as a way of being if they wish to communicate caring as the essence of nursing to students."*

Twin and Davies (1996:177) emphasized the need to prepare for supervising and integration of theory and practice, and the organization of patient care, as particularly important to the development of effective clinical learning environments.

6.3 Conclusions drawn on findings:

Subsequent to discussion and comparison of the quantitative and qualitative findings, the following conclusions were drawn:

6.3.1 Factors which were perceived to facilitate clinical learning

• Availability of appropriate and varied quality clinical learning experiences,

• Organization of units which promote privacy and patient comfort, and adequate working space,

• Availability and adequacy of resources, which are also made accessible to students,

• Adequate staffing with qualified staff, who should fully participate in clinical teaching and supervision of students,

• Appropriate and quality patient care which is up to standards, provided by nurses,

• Qualified nurses role modeling quality patient care,

• Lecturers being available and involved in teaching, guiding, supervising and evaluating students,

• Nurse managers building and including students in the team and appropriately managing actuvities in clinical units,

• Nurse manager being involved, and actively participating in clinical teaching,

• Conducive relationships among clinical staff, nurse managers, lecturers, students and patients,

- Allowing students to practice skills to develop competencies, and responding to their questions through provision of feedback,

- Providing opportunities for students to learn without intimidation, allowing them to ask questions where they do not understand and treating them as individuals,

- Availability and accessibility of up to date reference materials for use by both staff and students,

- Provision of appropriate information to patients about their care to enable them to actively participate in making informed decisions about their care.

However, these factors, although key to the conduciveness of the clinical learning environment, were found to be deficient. They therefore turned to become learning impediments instead of facilitators, and were described as:

6.3.2 Factors which were perceived to Impede clinical learning

- Resources were inadequate, not available or not accessible to students,

- Space was not available especially for students' belongings,

- Clinical nurses used nursing process inappropriately and ineffectively thus confusing students who were just learning how to use it,

- Patient care standards were poor, clinical nurses failed to role model appropriate care for students to emulate,

- Lecturers were not always available to facilitate for and guide students' clinical learning,

- Learning experiences were inadequate,

- Relationships among staff, students, nurse manager and patients were non-conducive

- Insufficient learner support, clinical nurses and even nurse managers were not doing enough to support students' learning

- Lack of collaboration between nursing education and nursing service.

- Inadequate/shortage of staffing, which limited clinical staff input into clinical teaching and learning.

- Organization of units in most settings did not ensure patients' comfort and privacy.

As to whether there were any differences in how study participants perceived these factors, one may say in the end there were very minimal. While students, and to some extent lecturers tended to be very critical of the learning environment, nurse managers were very moderate and believed that things were not very bad. However, on the qualitative findings the three subgroups of the sample shared the description of the situation as non- conducive.

6.3.3 Differences in Perception of the Clinical Learning Environment

The minimal differences were observed in the following areas:

While all research participants identified both the factors, which facilitated clinical learning as well as those, which impeded learning, when cross-tabulations were done, the differences became evident:

- Students, male respondents, those with 0-5 years of experience and nursing lecturers and degree holders perceived factors such as "organizations and size of clinical settings, patient care/practice standards, staffing and staff inputs, nurse managers' commitment and interpersonal relationships", as not facilitative to clinical learning,

- Nurse managers, female respondents and diploma holders on the other hand, were a bit modest. They were particularly different in issues such as nurse managers' commitment to clinical teaching and interpersonal relationships where they agreed with most of the items. Few of these perceptions were substantiated through qualitative data.

- Cross-tabulating all variables against the type of setting revealed that referral hospitals provided factors, which facilitated better clinical learning as compared to other settings. However, in most aspects, all settings were similar.

To what extent does the Clinical Learning Environment facilitate or impede learning?

To answer the last question therefore, the study findings revealed that clinical learning was perceived by all as the heart of nurse training, nevertheless, the current clinical learning environment in Botswana is seriously impeding learning for student nurses and was non-conducive. Determined actions were therefore needed to correct the situation, if nurse training in this country was to produce competent nurses to provide primary health care.

In addition to the study questions, the researcher was interested to determine how the findings related to the propositions of the conceptual framework. In order to appropriately address this question, one needs to briefly review the concepts used in the framework, which incidentally guided the whole study. Quinn (1995) identified the following factors as determinants of an effective clinical learning environment:

- Humanistic inclined staff who treat students with kindness, are approachable and helpful to students. They should also provide support for students to learn, foster their self esteem, and be aware of students as learners,

- Team approach, in which qualified staff work as a team, make students feel they are part of the team, and create a learning atmosphere by their relationships within the team.

- Management style in which the nurse manager controls the management of the unit, and role models nursing practice, assumes the role of the team leader, directs staff to provide quality care, ensures teaching is part of the organization, facilitates for students to learn, and provides necessary resources. The nurse manager also facilitates for learning support, where qualified nurses supervise, assess and counsel students, provide learning opportunities for students, such as to participating in rounds, asking questions, etc. nurse managers allow students to be creative and taking responsibility for own learning. She guides, supervises and evaluates student leaning, collaborates with clinical staff in selecting appropriate and adequate learning experiences, liases with staff to support learning, facilitates for students to grow and develop through application of theory to practice and ensures cordial respectful relationships.

All these the relationships function in a well-organized setting with adequate space for client care and student learning and where practice standards are available and used by adquate staff to guide patient care.

The study findings have provided evidence that all the above concepts of the framework are key factors in the creation of a conducive clinical learning environment. The study findings have however highlighted patient care standards and setting organization and adequate space as very vital to clinical learning and patient care environment. These concepts have however been shown, to be the pre-requisites to quality client care and effective clinical learning.

The findings of this study, support those of previous studies. Reilly and Oermann (1992:226) identified staff, resources, patient care standards and availability of experiences. Forrest, Brown and Pollock (1996:1259-1262) alluded to the role of clinical teacher and the quality of learning experiences. The quality of teacher-student interaction according to Nahas, Nour and Al-Nobani (1999:639-648) is very critical in clinical learning. It can either facilitate or hinder students' learning in the clinical area." This observation was true in this study, where students felt nurses yelled at them instead of assisting and guiding them to learn. Furthermore, Kelly (1993), Wilson (1994) and Sieh and Bell (1994), supported the above finding, and in addition they emphasized respectful relationships, adequate staffing and patient care standards consistent with what students were taught.

Dunn and Bunnet (1995:1170) stressed the concepts of nurse manager's commitment, staff-student relationships, interpersonal relationships, and student satisfaction. Dunn and Hansford (1997:1305) supported these findings and added hierachy and ritual. Furthemore, Barnard and Dunn (1994:420-421) outlined individualizing student learning outcomes, student-teacher ratios, sequencing and timing clinical experiences. The model for selecting Clinical Learning Experiences: An Analysis of the Factors Involved (Forthegill-Bourbonnais and Hiquchi (1995:38) proposed curricular goals, learning environment, teacher-expertise and learner characteristics. Basically all other literature reviewed was in congruence with identified concepts.

The model used then, although it was based on humanist theories, its components were drawn from literature. The model was then used to guide the study. The findings of the study led the researcher to modify the former model to incorporate areas of emphasis. The final model, which was a result of incorporation of research findings, is proposed as The Model for Selecting Clinical Learning Settings/ Experiences for Nursing Education for Botswana.

6.4   RECOMMENDATIONS

Having considered factors percieved to facilitate and those which appeared to impede clinical learning. The following recommendations were made:

a) ENHANCING A CONDUCIVE ENVIRONMENT

1. Bi-directional flow of knowledge, such as from patients and their relatives to health practitioners and student nurses, in particular. Mechanisms for facilitating exchange with consumers need to be developed. This will also provide the patients (custormer) with an opportunity to participate meaningfully in their own care and health care provision as informed stakeholders. Consequently, as customers of health services, they will be in a position to provide feedback on areas that need improvements, particularly standards of care they receive.

2. Strengthening the capacity for clinical instruction:

    Clinical training requires qualified and well- trained clinicians, functioning in a supportive environment. Additionally, collaborative networks among nurse managers and educators, consumers and community members, physicians and other health providers should be strengthened to enhance a multidisciplinary approach. This will increase exposure of students to relevant and current health science disciplines. For inadequacies that exist at home institutions, as is the case in this study, an arrangement should be made for affordable exchange programmes within the region. There is a need to engage consultancy to strengthen lectures' skills in clinical teaching and problem–based and student-centered learning.

b) **ESTABLISHMENT OF CLINICAL PRACTICE POLICY UNITS AT BOTH MINISTERIAL AND FACILITY LEVELS**

1. Clinical training requires that clinical practice must be of acceptable quality standards. The establishment of clinical practice policy unit could ensure that patient care is up to standards. The unit could be responsible for overseeing and enforcing development of patient care standards, their monitoring and implementation. An environment in which practice standards are of good quality will enhance clinical learning, where students emulate appropriate care provided by qualified staff.

2. The unit should closely work with statutory bodies such as nursing and midwifery Council of Botswana, medical and dental council etc to enforce standards of care and improve the quality of client care and clinical learning. Registration for practise must be based on passing Coucil Examinations.

3. Professional organizations must actively be involved and be seen to be the custodian of quality of services provided by their members. This will in turn ensure the improvement of the image of health proffessionals especially nurses.

c) INTRODUCE INNOVATIVE WAYS TO IMPROVE ON CLINICAL PRACTICE AND SETTINGS

1. Innovative approaches and strategies need to be introduced to improve clinical settings and enhance clinical practice and clinical teaching. Such strategies could include re-adjusting the plans to upgrade district hospitals, so that priority is given to upgrading teaching hospitals first. This approach alone could go a long way in making the clinical learning environment conducive, through improvement of space and organization of settings and therefore increased and varied clientele and staffing.

2. Specialist surgeons, medical specialists and gynaecologist/obstetricians can then be assigned to the teaching district hospitals throughout the country, so that most of the secondary care can be provided at these facilities. This arrangement would minimize referrals out to the only two national referral hospitals, and thus reduce overcrowding and very long waiting lists. At the same time district hospitals would be able to provide the much-awaited clinical learning experiences so desperately needed and improved client care.

d) IMPROVE STAFFING AND ENHANCE THEIR COMMITMENT TO CLINICAL TEACHING

1. Improvement of staffing in teaching facilities, so that staff-patient ratios are within acceptable staffing norms. Involvement of all members of the health team in teaching students. Especially members of the allied health professions should be made aware of their responsibility in clinical teaching.

2. Primary care settings, especially where students do their clinicals be strengthened with staffing to minimize the incidences where students are supervised by junior members of staff.

3. Improvement of clinical teaching through adherence to the recommended student teacher ratios of 8:1 or 10:1 whichever is feasible. Reintroduction of the concept of clinical instructor, to ensure that at no time students are left unsupervised. Reviewed and up-to-date clinical teaching strategies and utilize time cost effectively.

4. Nurse managers to improve their communications and take serious their responsibility to oversee that appropriate and quality patient care is provided. They should also promote interpersonal relationships and build cohesive teams, in which all staff, students and patients feel they belong and work cooperatively together for the benefit of all.

5. Eliminate all repetitious coursework and restructure teaching strategies so that emphasis is on principles and concerpts toto allow for clinical practice time by students with teachers to guide.

6. Develop a continuing- education program on clinical teaching for nurse teachers and clinical supervisors. This could also include exchange arrangements within the region.

e) **RECOMMENDATIONS FOR FUTURE RESEARCH**

Further research is recommended in the following areas:

1. Exploration of why male nurses tend to perceive patient care differently from their female counterparts. Determine factors, which contribute to male nurses being at variance in their perception of the quality of patient care, with the female nurses.

2. Exploration of ways in which clinical nurses could be empowered, first to be committed to providing quality patient care, and second to take responsibility for mentoring students, and role modeling appropriate care for them.

3.   Determine the impact of the current student placement in primary care settings on attainment of learning objectives.   Are these settings (clinics) assisting students to develop appropriate primary health care skills, knowledge and attitudes, to be able to provide preventative and promote services?

4.   Replications of the current study nation-wide, so that findings could be generalized to the whole country. Recommendations for improvement could thus be implemented to benefit the entire nursing education and nursing service in Botswana.

5.   Exploration of nurse teachers' perceived role in clinical teaching in Botswana.Do nurse teachers perceive clinical teaching as part of their responsibilities?   How prepared are they to handle both theory and clinical teaching

The outlined recommendations grow out of the research findings and analysis. Any possibility of quality improvement and empowerment of clinicians will be of high value. This improvement may assist to prioritize clinical practice and its' educational objectives.

6.5   CONCLUSION

This chapter has presented summary of study findings on factors perceived to facilitate and those perceived to impede clinical learning for student nurses in Botswana. Key factors identified as facilitative were nurse manager commitment role, team approach, clinical teachers' role and humanistic staff role, all these functions in a setting, which is appropriately organized and has adequate space. The setting must also have standards of care, which are used to guide staff in the provision of care. The inner players of client and family care and student clinical learning are the result of the inter play maong all the other factors.

The factors, which impede clinical learning on the other hand, had a lot to do with implementation problems. These included shortage of staffing, poor patient care standards, por interpersonal relationships and repetition courework and clinical requirements for students.

Conceptual framework based on literature reviewed and supported by study findings has been recommended for use to select clinical learning environments for Botswana. Limitations were described and recommedations forwarded

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LIST OF APPENDICES

1. APPENDIX A: Request for Study Grant and Research Grant Permit

2. APPENDIX B: Local Government Request to use Clinics And Permit to use the Clinics

3. APPENDIX C: Request to use Health Facilities for the study

4. APPENDIX D: Letter of consent 1-6 to use Health Facilities

5. APPENDIX E: Individual Consent Letter and Questionnaire.

Institute of Health Sciences
P O Box 985
Gaborone

5th July 1998

The Chairperson
National Health Research Committee
Ministry of Health
Private Bag 0038
Gaborone

Dear Sir

Re: **REQUEST FOR RESEARCH STUDY GRANT – MYSELF**

I am a nurse lecturer (principal) enrolled in a doctoral programme with the University of South Africa. I am conducting a research project as a partial requirement for my studies. The title of my study is "An exploration of various clinical settings for the educational preparation of student-nurses for Primary Health Care in Botswana."

The purpose of the study is to identify and describe factors which characterize the clinical learning environment for student-nurses.   With a view to nurture those which facilitate, while improving the ones which impede learning.   Your facility has been selected to participate in the study. The study population consists of the following.

- Second year student nurses
- Nurse-teachers
- Nurses-in-charge of clinics/wards
- Selected clinical units (wards or clinics)

Data will be collected through a self-administered questionnaire, interview and observation of selected clinical units.

The study seeks to answer the following questions:

- What clinical setting factors are perceived by student nurses, nurse-teachers and nurses-in-charge of units as facilitating or retarding both theoretical and clinical learning of student nurses in Botswana?

- Are there any similarities or differences in the factors as perceived by student-nurses, nurse-teachers and the nurses-in-charge?

- Are there any similarities or differences in the observed factors of the setting by the researcher and those perceived by student-nurses, nurse-teachers and nurses-in-charge?

I therefore request permission to conduct this study. The study has no inherent risks to participants. Individuals participating in the study will do so voluntarily after the study has been explained to them. No data will be linked to individuals or facilities and no names will be used. Individuals will be reassured that they are free to withdraw if they so wish.

It is believed that this study will generate locally relevant data on the status of our clinical settings as learning environments. For details, please refer to the enclosed study proposal.

Thank you for your cooperation.

Yours truly

C N Pilane

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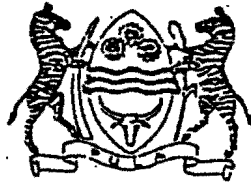
REPUBLIC OF BOTSWANA

MINISTRY OF HEALTH,
PRIVATE BAG 0038,
GABORONE.

09 October, 1998

Mrs C.N. Pilane
Institute of Health Sciences
P.O. Box 309
Lobatse

Dear C. N. Pilane

Grant of a Research Permit: C. N. Pilane

Your application for a research permit refers.

I am pleased to inform you that you have been granted permission to conduct research on **"Exploration the various clinical settings for their appropriateness to facilitate student learning in the clinical area "**

The permit does not give authority to enter any premises, private establishment or protected area without permission of concerned parties. Such permission should be negotiated with those concerned. You may also need to request permission from other relevant authorities, i.e. Ministry of Local Govememnt Lands and Housing, (PHC), Local District Health Team, etc.

You are also requested to submit at least one copy of the findings of your study to the Ministry of Health, Health Research Unit.

Yours sincerely

Pilate Khulumani.
For Permanent Secretary.

Institute of Health Sciences
P. O. Box 309
Lobatse

20- 10 - 98

The Establishment Secretary
Local Government Service and Management
Private Bag 0052
Gaborone

Dear Sir

RE: PERMISSION TO CONDUCT STUDY IN YOUR FACILITY

I am a nurse lecturer (principal) enrolled in a doctoral programme with the University of South Africa. I am conducting a research project as a partial requirement for my studies. The title of my study is "An exploration of various clinical settings for the educational preparation of student-nurses for Primary Health Care in Botswana."

The purpose of the study is to identify and describe factors which characterize the clinical learning environment for student-nurses, with a view to recommend suggestions for nurturing those which facilitate, while improving the ones which impede learning. Your facility has been selected to participate in the study. The study population consists of the following:

- second year student nurses
- nurse-teachers
- nurses-in-charge of clinics/ wards
- selected clinical units (wards or clinics)
- selected other members of the health team.

Data will be collected through a self-administered interview guide and observation of selected clinical units (clinics and wards).

The following Districts where general nursing training schools are located are included in the study. These districts/ councils include: Kweneng District Council, Southern District Council, Gaborone City Council, Lobatse Town Council and Francistown City Council.

The study seeks to answer the following questions:

- What clinical setting factors are perceived by student nurses, nurse-teachers and nurses-in-charge of units as facilitating or retarding both theoretical and clinical learning of student nurses in Botswana?
- Are there any similarities or differences in the factors as perceived by student-nurses, nurse-teachers and the nurses-in-charge?
- Are there any similarities or differences in the observed factors of the setting by the researcher, and those perceived by student-nurses, nurse-teachers and nurses-in-charge?

I therefore request permission to interview staff of your facility and do observation of a few selected units. The study has no inherent risks to participants. Individuals participating in the study will do so voluntarily after the study has been explained to them. No data will be linked to individuals or facilities and no names will be used. Individuals will be reassured that they are free to withdraw if they so wish.

It is believed that this study will generate locally relevant data on the status of our clinical settings as learning environments. Thank you for your co-operation.

Yours Truly

C. N. Pilane

SAVINGRAM

FROM: Establishment Secretary
         Local Govt. Service Management

M C Majelantle for ES

TELEPHONE NO: 3612800

TO: Council Secretary - Kweneng District Council
                     - Southern District Council
     City/Town Clerk - Gaborone C .C
                    - Lobatse Town C
                    - Francistown C .C

ATTENTION: SDMO/Matron

REFERENCE NO: U 17/63 VI (31)

20th November 1998

cc: N . C . Pilane   - I.H.S Lobatse

PERMISSION TO CONDUCT RESEARCH STUDY: N.C. PILANE

Enclosed find a copy of a self explanatory letter from Mrs. N. C. Pilane to the Establishment Secretary.

According to Mrs. Pilane, she has already approached you and you showed willingness to let her conduct her study. She has also informed the health facilities where the data will be collected.

This Savingram serves to authorize her to conduct the study. Please give her the support that she needs.

Thank you.

Institute of Health Sciences
P. O. Box 309
Lobatse

21 - 07 - 98

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Dear Sir/ Madam

RE: PERMISSION TO CONDUCT STUDY IN YOUR FACILITY

I am a nurse lecturer (principal) enrolled in a doctoral programme with the University of South Africa. I am conducting a research project as a partial requirement for my studies. The title of my study is "An exploration of various clinical settings for the educational preparation of student-nurses for Primary Health Care in Botswana."

The purpose of the study is to identify and describe factors which characterize the clinical learning environment for student-nurses, with a view to nurture those which facilitate, while improving the ones which impede' learning. Your facility has been selected to participate in the study. The study population consists of the following:

- second year student nurses
- nurse-teachers
- nurses-in-charge of clinics/ wards
- selected clinical units (wards or clinics)
- selected other members of the health team.

Data will be collected through a self-administered questionnaire, interview and observation of selected clinical units.

The study seeks to answer the following questions:

- What clinical setting factors are perceived by student nurses, nurse-teachers and nurses-in-charge of units as facilitating or retarding both theoretical and clinical learning of student nurses in Botswana?

- Are there any similarities or differences in the factors as perceived by student-nurses, nurse-teachers and the nurses-in-charge?

- Are there any similarities or differences in the observed factors of the setting by the researcher, and those perceived by student-nurses, nurse-teachers and nurses-in-charge?

I therefore request permission to interview staff of your facility and do observation of a few selected units. The study has no inherent risks to participants. Individuals participating in the study will do so voluntarily after the study has been explained to them. No data will be linked to individuals or facilities and no names will be used. Individuals will be reassured that they are free to withdraw if they so wish.

It is believed that this study will generate locally relevant data on the status of our clinical settings as learning environments. Thank you for your co-operation.

Yours Truly

C. N. Pilane

TELEPHONE: 353221
TELEGRAMS: NGAKA
REFERENCE:

REPUBLIC OF BOTSWANA

PRINCESS MARINA HOSPITAL
P.O. Box 258
GABORONE
BOTSWANA

16 November 1998

CN Pilane
Institute of Health Sciences
P.O. Box 309
Lobatse
Botswana

Dear Ms Pilane

Re: An Exploration of various Clinical Settings for the Educational Preparation of Student Nurses for Primary Health Care in Botswana

Having read your proposal and consulted with the Committee Chairperson I am happy, on behalf of the Research and Ethics Committee, to give provisional Ethics approval for you to proceed with the above named research. We note that this will be a purely observational enquiry and that it will not involve patient interventions.

In giving you this provisional approval, I wish to inform you that it is the mandate of this Committee to maintain a Research Inventory on behalf of this hospital. Consequently, you will be obliged to provide the Committee with one copy of your study report, including all the key research findings, at the end of the study.

On behalf of the Committee, I wish you success in this endeavour.

Yours sincerely,

Prof. Gabriel M. Anabwani
Secretary, Research and Ethics Committee

Cc: Chairman, Research and Ethics Committee

FROM: Chief Medical Officer
      Athlone Hospital

Dr E.M. Mapara/C.M.O.

TELEPHONE NO.   330333

TO: The Principal
      Institute of Health Sciences
      Lobatse

REFERENCE NO: AH 3175 2

2nd   December   19 98

Attention: Mrs C.N. Pilane

RE: PERMISSION TO CONDUCT STUDY IN ATHLONE HOSPITAL

I am in receipt of letter requesting permission to conduct a study
in Athlone Hospital. My apologies for the delay in response.

The permission has been granted.

Athlone hospital being a 'teaching facility' for the Lobatse Institute
of Health Sciences, readily opens its doors to you.

I am sure your research will go a long way in helping our facility
improve its services to the patients and the teaching of the students.

Thank you.

REPUBLIC OF BOTSWANA

NH 3/54

9 December, 1998

Institute of Health Sciences
P O Box 309
Lobatse

Dear Madam

PERMISSION TO CONDUCT STUDY IN NYANGABGWE HOSPITAL

Your letter dated 21 July, 1998 refers.

Having read your proposal we feel the major objective of your study is acceptable. However we have these comments.

1. We have reservations on your "observations" methodology. Observations tend to be highly weighted on individual perceptions. We therefore wish to be made familiar
with   your objective criteria,

Since this is not a national/or institutional project study (but an individual study)
we hope that you will satisfy the Ministry of Health and the ethical committee requirements.
Permission from the Ministry of Health will be needed for our institution.

Thank you for considering our institution for your study.

Good luck.

Yours faithfully

Dr H N C Hobona
HOSPITAL SUPERINTENDENT

cc: Permanent Secretary
        Ministry of Health

Kanye Seventh-day Adventist Hospital

P.O. Box 11
Kanye. Botswana.

Tel : (267) 340-333/4
Fax : (267) 340-224

hui to minister

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11 December 1998

Mrs. C.N.Pilane
Institute of Health Sciences
P O Box 309
Lobatse

RE:- PERMISSION TO CONDUCT STUDY IN YOUR FACILITY

This is to inform you that the Administrative Committee at its meeting on the 3rd December 1998 took an action to grant you permission to conduct study in our facility.

You may therefore come and start your study at any time as permission has been granted.

Yours faithfully

Mr. B.Moahi
HOSPITAL ADMINISTRATOR

Kanye Seventh-day Adventist Hospital

P.O. Box 11
Kanye, Botswana.

Tel : (267) 340-333/4
Fax : (267) 340-224

"but to minister"

11th December 1998

C. N. Pilane
Institute of Health Sciences
P. O. Box 309
Lobatse

Dear Madam,

Please refer to your letter dated 21 July 1998. The Kanye SDA College of Nursing is granting you permission to collect data from our second year students nurses and staff.

We wish you a successful completion of your research project.

Yours faithfully

T. Thongola
DEPUTY PRINCIPAL

Institute of Health Sciences
P.O. Box 884
Botswana

31st July, 1998.

Ms C. N. Pilane
Insituteof Health Sciences
P. O. Box 309
Lobatse

Dear Madam

PERMISSION TO CONDUCT STUDY

Reference is made to your letter dated 21st July, 1998 on the above subject. You are hereby granted permission to interview the staff at the institute of health sciences - Molepolole as a partial requirement for your doctoral programme.

Wishing you luck in all your undertakings

Yours faithfully,

D. Mooka/for Principal

Institute of Health Sciences
P. O. Box 309,
LOBATSE.

17th November, 1998.

Dear Colleague, Nursing lecturer/Clinical Unit Manager
Institute of Health Sciences
Gaborone
Molepolole
Francistown
Lobatse
Kanye College of Nursing
Associated clinical settings

Your name has been randomly selected to participate in the study that seeks to identify and describe factors which facilitate or impede learning in the clinical area. You are therefore requested to freely consent to participate in the study.

In the effort to improve clinical learning. I need your input to evaluate the clinical settings used for Year II learning experiences.
I therefore request that you take a few minutes to complete the attached interview guide / questionnaire. Please note that the tool has been pre-coded. Do not write your name or that of your facility. Your responses will be treated in confidence and only average data will be reported. No names on facility will be linked to the results. I would very much appreciate your participation. however, you are free not to participate if you so wish.

Thank you.

C.N. Pilane

DATA COLLECTION TOOL

TOPIC: An exploration of various clinical settings for the educational preparation of student-nurses for Primary Health Care in Botswana.

PURPOSE OF THE STUDY

To identify and describe factors which characterize the clinical learning environment for the student-nurses. with a view to nurture those which facilitate. while improving the ones which impede learning.

The entire tool will take ten to fifteen minutes to complete and will require that you place a mark (x) on the appropriate space provided.

SECTION 1: DEMOGRAPHIC DATA

Please complete the following questionnaire by placing an X next to the statement that best describes you.

1	Your Age is	24
		25
		26
		27
		28
		29
		30
		31
		32
		Other-Please Specify:
2	Your Gender is	Male
		Female
3	Your Marital Status is	Single
		Married
		Divorced
		Widowed
		Other-Please specify:
4	What type of family setting do you live in?	
		Nuclear
		Extended
		Other-Please specify:

5   How many children do you have?   0
                                               1
                                             2
                                             3
                                             4
                                             5 or more

6   Your Religion is   Christianity
                                     Islamic
                                     Hinduism
                                     Other-Please specify:

_____

7   What is your nursing qualification level?
                                     Student nurse
                                     General Nursing Diploma
                                     Post-basic Diploma
                                     Basic Degree
                                     Post-Graduate Degree
                                     Other-please specify

_____

8   What is your years of nursing experience?
                                     0 - 5 years
                                   6 - 10 years
                                   11 - 15 years
                                   16 - 20 years
                                   21 and over

9   What is your position?
                                     Staff-Nurse
                                     Nursing Sister
                                   Unit Manager/ Nurse in-charge
                                   Lecturer
                                   Other-please specify

_____

10   What is the type of setting you worked at
      during the last year?
                                     Ambulatory Clinic
                                     Primary Hospital
                                     District Hospital
                                     Referral Hospital
                                     Other-please specify

_____

-11   In which ward/unit did you work and supervise students
during the last year? Select as many as applicable.

                              Medical - Male
                                    -Female
                         Surgical - Male
                                - Female
                         Paediatric - Male
                                    - Female
                         Othorpaedic - Male
                                    - Female
                         Intensive Care- Male
                                       -Female
                         General Wards - Male
                                          -Female
                         Gynaecological Ward
                         Accident & Emergency
                         Obstetric/Maternity
                         Clinic/ OPD

SECTION 2: ASSESSMENT OF CLINICAL LEARNING ENVIRONMENT

Please respond to the following questions by placing a mark (x) against the statement that best describes your perception. Use SA for Strongly Agree. A for Agree.MA for Moderately Agree. U for Undecided. MDA for Moderately Disagree. DA for Disagree and SDA for Strongly Disagree. If your response is MDA. DA or SDA please comment on the space provided below.

ITEM NO	DESCRIPTION	POSSIBLE RESPONSES						
1	CLINICAL SETTING	SA	A	MA	U	MDA	DA	SDA
1.1	The facility is adequate in terms of space.							
1.2	The organisation of units\ wards is conducive for students learning.							
1.3	Space is available in the setting for student belonging.							
1.4	The setting provides reference materials for staff and students.							
1.5	A wide range of learning experiences is available for students in the setting							
1.6	Patient populations are adequate in number for student learning objectives.							
1.7	Patient populations have a variety of conditions for student learning.							
1.8	Patients are present in the setting for an adequate length of time to enable students to attain learning objectives.							
1.9	Resources required for patient care are available in the setting.							
1.10	Available resources are adequate.							
1.11	Resources for patient care are accessible to student.							
1.12	Patient records are accessible to students.							

COMMENTS:-

2	PATIENT CARE/NURSING PRACTICE	SA	A	MA	U	MDA	DA	SDA
2.1	Nursing care reflects practice standards, consistent with what students are taught.							
2.2	The ward/clinic has practice standards which guide patient care activities.							
2.3	The client/patient records reflect current nursing practice standards.							
2.4	The ward/clinic uses nursing process effectively while providing care for patients/clients.							
2.5	Patient care is monitored through regular check of vital signs.							
2.6	Patient care is documented using "SOAPIE."							
2.7	The ward/clinic practices patient allocation rather rather than task allocation.							
2.8	Privacy is a key factor is patient care.							
2.9	Patient needs are given first priority as compared to nurses needs.							
2.10	Nursing care is individualised for each patient/client.							
2.11	Patient care is safe, organised and holistic, based on patient needs.							
2.12	Nurses relate therapeutically with patients/clients in various conditions.							
2.13	Nurses act as patient advocates while providing care.							
2.14	Patient's are given adequate information about their own care.							
2.15	Nurses allow patients to participate as much as possible in their own care.							

COMMENTS:-

3	STAFFING	SA	A	MA	U	MDA	DA	SDA
3.1	The setting is adequately staffed with qualified nurses to support student learning.							
3.2	Qualified clinical nurses support student learning.							
3.3	Clinical nursing staff are too busy to assist students.							
3.4	The setting is staffed with appropriately qualified allied health personnel to support student learning.							
3.5	The setting is staffed with adequate numbers of medical personnel to support student learning.							
3.6	Nursing staff is willing to collaborate with nurse-lecturers to select learning experiences							
3.7	Nursing staff is willing to guide and supervise students' learning.							
3.8	Nurse-lecturers are available to guide students learning in the clinical setting.							
3.9	Nurse-lecturers are only available to evaluate students.							

COMMENTS :-

4	NURSE MANAGERS COMMITMENT	SA	A	MA	U	MDA	DA	SDA
4.1	Nurse manager/nurse-in-charge is flexible to students and lecturers' time in the clinical setting.							
4.2	Nurse manager/nurse-in-charge orientates students and lecturers' to the clinical settings.							
4.3	Nurse manager/nurse-in-charge has ward program for teaching students.							
4.4	Nurse manager/nurse-in-charge devotes time to teaching students.							
4.5	Nurses-in-charge feel clinical teaching is the work of lecturers.							
4.6	Nurse manager/nurse-in-charge attaches great importance to students' learning needs.							
4.7	Nurse manager/nurse-in-charge is too busy with more important matters to attend to students.							
4.8	Nurse manager/nurse-in-charge role models nursing care to staff and students.							
4.9	Nurse manager/nurse-in-charge ensures safe physical, social and psychological environment for patients to facilitate student learning.							
4.10	The nurse manager/nurse-in-charge does ward rounds with students to teach them to check standards of care.							
4.11	Nurse manager/nurse-in-charge counsels staff members on problems related to clinical teaching and learning.							
4.12	Nurse manager/nurse-in-charge counsels students on problems related to clinical learning.							
4.13	Nurse manager/nurse-in-charge checks on adequacy of facilities and equipment for use in patient care.							

4.14	Nurse manager/nurse-in-charge checks for adequacy of facilities equipment for use in clinical teaching.							
4.15	Nurse manager/nurse-in-charge coordinates the team to work together in providing care for clients.							
4.16	Nurse manager/nurse-in-charge coordinates the teams to work together in teaching students.							

COMMENTS :-

5	INTERPERSONAL RELATIONSHIPS	SA	A	MA	U	MDA	DA	SDA
5.1	Nurse manager/nurse-in-charge usually explain instructions coming from high level to to staff in the unit.							
5.2	All staff in the unit feel part of the team.							
5.3	The unit is a happy environment for both patients and staff.							
5.4	Patients are given enough time to rest in between activities.							
5.5	The unit has too much rituals/routines. may							
5.6	Students are expected to obey registered nurses' instructions without asking questions.							
5.7	Nurse manager/nurse-in-charge regards student nurses as workers than learners.							
5.8	Nurses-in-charge expect student nurses to provide care on their own without supervision.							
5.9	Students nurses learn more from other students rather than from staff.							
5.10	Ward/clinic shifts allow students to gain the widest possible experiences.							
5.11	The ward/clinic treats students as individuals rather than just students.							
5.12	Students are allowed to ask questions.							
5.13	Students' questions are answered satisfactorily.							
5.14	Only doctors answer student nurses' questions satisfactorily.							

COMMENTS :-

Thank You For Completing This Questionnaire