A CONTINUING EDUCATION PROGRAMME FOR FAMILY NURSE PRACTITIONERS IN SWAZILAND

by

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DEDICATED TO MY PARENTS AND FAMILY

"IF SOMEONE STUDIES A LOT AND DOES NOT GO AMONG THE MASSES HE HAS NO PRACTICE, IF HE HAS NO PRACTICE, HIS KNOWLEDGE REMAINS LIFELESS. HE REMAINS A STORYTELLER WHO CAN QUOTE MANY PASSAGES FROM SCIENTIFIC OR REVOLUTIONARY WORKS BY HEART, BUT WHO WILL NOT WRITE A SINGLE NEW PAGE, A SINGLE NEW LINE THROUGHOUT HIS LIFE.

WE LEARN FROM THE MASSES AND TEACH THEM WHAT WE HAVE LEARNT. WE PERSISTENTLY APPLY OUR KNOWLEDGE TO PRODUCTIVE WORK, CORRECT OUR MISTAKES AND MAKE OUR COGNITION MORE PROFOUND".

ANONYMOUS

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SUMMARY

In Swaziland, family nurse practitioners (FNPs) are professional nurses who have undergone preparation as general nurse, midwife and FNP. These nurses play an important role in the delivery of primary health care (PHC). Family nurse practice is an evolving concept introduced in Swaziland in 1979. It is a means of exploring nursing roles and primary health care services for deployment in under-served areas and to enable nurses to serve as the primary providers of health care services in clinics, health centres and in the outpatient departments of hospitals.

Changing responsibilities within the health care setting require different skills and more knowledge. The expansion and extension of the nurses' role, including the techniques of diagnosing and treating, was a priority of the Ministry of Health and Social Welfare (MOH&SW) in Swaziland's five-year development plan for 1978-1983. It was regarded as a necessary component for raising the quality and effectiveness of PHC services.

Some of the major and urgent challenges that confront FNPs today are the advent of the human immune virus/acquired immuno-deficiency syndrome (HIV/AIDS) scourge and the re-emergence of the tuberculosis epidemic. Both these health problems require proficient diagnosis and case management skills as well as new approaches. If FNPs are to remain relevant and to continue to provide quality services in spite of prevailing challenges, they have to engage in continuing education (CE).

The main aim of this study was to investigate the perceptions of the FNP role, CE needs and issues relevant to the current practice of FNPs in Swaziland. A further aim was to establish a structure or framework for a CE programme that would contribute to the strengthening of CE for FNPs and identify enabling factors and barriers in the practice and education of FNPs.

Both quantitative and qualitative research methods were used for data collection. A survey was conducted to collect data from 57 FNPs and 11 nurse managers and nurse educators. The transcript from the questionnaires was subjected to quantitative-based content analysis. A total of thirty nurse managers, nurse educators and MOH&SW nurse executives participated in the focus group interviews. The collected data was subjected to qualitative-based content analysis.

The findings identified the role of the FNP as manager, clinical practitioner, educator and researcher. The analyses highlighted the CE needs of FNPs, and the question of updating and upgrading the skills of practising FNPs. The identified enabling factors and barriers,

although perceived as issues that are peripheral and auxiliary to the curriculum, appeared to have a strong bearing on programme planning. The findings from this study have implications for a structured CE programme for FNPs at the University of Swaziland.

Key terms:

family nurse practitioner; continuing nursing education; primary health care; needs assessment; adult learning; experiential learning; programme planning; teaching/learning methods; focus group interview; expanded role.

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CHAPTER 1

OVERVIEW OF THE STUDY

1.1 Introduction

In Swaziland, family nurse practitioners (FNPs), with preparation in general nursing, midwifery and family nurse practice are playing an important role in the delivery of primary health care (PHC). The family nurse practitioner is an evolving concept introduced in Swaziland in 1979. Family nurse practitioner preparation emerged as a means of exploring nursing roles and PHC services for deployment to under-served areas and to enable nurses to serve as the primary providers of health care services in outpatient departments.

Changing responsibilities in the health care setting required different skills and more knowledge. The expansion and extension of the nurse's role to include the techniques of diagnosing and treating was a priority of the Ministry of Health and Social Welfare (MOH&SW) in Swaziland's five-year development plan for the period 1978 to 1983. It was considered a necessary component for raising the quality of curative services. In a synopsis of a community health project that formed part of the five-year plan, the Ministry stated:

> The Community Health project identified the following as the most urgent requirements in preparing nurses to function in their expanded roles: knowledge and skills in human physical assessment, knowledge and skills in administering standard treatment (Government of Swaziland 1978-1983:16).

What was important to the MOH&SW was the improvement of the health services and the expansion of health service delivery in rural areas, as a vital element in pursuit of the goal of health for all by the year 2000.

The MOH&SW is committed to the ongoing improvement of the calibre of health workers as it moves towards its stated goal, which reads as follows:

> To improve the health status of the Swazi people by providing preventive, promotive, rehabilitative and curative health services which are relevant and accessible to all (Government of Swaziland MOH&SW 1983:1).

To continue to improve the health of the Swazi people, FNPs need to provide services that are relevant. Continuing education (CE) is one means of ensuring that the care these nurses provide is up to date, relevant and in line with new developments in health care.

The literature reveals that CE is vital to the continuance of excellence in the nursing profession. According to Farley (1987:184), CE for nurses has come to represent an important means of assuring competent quality care in practising nurses. Meade, Burger and Ninksic (1985:121) assert, further, that for today's nursing care, it is not enough that the nurse be competent. It is essential that new knowledge be acquired and new skills learnt so that new technology can quickly become part of even routine nursing care. In addition, today's nurse must stay abreast of new developments so that administrators can ensure the delivery of effective health care at a reasonable cost to the consumer.

Continuing education courses in nursing have gained widespread acceptance in Swaziland in the past few years. Continuing education is viewed as consisting of systematic learning experiences designed to build on previous knowledge and skills, and requiring both the provision of an organised, planned programme and an independent effort on the part of the practitioner. Continuing education has been defined by a World Health Organisation (WHO) group cited by Lanara (1994:88) as:

> ... the training that an individual health professional undertakes after the end of basic professional education or of any additional education for a career as a generalist or specialist to improve competence as a practitioner and not with view to gaining a new qualification.

Beukes (1992:34) describes CE as a process of ongoing education aimed at personal and professional growth and development, which will enable adult learners to function more effectively in their chosen field of practice. Several factors have contributed to the popularity of continuing nursing education. According to Cooper (1983:11):

> Causes for the popularity of CE programmes include the ever increasing body of scientific technology, a changing outlook on health care, which more frequently demands better care and responsibility from nurses and a general increase in the sense of professionalism within nursing itself.

Disease patterns and modes of treatment change far more rapidly than do health care structures and systems. These emerging trends in our society affect the practice of FNPs, professionally and technically. Maintaining professional knowledge and skills in a rapidly changing, increasingly technical health care delivery system is a challenge for all health care workers including FNPs (Turner 1993:5).

Advances in science and technology, and changes in health problems all demand changing patterns of nursing education. In Swaziland, education should address the shortage of nurses with specialised training, so as to meet the ever-increasing health needs of the Swazi people. It is a fact that nurses in Swaziland form the largest group of health care providers and that they are the key providers of primary health care. In view of the shortage of medical doctors in the country, FNPs were found to be very effective and appropriate in rendering health care in the absence of medical doctors. The MOH&SW in Swaziland recognises the need to provide education for nurses employed as FNPs in order to enhance their ability to provide comprehensive health care and utilise the referral system as necessary. Continuing education for nurses therefore forms an integral part of the health and educational systems of the country.

In Swaziland, CE is being used to make a positive impact upon the knowledge, skills and attitudes of health care workers. According to Bazillio (1989:3) CE is used to introduce new developments and techniques in health care and health service management to deal with gaps between performance and the actual demands of a job; and to impart new skills demanded by changes in health programmes or by new or different responsibilities. Continuing education involves planned learning activities developed to provide knowledge, skills and attitudes that enhance nursing practice. This includes introducing new technology and concepts, redefining procedures, taking care of emerging illnesses, innovations and specialised training.

Continuing education focuses on the overall growth and development of nurses as well as improving effectiveness in the current work situation. According to Chalmers and Kristjanson (1987:129), the overall purpose of CE consists of systematic learning experiences designed to increase the knowledge and skills of nurses. Therefore, CE is essential to the development of quality health care.

1.2 Background to the problem

In Swaziland, CE programmes are organised and conducted in five public hospitals and in other health service organisations, such as the Family Life Association and the Red Cross organisation. Continuing education for FNPs is monitored by the MOH&SW as the major provider of programmes. The government provides grants and paid educational leave of absence to nurses who participate in CE programmes.

Continuing education in Swaziland is not mandatory. Professional nurses in Swaziland are registered for life once they have completed their basic nursing and midwifery education. Nurses, including FNPs, do not have to renew their licenses through CE in order to practise. There is therefore no way of knowing whether they are keeping themselves updated on the latest

technological advances and the rapid sociological changes that require individuals to continually adapt by adjusting or improving their practice. Although nurses have to pay an annual registration fee that keeps them currently registered, they are not required to undergo a CE programme to be re-licensed or re-registered.

Once the FNP has been educated, Swaziland has no formal, rational and systematic training co-ordination process where priority is given to the country's needs and training is then based upon these needs rather than on what is currently being funded by donors. Donors who fund these CE offerings are mainly concerned with vertical programmes such as expanded programmes of immunisation, maternal and child health, family planning, malaria, control of diarrhoeal diseases, Acquired Immune Deficiency Syndrome (AIDS) and acute respiratory infection programmes. They concentrate mainly on these specific health problems or disease control rather than on integrated PHC. Continuing education related to these vertical programmes reaches some nurses while others, especially those in the remote areas, are neglected. Bazillio (1989:3) identified some concerns of the MOH&SW regarding in-service education, which were:

> ... proliferation of formal in-country training courses, a lack of co-ordination and scheduling of training courses, the excessive amount of time spent away from the clinic in training, and the absence of a systematic evaluation and adequate follow-up to training.

Although most FNPs have been educated in the country, problems arise if these nurses are not updated on current information and if the skills they acquired whilst in training are not upgraded. Many of them may view their initial training in family nurse practice as adequate for a lifetime of practice. It is a major problem for nursing as a whole if some individuals think that once a nurse is trained she has all the information she needs to practise for a lifetime. There should therefore be a programme of CE for FNPs, especially for those in the rural areas, who have the greatest difficulty in obtaining it. Another issue of concern is getting nurses, including FNPs, to attend CE

offerings. According to Strehler (1992:21), reasons for non-attendance include: lack of finances; lack of time; inconvenient scheduling; inadequate publicity or information about the educational opportunities; home responsibilities; lack of interest and motivation; lack of confidence; lack of encouragement from management; and lack of suitable literature.

According to Kristjanson and Scanlan (1989:121), providers of CE have also been blamed for passing on information that is sometimes vague and unhelpful. It is, of course, very important that learning needs of CE students be determined before planning any educational programme. According to Jazwiec (1991:138) a learning needs assessment is the essential first step in any educational programme.

1.3 Problem statement

Planning CE programmes for FNPs who function in expanded roles, mostly in the rural areas where there are no doctors, is presently quite haphazard since their needs are generally not ascertained before the programmes are initiated. At this time the MOH&SW does not have a plan or budget to provide health personnel with comprehensive CE, which is both systematic and continuous. Continuing education efforts consist of a number of unrelated courses offered by independent agencies, which focus more on transmitting new information than on improving competence. Although CE activities take place almost continually throughout the year, it is doubted that they are effective, adequate, systematic, well planned or even relevant to the needs of the participants and clients. In addition, there is no systematic evaluation of CE, nor is there adequate follow--up with clients. Training for FNPs often appears unstructured, a patchwork of courses, approaches and curricula. Little effort seems to have been made to co-ordinate the content or to set priorities in the topics to be covered. Evaluation of the impact of these courses is lacking.

1.4 Aim of the study

The main aim of the study was to investigate the status of CE and to establish a structure for a programme that will strengthen continuing and in-service education programmes for FNPs and other health care professionals. A further aim was to ensure that FNPs are able to meet the health needs of the people and satisfy the technical requirements of the health sector more effectively. The study would also gather information on a number of issues that will assist with the planning, implementation and evaluation of CE programmes for FNPs.

Although the necessity of assessing the CE needs of FNPs prior to planning the programmes has been well documented, the researcher felt that this had not been done in Swaziland, and that it was therefore appropriate to identify and set priorities for the CE needs of FNPs. Such needs can be identified by the FNPs themselves, by the nurse managers, who are their supervisors and employers, and by nurse educators, who might have to offer or co-ordinate the CE programme. Continuing education programmes can then be planned or proposed in response to the identified needs.

1.5 Objectives

The objectives of this study are as follows:

1 To identify the characteristics (demographics, motivators, and preferred methods of learning) of practising FNPs registered with the Swaziland Nursing Council.

2 To assess and examine the perceptions of FNPs, nurse managers and educators of the FNPs' role, their CE needs and the issues relevant to their current and future professional development.

3 To identify nurse managers' and nurse educators' perceptions of FNPs' developmental issues and learning needs.

4 To identify the content of a CE programme for FNPs and select an appropriate mode of teaching, with the purpose of directing nurse educators in providing a programme of CE for FNPs.

5 To identify the barriers and enabling factors in the practice and education of FNPs.

6 To design a framework for continuing education for FNPs.

1.6 Significance of the study

Today, with the rapid expansion of new knowledge and technology, health professionals soon find that their knowledge becomes outdated and their technical skills obsolete. Gilles and Pettergill (McDiarmid 1998:267) found that, given the rapid scientific and technological advancements in the health care field, nurses' basic educational preparation for practice becomes obsolete within ten years. Continuing education is considered one of the ways of closings the gap between an ever-increasing body of knowledge and its application to clinical practice. According to Oliver (1984:130):

> Continuing education is not merely a matter of getting the latest information to the nurse in the fastest possible way, but the goal of continuing nursing education is the improvement of health care through change in behaviour or practice of the nurse.

If the goal of CE is to enhance nursing practice by improving knowledge, skills and attitudes, it then becomes critically important that the learning needs of FNPs be addressed. Society's learning needs, in terms of the health problems FNPs encounter, should also be taken into account in designing CE programmes.

The FNP programme in Swaziland has been under way for almost 20 years, yet a study to determine the CE needs of these nurses has never been done. A needs assessment is therefore vital to establish priorities within possible content areas, and then a CE programme for FNPs can be developed or proposed. The literature written on this issue emphasises the importance of employing systematically planned, formal design to ascertain learning needs (Betz 1984:35; Hendricks 1983:13).

According to Bowman, Wolkenheim, O'Donnell, LeBeck and Scheneider (1985:200), the best sources of information about the perceived needs of the learners are, obviously, the learners themselves. Puetz (1987:26) emphasises that learning needs arise from organisational needs, so the institution also serves as a source of assessment information. Representatives from the employing agency should therefore also be involved. Likewise, Farley and Fay (1988:14) are of the opinion that:

> If the goal of continuing education is to enhance nursing practice by improving knowledge, attitudes and skills, it becomes critically important that the learning needs of the practitioners as well as the administrator be addressed.

It is equally important therefore, to involve the nurse educators in learning needs assessment, just as it is essential for organisations like the MOH&SW and those that offer CE programmes to adopt systematic ways of identifying CE needs of health workers, and planning

to meet those needs. Involvement of the stakeholders mentioned above may encourage nurses to continue to value learning. Bowman et al (1985:201) maintain that a needs assessment must address the needs of the organisation as well as those of the learner and that for education to achieve its goals of changing behaviour while still maintaining the support of the sponsor, the organisational context in which learning is to be applied must be considered.

The MOH&SW in Swaziland has done much in providing CE for nurses and responding to the dictates of PHC and the needs of society. However, many CE courses have been haphazard and unsystematic. Their direct impact on the quality of health care provision is therefore not measurable. The MOH&SW realises it must evaluate, reform and adapt the CE of the FNPs who are the pillars of health care in rural areas. The need is accentuated by the emergence of the HIV/AIDS scourge and other health problems, as well as by advances in technology.

Continual re-orientation of nurse practitioners is necessary to ensure that they are able to meet emerging health challenges and advances in scientific knowledge. Some of the major and urgent challenges that confront FNPs today are the advent of the HIV/AIDS scourge and the re-emergence of the tuberculosis epidemic. Both these health problems require proficient diagnosis and case management skills as well as new approaches. The introduction of syndromic management of sexually transmitted diseases is one such new approach. If FNPs are to remain relevant and continue to provide quality services in spite of these challenges, they have to engage in CE. This study is therefore presented as part of many efforts that are aimed at equipping FNPs for better service provision. The ultimate beneficiaries of the study will be a wide cross-section of under-served communities in Swaziland who, it is hoped, will enjoy the advantages of a more efficient and effective service delivery system. The empowerment of FNPs with appropriate knowledge, skills and attitudes will be an asset to the nursing profession.

This study should also benefit the FNPs by addressing their learning needs and bridging the gaps in their knowledge and skills. This, in turn, should benefit the FNPs' clients, their families and communities. The MOH&SW should also benefit from improved services and motivated, empowered FNPs who would be able to integrate curative, preventive, promotive, palliative and rehabilitative services with an improved quality of nursing and health care. The health training institutions, including the University of Swaziland, whose mission statements include teaching, research and community service, can all benefit by the implementation of such a programme, since CE extends their resources and capabilities to the public, thereby allowing them to perform one of their major functions, namely community service. This will, in turn, enhance the image of these institutions.

1.7 Conceptual framework

This research is based on the concepts of adult learning theory (andragogy), as identified by Malcolm Knowles in the early 1970s. Knowles drew attention to the concept of adult learning when he introduced "andragogy" to distinguish between the learning needs of adults and those of children (pedagogy). Knowles (1990:64) defines andragogy (a process model) as "a system of alternative sets of assumptions whereas Pedagogy (content model) is an ideological model, excluding andragogical assumptions". According to Abruzzese (1996:31) andragogy is explained by Knowles as a set of learning assumptions and a series of recommendations. The comparison of the different assumptions and designs of pedagogy and andragogy in table 1.1 reveals that a unified model can incorporate principles and technologies from various theories and still maintain its own integrity (Knowles 1990:118).

Table 1.1 **Comparison of assumptions and designs of pedagogy and andragogy**

Assumptions/ Design elements	Pedagogical model	Andragogical model
Self-concept	Dependency	Increasing self-directedness
Experience	Of little worth	Learners are a rich resource for learning
Readiness	Biological development; social pressure	Developmental task of social roles
Time perspective	Postponed application	Immediacy of application
Orientation to learning	Subject centred	Problem centred
Climate	Authority oriented, formal and competitive	Mutual, respectful, collaborative, informal
Planning	By teacher	Mechanism for mutual planning
Diagnosis of needs	By teacher	Mutual self-diagnosis
Formulation and objectives	By teacher	Mutual negotiation
Design	Logic of the subject matter, content units	Sequenced in terms of readiness, problem units
Activities	Transmittal techniques	Experimental techniques (inquiry)
Evaluation	By teacher	Mutual re-diagnosis of needs, mutual measurement of the programme

Source: Knowles (1990:119)

The series of recommendations or implications for educating adults has a different focus than pedagogy. Pedagogic educators focus on transmitting the content; andragogic educators focus on facilitating the learners' acquisition of content (Abruzzese 1996:31). Andragogy is based on several assumptions about the development of adult learners (Knowles 1990:57-63), as follows:

1. **The need to know.** Adults need to know why they need to learn something before undertaking to learn it. They need to know how they will be able to use the learning in real life. To encourage FNPs to attend CE offerings, Abruzzesse (1996:32) urges educators to

structure learning experience through simulation or role-play so that reasons to learn and the value of learning are experienced.

2. **The learners' self-concept.** Adults have a self-concept of being responsible for their own decisions, for their own lives. They have moved from viewing themselves as dependent to viewing themselves as self-directing human beings. Knowles (1990:118) points out that educators need to help learners discover that they can and should take responsibility for their own learning, in addition to being accountable for their own professional development.
3. **The role of the learners' experience.** They have accumulated a growing reservoir of experience that becomes an increasing resource for learning. Adults enter an educational situation with a wide variety of backgrounds and experiences. According to Lovell (1980:98) human beings are unique individuals and because adults have different personalities, learning styles, learning needs, abilities, interests, knowledge, circumstances and backgrounds, they will want to learn different things at different stages of their lives. It is therefore important for educators of adult learners not to assume that all adults enter the learning situation with the same experiences. Each learner in a group is an individual and, as such, they often differ in terms of age, skill, knowledge, experience, level of intelligence, culture and background. In addition, adult learners have a variety of learning needs, learning preferences and learning styles. Adult learners will therefore learn for differing reasons and their learning needs and expectations will differ.

When planning CE programmes it is essential to involve the learners. The educator must also acknowledge that differences (as well as similarities) exist among adult learners and must be aware of their expectations. Because of the learners' diverse backgrounds, educators should give choices that will accommodate their learners' diversity. They should bear in mind

that each adult learner has developed a pattern of learning to suit their aptitude, and which fits into their framework of experience.

4. **Readiness to learn**. Adults are problem centred in their orientation to learning. They are motivated to learn something that will help them perform tasks or deal with problems that they confront in their life situations. Quinn (1988:48) asserts that educators should encourage self-awareness, self-confidence and the ability to self-assess progress.
5. **Motivation to learn.** While adults are responsive to such motivators as better jobs, higher salaries, promotion etc, the most potent motivators are: the desire for increased job satisfaction, self-esteem, and quality of life. Informing learners in advance about CE offerings is likely to motivate them to learn and attend most training sessions. It is also important to explain why it is important to learn and advance oneself. Educators should ensure that learning is process-based so that intrinsic motivation is developed and encouraged.
6. **Sense of relevance.** Adults need to know how the learning is relevant to their particular situation. New information must fit into a current need.
7. **Support systems.** Adults need special support systems to assist them in their life transitions and re-entry into the learning environment.

Reinforcement is also important because once a skill is learnt it needs constant reinforcement until the learner can internalise it. Adult education therefore encompasses all those processes used by adults to learn; these processes include self-directed learning activities, as well as those directed by educators. As adult learners, FNPs bring a unique set of life experiences and learning needs to their educational experience. They define their own learning needs and focus on competencies necessary to function within their roles. Typically they are highly motivated, having proven themselves to be successful learners in a variety of settings. These are nurses who have

three or more qualifications - general nursing, midwifery and FNP.

Due to the many roles that they assume, educational activities should be designed in various delivery modes. The learning style of the learner should also be accommodated and challenged by offering a variety of methods for acquiring new competencies. Continuing education programmes for FNPs must, therefore, provide them with educational opportunities to increase their knowledge, skills and attitudes so that they can meet the requirements of their expanded and extended roles in a changing, dynamic society.

Although many of the concepts of adult learning (andragogy) have since been shown to be equally applicable to other age groups, their greatest value continues to lie with programmes, like CE, that recognise the unique assets and special needs of adult learners.

1.8 Research methodology

According to Uys and Basson (1995:8) research methodology includes the planning, structuring and execution of research, with emphasis on the actual research processes. They interpret the research methodology as the total strategy for a study, starting from the identification and formulation of a researchable problem, to the statement of aims and hypotheses, research design and techniques, sampling, collecting and analysing data and writing the reports. The two main classifications of research methodology used in nursing are quantitative and qualitative methods. The methodology used for this study is descriptive and exploratory, using both qualitative and quantitative data gathering methods.

1.8.1 Research design

Polit and Hungler (1993:54) interpret research design as the overall plan for the collection and analysis of data. The research design chosen for this study included both qualitative and quantitative approaches. The study is descriptive in that it sought to answer the *what*? question and, to a lesser extent, the question of *how?* The qualitative part of the study included focus groups and key informants, which were the major sources for the data. The quantitative part involved a survey during which two questionnaires, one for FNPs and the other for nurse managers and educators, were used to gather data. According to Brink (1991:14) each method is uniquely suited to particular aims or problems.

1.8.2 Exploratory-descriptive design

In order to identify the learning needs of FNPs, exploratory-descriptive research in the form of a needs assessment was undertaken. According to Polit and Hungler (1993:435), the main objective of descriptive studies is the accurate portrayal of the characteristics of individuals, situations, or groups and the frequency with which certain phenomena occur. Uys and Basson (1991:51) have noted that a descriptive study is not used to establish cause-effect relationships. A survey and focus group interviews were used to gain information to establish educational priorities and to plan an educational programme that is related to the identified needs of the FNPs. Details of the focus group discussions are described in chapter 4, section 4.2. The survey approach is described in detail in chapter 5, section 5.2.

Since this study was descriptive in nature there was no need for a hypothesis. According to Wilson (1993:14), stating a hypothesis requires not only sufficient knowledge of a topic to make a prediction about the outcome of the study, but also the ability to specify definitions for the variables under investigation in measurable terms.

1.8.2.1 Qualitative method

Denzin and Lincoln (1994:1) interpret qualitative research as a field of inquiry that cuts across disciplines, fields and subject matter, whilst Uys and Basson (1995:51) explain that the term ***qualitative*** indicates that this approach or methodology concentrates on understanding and interpreting the meanings and intentions that underlie the everyday qualities of human action. Its purpose is to describe, explain, predict and control; however, this is not achieved by determining cause and effect, but by understanding the phenomenon as a whole. Ogier (1998:38) describes qualitative research as mainly descriptive and involving the collection and analysis of data concerned with meanings, attitudes and beliefs rather than data that results in numerical counts from which statistical inferences can be drawn. In qualitative research, therefore, it is important to note that the researcher, as an individual, is looking for meanings, use of words and perceptions of the respondents in a holistic and subjective manner. Respondents in qualitative research are allowed to answer using their own words.

The qualitative method seemed the most suitable for exploring the current practice issues of FNPs in Swaziland. The strength of qualitative research, according to Chenitz and Swanson cited by Atkin and Lunt (1996:500), lies in its ability to allow understanding of process and meaning within a contextual framework, thus enabling particular contingent situations to be explained. In addition, Chenitz and Swanson (1986) maintain that qualitative research has to provide a valid description of human phenomena in a specific setting, rather than findings that can be automatically generalised to larger groups.

The qualitative research method for this study was used to explore the current practice issues of FNPs so as to enable the researcher to describe the proposed programme for CE of FNPs.

1.8.2.2 Focus group interviews

The researcher chose the focus group method to gain an in-depth understanding of the current practice issues of FNPs in Swaziland. This method was chosen because it gives rich data based on the lived experiences of participants. Torn and McNichol (1998:1202), citing Raistrick and Godfrey (1994), describe this in-depth understanding as occurring through the identification of the emic's thoughts, feelings and perceptions. The focus group interviews are discussed in more detail in chapter 4.

1.8.2.3 Population and sample for qualitative method

Purposive sampling was adopted as an appropriate method for obtaining information from respondents. Purposive sampling, according to Polit and Hungler (1993:444), is a type of non-probability sampling method in which the researcher selects subjects to study on the basis of personal judgement about which of the subjects will be most representative or productive. It is often used when the researcher wants a sample of experts, as in the case of needs assessment using the key informant approach. The rationale for deciding on purposive sampling was that all the respondents recruited had the requisite knowledge about FNP. The researcher was interested in ideas from different groups of nurses, like managers, educators and practitioners. The nurse managers, nurse educators, FNPs and nurse executives from the MOH&SW, such as the chief nursing officer and deputy chief nursing officer, were all potential beneficiaries of the FNP programme and were considered to be expert in FNP issues. Some of these nurses are products of the FNP training, while others are people who have worked closely with the FNPs. They were also considered because they had many common characteristics so that interacting demographic and socio-economic variables would not bias the discussions.

Nyamathi and Schuler (1990:1285) maintain that homogeneity of the group is important and that selection of participants who are similar in terms of occupation, social class and environmental characteristics will promote a smooth communication pattern. The procedure for focus group interviews is discussed in chapter 4 together with the data analyses.

1.8.2.4 Quantitative method

Polit and Hungler (1993:18) describe the quantitative method as a systematic collection of numerical information and the analysis of that information using statistical procedures. Clifford, Carnwell and Harkin (1997:57) explain that researchers start on something they know little about and want to explore further, or on known issues, where they identify trends. The researcher is distant from the people being studied. Questionnaires, personality tests, physiological measurements and score sheets are examples of tools used with a quantitative research method. Brink and Wood (1989:13) reason that quantitative research methods produce data that reflect, at least, the frequency with which phenomena occur and, at most, an exact measure of the amount of phenomena occurring under prescribed circumstances. They argue that quantitative research methods require substantial knowledge of the phenomena under study in order for tools to be available to measure these phenomena. The quantitative method was found suitable for identifying the learning needs, roles and issues of the FNPs in Swaziland.

1.8.2.5 Population and sample for the quantitative method

The population studied was all 102 practising FNPs, who are listed in the Swaziland Nursing Council Register. Polit and Hungler (1993:38) have defined the term ***population*** as the aggregate or totality of all subjects, objects or members that conform to a set of specifications. These nurses form the core of the needs assessment. A needs assessment serves as a primary source of information input in a planning process (Brink 1990:39). Purposive samples of four

nurse managers who represent the four regions of Swaziland and are supervisors of the FNPs were included in the study. In addition, two nurse managers from the MOH&SW were also part of the study together with five nurse educators, who may have to co-ordinate and implement the CE programme. The nurse managers and nurse educators were chosen to participate in the study because they were considered experts and knowledgeable in the area of family nurse practice. According to Treece and Treece (1986:217) and Wilson (1993:79), expert sampling is a type of purposive sampling that involves choosing experts in an attempt to represent each type of desired characteristic in a given area because of their access to information relevant to the study. The researcher used the total FNP population because of its small size.

1.8.2.6 Research instrument for quantitative method

The research instrument selected for this method of study was the self-administered postal questionnaire, owing to the wide geographic distribution of the FNPs practising in Swaziland. Numerous research and literature sources were sought to provide a basis for items in the questionnaire. A review was done of the FNPs' job descriptions, the draft scope of practice, and curricula that reflected the role and functions of the FNP. Some factors that contributed to the selection of a questionnaire as the most suitable instrument for this study were the following, identified by Polit and Hungler (1993:205) and Treece and Treece (1986:227):

- Questionnaires are much less costly than interviews and require less time and energy to administer.
- Questionnaires offer the possibility of complete anonymity, which may be crucial in obtaining information about social behaviour.

- The absence of an interviewer ensures that there will be no bias in the responses in that they do not reflect respondents' reaction to the interview rather than to the questions themselves.
- Measurement is enhanced because all subjects respond to the same questions.

Two questionnaires were designed, one for FNPs and the other for nurse managers and nurse educators. These instruments will be discussed in detail in chapter 5.

1.8.3 Validity and reliability

According to Uys and Basson (1995:80) "validity is the degree to which an instrument measures what is supposed to be measuring". Content and face validity were established by having the content of the questionnaires reviewed by nurse educators who teach and supervise research in the post-basic nursing programmes at the University of Swaziland. An extensive review of literature on nurse practitioners' education and practice needs was conducted before compiling the questionnaires. They were also pre-tested for clarity, adequacy and freedom of bias on four community health nurses who had undergone a programme at the Faculty of Health Sciences of the University of Swaziland. The programme had the same core courses as the FNPs, which ensured that the items included were representative of the content of the FNPs' education. Comments from both the faculty members and community nurses were considered and some aspects of the questionnaires were modified.

Reliability is the extent to which a research instrument tool can be relied upon to give results that are consistent (Clifford, Carnwell & Harlaen 1997:80). When used by a different researcher, the instrument should yield the same findings. The researcher should administer the tool with a view to ascertaining its reliability and consistency.

1.8.4 Ethical considerations

All participants were informed about the nature and purpose of the study and it was explained that they were free to withdraw their participation at any time or to choose not to answer certain questions if they so wished. Participants' verbal consent was obtained before starting on the interviews for the focus group discussions. Interviews were scheduled according to each participant's convenience. Anonymity and confidentiality were maintained throughout the study. No names or addresses were attached to the questionnaires, and no one except the interview researcher had access to the information. Permission to conduct the study was obtained from Swaziland's MOH&SW Research Committee.

Voluntary participation in a research study is one of the key principles of ethical conduct (Polit & Hungler 1993:359). Accordingly, the covering letter accompanying the questionnaire, which provided information about the research project, made it clear that participation in the study was voluntary. Respondents therefore signified their willingness to participate by answering and returning the questionnaires.

1.8.5 Data analysis

The statistical analysis of the questionnaire was done with the assistance of a statistician from the University of South Africa's Statistics Department. A computer program (the SPSS software package) was used to process the coded data of the returned questionnaires. The data were presented with the aid of diagrams and tables.

For purposes of analysis, the questionnaires were divided into categories and sub-categories. A codebook was developed for the questionnaire. The investigator reviewed the completed questionnaires for content analysis of the open-ended questions. The responses to the category "other" were written on individual 5"X8" index cards for the purpose of analysis. The

questionnaires were coded for easy entry into the computer and the SPSS was used to analyse the data. Descriptive statistics was used to examine the research questions of the study. The investigator rechecked the coded data to ascertain their accuracy. The computer analysis of the data provided the information needed to discuss the research findings and draw conclusions for further research.

1.9 Definition of key concepts

Family nurse practitioners (FNPs): Registered nurses and midwives, who have completed a formal, 12-month post-basic programme of supervised clinical practice and academic study to prepare them to perform a wide range of extended and expanded PHC functions in a variety of settings, and to provide an array of preventive, promotive, rehabilitative and curative health services to individuals, families and communities.

Continuing nursing education: This is training that an individual health professional undertakes after her or his basic professional education has been completed, to improve competence as a practitioner. Its purpose is not to gain a new qualifying diploma or license (Continuing Education 1980:16). The ANA describes it as "those professional learning experiences designed to enrich the nurses contribution to quality health care and his or her pursuit of professional career goals".

Primary health care (PHC): Provision of promotive, preventive, curative, supportive and rehabilitative health services, with the emphasis on keeping individuals, families and communities well, on promoting and supporting good self and family care, and on developing self-reliance and self-determination regarding health.

Educational needs: These encompass the things a person ought to learn for her or his own good. Such a need is a gap between the present level of competencies and a higher level required for effective performance as defined by herself, her organisation or society (Knowles 1970:85). Needs

may be perceived by the individual or observed by someone else.

Needs assessment: For the purposes of the study, this is a process of identifying the education needed to expand the FNPs' knowledge base in order to improve performance. It also provides a curriculum for programme development (Almquist 1990:246). It is a process whereby weaknesses in job performance are identified and checked to determine whether they are due to lack of skills and knowledge, or inappropriate attitudes. It is also a process by which an individual's job performance is compared with job expectations in order to identify gaps that can be corrected through CE.

Experiential learning: This process links education, work and personal development. It has been defined by McGill and Weil (1989:248) as "the process whereby people, individually and in association with others, engage in direct encounter and then purposefully reflect upon, validate, transform, give personal meaning to and seek to integrate their different ways of knowing." The prior experience of learners is valued and regarded as a useful resource for further learning that is active, meaningful and relevant to real life situations. The four elements of experiential learning are experience, reflections, actions and revisiting the experience.

1.10 Outline of the study

The outline of the chapters is as follows:

Chapter 1: An overview of the study is given, which includes the introduction; background to the problem; statement of the problem; aim of the study; objectives of the study; significance; conceptual framework and definition of terms.

Chapter 2: This comprises a literature study, which covers learning theories and continuing nursing education.

Chapter 3: This chapter describes initial training of the FNP in Swaziland.

Chapter 4: The chapter is an analysis of the current practice of FNPs in Swaziland.

Chapter 5: This gives a survey of the role, functions and CE needs of FNPs.

Chapter 6: The chapter presents the findings, conclusions, limitations and recommendations.

Chapter 7: A framework for a CE programme for FNPs is discussed in this chapter.

1.11 Conclusion

In chapter 1 an overview of the research study was given, which comprises an introduction and rationale for the study, the problem statement, aim of the study, objectives of the study, its significance, the conceptual framework and methodology used. Chapter 2 discusses the literature on continuing nursing education and learning theories.

CHAPTER 2

LITERATURE STUDY

2.1 Introduction

This chapter examines a number of learning theories and indicates their relevance to nursing education. These theories are behaviourism, cognitivism, humanism and experiential learning, which have been chosen because of their applicability to nursing education and the education of FNPs. Family nurse practitioners need a variety of behaviours and skills to perform their role adequately. Psychomotor functioning comes into play in a number of tasks that demand physical ability and co-ordination, such as giving an injection or suturing lacerations. The cognitive domain is important since FNPs must be able to remember and comprehend theoretical aspects of nursing. Humanism has a bearing on the education of FNPs because it deals with feelings and attitudes, which are the core of the caring function of a nurse. Experiential learning (hands-on learning grounded in experience) is an important element in any educational course with a clinical component. In nursing education programmes, learning through experience has long been accepted because nurses do a lot of practical work. This is built on the experience of the learner, which in turn provides a basis for additional learning (Puetz 1987:144).

Following the description of the theories, an overview of continuing nursing education is given. The education of nurses is a lifelong process beginning with basic nursing training. A good basic nursing education lays the foundation for CE. The objectives of CE are to assure professional practice, to improve workers' competence, thereby allowing them to adapt to the changing health needs of their clients and the demands of technology. Continuing education is a vital element in the career of all FNPs and should be seen as an upgrading of one's knowledge and skills.

2.2 Learning theories

Learning theories speculate about how learning occurs and provide clues as to how teaching should proceed (O'Connor 1986:39). Maples and Webster (Merriam & Caffarella 1991:124) provide a generally recognised, succinct description of learning: "Learning can be thought of as a process by which behaviour changes as a result of experience". Theories prescribe desired forms of learning and predict what outcomes are likely to occur if a particular approach is used.

Some learning theories have implications for adult learning and continuing nursing education. Different learning theories and strategies are used by nurse educators to suit their goals and objectives. They feel that one theory may be better than another depending on the situation or the type of participants. These implications will be discussed with each theory.

Learning is a very necessary human activity. According to Child (Duminy, Steyn, Dreyer, Vos & Peters 1995:223-4) a comprehensive theory of learning should be capable of answering questions such as:

- How is learning affected by early, later and future experience?
- To what extent is the individual's learning affected by abilities, attitudes and interests?
- What is the role of practice and repetition in learning?
- What is the role of motivation, incentives and punishment in learning?
- To what extent can learnt skills, habits and attitudes be transferred to new learning situations?

2.2.1 Definitions of and perspectives on learning

Attempts at defining learning reveal that it may occur in many different situations and may be of many types. The literature presents a wide variety of definitions, although a common factor is the tenet that learning is a change of behaviour. Ormrod (1990:6) describes two definitions that

reflect common but very different conceptions of what learning is:

1. Learning is a relatively permanent change in behaviour due to experience.
2. Learning is a relatively permanent change in mental associations due to experience.

Both definitions refer to "permanent change" and "experience". The differences therefore lie in the change in external behaviour, which can be seen by the observer, and the change in mental associations, which cannot be observed.

The first definition reflects the view of the behaviourists or stimulus-response (S-R) theorists. These theorists are of the view that experience alone is the sole source of knowledge. They believe knowledge is gained through sensory experience, and emphasise relationships among observable, measurable stimuli and responses. According to Duminy et al (1995:229), these theorists concern themselves exclusively with external behaviour and disregard internal experiences and feelings. Their work also propounds reductionism (the notion that complex ideas are derived from simple ideas); connectionism (the idea that experiences are connected with the mind by association); and mechanism (the perception that the mind is a mere machine, with no complex parts). Such theories include Watson's association of stimuli and response (behaviourism), Pavlov's work on classical conditioning, Thorndike's trial and error learning, and Skinner's operant conditioning.

The second definition reflects the view of the cognitivists, who take the position that reason is the prime source of knowledge, that learning is a purely cognitive process and that the observable change in behaviour after learning has taken place is a result of the mental structuring of problem solving. The cognitivists focus on changes in knowledge and believe that learning cannot be observed directly because it involves unobservable mental activities such as thinking. According to Quinn (1992:4) cognitive theorists are interested in the thinking, perception and other intellectual functions of an organism, a stance that is in direct contrast to that of the behaviourists.

The humanists, on the other hand, are in contrast with both the behaviourists and the cognitivists. According to Quinn (1995:100), the exponents of humanistic theory claim that the other two theories omit some of the most significant aspects of human existence, namely feelings, attitudes and values. Despite these differences, elements of all three theories have been used to explain how learning and its processes occur. In fact, a definition by Hilgard and Bower (1965:17) draws on both the behaviourist and the cognitive views:

> Learning refers to the change in a subject's behaviour to a given situation brought about by his repeated experiences in that situation, provided that the behaviour change cannot be explained on the basis of native response tendencies, maturation, or temporary states of the subject (such as fatigue, drunkenness, drives and so on).

One of the exponents of humanistic theory, Carl Rogers (Knowles 1986:8), said the following:

> Let me define a bit more precisely the elements which are involved in such significant or experiential learning. It has a quality of personal involvement - the whole person in both feeling and cognitive aspects being in the learning event. It is self-initiated. Even when the stimulus comes from the outside, the sense of discovery, of reaching out, of grasping and comprehending, comes from within. It is pervasive and it makes a difference in the behaviour, attitudes, and perhaps even the personality of the learner. It is evaluated by the learner, he knows whether it is meeting his need, whether it leads towards what he wants to know. Its essence is meaning. When such learning takes place, the element of meaning to the learner is built into the whole experience.

It is therefore important to note that no single theory of learning can at present account for all aspects of learning.

2.2.2 Behaviourism

Behaviourism, a stimulus response theory, is based on experimental findings that behaviour can be provoked through specific stimuli and reinforced by rewarding the desired behaviour (Horner 1995:51). The S-R theorists or behaviourists hold the belief that stimulus alone tends to produce repetitive behaviour, that is, if you reward positive behaviour it will be repeated. In addition they cling to the idea that what is learnt is merely habit and that human beings will resort to trial and error when presented with a novel problem.

As has been stated earlier the S-R theorists view learning as a change in observable behaviour "which occurred when a link or connection was made between two events - that is a stimulus and a response and by manipulation of this link the behaviour could be altered" (McKenna 1995:29). According to O'Connor (1986:39) there are four key concepts related to this theory of learning, and these are:

- stimulus - that which evokes action on the part of the learner
- response - action by the learner, presumed to be caused by a stimulus
- conditioning - use of the stimulus-response association to produce a modified response, learning
- reinforcement - specialised form of conditioning wherein the response is rewarded

Learning can therefore be explained as a connection made by the learner between the stimulus and the response. The process by which such a connection is made has been labelled conditioning. Two types of conditioning have been distinguished - classical and operant. Rather than use the term **learning**, behaviourists use the term **conditioning**; an organism is conditioned by environmental events. What is learnt, being largely the result of one's past and present experiences, is often beyond the organism's control (Ormrod 1990:17). Early behaviourist learning theorists - Pavlov, Watson, Thorndike, Skinner, Guthrie, Hull and others - have viewed learning somewhat differently, but each has made a unique contribution to the understanding of how people learn. This chapter confines itself to a discussion of Thorndike's trial and error learning, Pavlov's classical conditioning and Skinner's operant conditioning.

2.2.2.1 Connectionism (trial and error learning)

Thorndike (1874-1949) developed the theory of connectionism through his experiments with learning in animals. His theory is also referred to as the stimulus-response psychology of learning. It emphasises the role of experience in strengthening and weakening S-R connections (Ormord 1990:18). It postulates that the connection between stimulus and the response is

strengthened or weakened because of the satisfaction or annoyance that accompanies an action. Thorndike maintained that learning the correct response is accidental, or a matter of trial and error. In other words, one learns by selecting a response and receiving reinforcement if it is correct; thus a connection is made.

As a result of his experiments with animals, Thorndike formulated some laws of learning which he believed applied equally well to people and animals. He noted that through repeated trial and error learning, certain connections between sensory impressions or stimuli and subsequent behaviour or responses were strengthened or weakened by the consequences of behaviour. His laws of learning were intended to explain his findings. These laws are summarised below.

1. The law of effect states that behaviour that results in success or reward is more likely to be repeated than behaviour that does not. Ormrod (1990:19) has paraphrased the law of effect thus: "responses to a situation that are followed by satisfaction will be strengthened; responses that are followed by discomfort will be weakened".
2. The law of exercise or repetition asserts that the repetition of a meaningful connection results in substantial learning (Merriam & Caffarella 1991:126). This law emphasises that S-R links are strengthened by repeatedly occurring together, provided that positive reinforcement normally occurs. "So in nursing although repetition and practice are very useful it is knowledge of results that is important" (McKenna 1995:30).

Thorndike's connectionism was refined and expanded upon by some of his fellow behaviourists, such as Pavlov, Guthrie and others. "Guthrie stated that one law of learning based on contiguity is all that is needed to make learning comprehensible, whatever you do in the presence of a stimulus, you do again when the stimulus is re-presented" (Merriam & Caffarella 1991:127). Many behaviourists have stressed the principle that repetition of S-R habits strengthens those habits. If responses to a particular stimuli are to be learned thoroughly, then practice is essential. Nursing procedures such as giving injections and making beds provide a good

example of this. According to Mellish and Brink (1990:92), however, trial and error is a wasteful method of learning and in the sphere of nursing may even be dangerous. They argue that even though students learn by practice, it is important that their practice is guided, supervised and based on sound knowledge. Nevertheless, as Duminy et al (1995:233) point out:

> The unique contribution of Thorndike to learning theory and to teaching is his insistence on the use of scientific measurement as a method of examining learning skills amongst pupils and his faith in motivation through the agency of rewards rather than punishment as an efficient means of establishing good learning habits.

2.2.2.2 Classical conditioning

As a result of his experiments with dogs, Ivan Pavlov, a Russian physiologist, developed a theory of learning known as classical conditioning. In his study of dogs' digestive secretions, he observed that they salivated in response to two kinds of stimulation. The first kind was food that was introduced into the dog's mouth. He called this an unconditioned response because it was unlearnt as no training was needed to elicit it. It was a physiological reflex.

Pavlov went on to sound a bell regularly before the dog's food was served and observed that it could be trained to salivate upon hearing the bell, even when no food was presented. He called the response to this second type of stimulus a conditioned response. The sound of the bell was the conditioned stimulus and the salivation, the conditioned response.

Hilgard and Bower (Knowles 1973:20) provide the following description:

> When meat powder is placed in a dog's mouth salivation takes place; the food is the unconditioned stimulus and salivation is the unconditioned reflex. Then some arbitrary stimulus such as a light is combined with the presentation of food. Eventually, after repetition and if time relationships are right, the light will evoke salivation independent of food; the light is the conditioned stimulus and response to it is the conditioned response.

Quinn (1992:33-34) describes four terms used in connection with conditioning:

1. **Extinction.** If a conditioned stimulus is presented a number of times without being followed by the unconditioned stimulus, then the conditioned response will gradually weaken and eventually become extinct.

2. **Generalisation**. If a musical tone of a different pitch is used instead of the usual one, the conditioned response will generalise to include the new stimulus, provided that it differs only slightly from the original. Generalisation occurs when the eliciting properties of one stimulus are taken on by another stimulus with which it is paired. If both stimuli are reinforced, then generalisation can occur.

3. **Discrimination**. If the experimenter presents stimuli in the form of musical notes of varying pitch, but only presents one of these notes with the unconditioned stimulus, then the animal will learn to distinguish between the two notes.

4. **Spontaneous recovery**. A conditioned response that has become extinct may often exhibit spontaneous recovery without further training.

Classical conditioning is frequently used to explain human fears such as test anxiety, fear of failure, or school phobia. Undesirable conditioned responses can sometimes be eliminated by extinction or counter-conditioning. According to Ormrod (1990:41) "counter-conditioning provides a means through which many conditioned anxiety responses can be decreased or eliminated". Quinn (1992:34) suggests that nurse teachers can use certain aspects of classical conditioning with students. For instance systematic desensitisation is a therapeutic technique designed to replace anxiety with a relaxation response. Another approach is to prevent those negative-conditioning situations in the first place. The stimulus that elicits undesirable conditioned responses should therefore be associated with positive events and a positive environment. Classical conditioning represents an extremely simple form of learning. It is therefore regarded as an appropriate starting point in the learning process.

2.2.2.3 Operant conditioning

BF Skinner's operant conditioning shares many of the principles of classical conditioning. However, in operant conditioning or training the reinforcement behaviour bears no resemblance to the behaviour normally elicited by the reinforcing stimulus. The idea of reward provides the

foundation for Skinner's principles of operant conditioning. Operant conditioning can be summarised as follows: "a response that is followed by a reinforcer is strengthened, and is therefore more likely to occur again" (Ormrod 1990:44). On the other hand, behaviour that is not rewarded will cease. Skinner believes that desired behaviour is obtained by giving rewards when the person does what is expected of him. His approach was to identify the desired behaviour, then create situations in which successive approximations of the behaviour would occur and be reinforced. For Skinner, the organism is the centre of learning.

Skinner's initial experiments involved hungry rats placed in "Skinner boxes" that contained levers which, when pressed, would cause the release of food pellets. Exploratory activity of the rat in a confined space would usually end up in a chance contact with a lever. After two or three accidental lever contacts, the rat would display a dramatic change in behaviour by intentionally pressing the lever to obtain the food. This is an example of trial and error learning. More important is the rat's operant behaviour, whereby it produces its own reinforcement, the food, converting a productive accident into an intentional behaviour pattern. Operant conditioning derives meaning from the fact that a person operates in his environment. Operant responses are voluntary or reflex behaviour. Ormrod (1990:45) identifies three important conditions necessary for operant conditioning to take place:

1. The reinforcer must follow the response. Reinforcers that precede a response rarely have an effect on that response.
2. The reinforcer must follow immediately after the response. Reinforcement is less effective when its presentation is delayed.
3. The reinforcer must be contingent upon the response. A reinforcer should never be presented unless the desired behaviour has been exhibited.

There are generally two types of reinforcements:

- Positive reinforcement, which is similar to a reward. It increases the possibility that a person will continue his original behaviour because the environment responds positively. One can reshape the behaviour of a person who originally was positively reinforced by ignoring further similar behaviours. Eventually the person will stop the behaviour because of a lack of response and reinforcement from the environment. This process is known as extinction.
- Negative reinforcement occurs when behaviour increases because an unpleasant stimulus is removed. This is often confused with punishment.

Skinner is renowned for his scientific analysis of behaviour and his use of reinforcement to shape behaviour. Child (Duminy et al 1995:234) points out that "reward should follow quickly when the correct response appears." This is termed "feedback", and Skinner is possibly the first person to pinpoint the essential element in any learning as feedback. This is based on the principle that motivation is enhanced when we are informed of our progress. Skinner showed that a high success rate is achieved when the steps in the learning process are small and within the learners' capabilities. He demonstrated that administering carefully planned rewards, which he called reinforcements, could induce learning. These principles formed the basis of a teaching technology, devised by Skinner, known as programmed instruction, with the emphasis on self-paced individual instruction. Skinner's operant conditioning can be used by nurses for behaviour modification, for example in reshaping a patient's undesirable behaviour using conditioning techniques to bring about the desired behaviour. In addition, reinforcement can be used when teaching something new: once something is learnt, it will be remembered better if it is presented again. This is an important concept for family nurse practitioners, who routinely do preventive and promotive health teaching in both in-patient and outpatient settings to change certain behaviours.

Thus teaching informed by behaviour modification principles might include a mechanism for motivating the learners, telling them about the objective of the lesson, presenting the information in a sequenced manner through methods such as lectures, demonstrations or role-plays. Once the information is given, using the above methods and many others, learners are given a chance to practice what they have learnt. The main aim is to elicit observable behaviour from the learner. It is important to give feedback on the progress made during or after the practice. The objective should be observable and measurable so that achievement of the objective means that the learner has also acquired the specified skill. If the objective is not attained, more instruction is given until the learner is able to achieve the skill before moving to another level. Observable behaviour comprises activities or skills that can be measured. Quinn (1988:39) contends that behaviour modification can be used by nurse educators in class to encourage acceptable behaviours and discourage negative ones. If the nurse educator wishes to train a student nurse to answer questions in class, the educator should praise the student each time he or she answers a question, regardless of whether it is correct. Gradually the educator will begin to praise the student only when the answer is correct.

2.2.3 Cognitive theory

Cognitive psychology represents a major theoretical deviation from the behavioural approach. Cognitive theorists emphasise complex intellectual processes such as thinking, language and problem solving as major aspects of the learning process. Cognitivists view learning as a perceptual conceptual process which modifies the person's knowledge base and structure. It implies that individuals think about both what they are learning and how they are learning (Horner 1995:52). According to McKenna (1995:25) cognitive psychologists believe that learning is an internal, purposive process concerned with thinking, perception, organisation and insight. They see learning as the organisation of mental connections that influence how one will behave in future. The learner is involved with problem solving, seeking out new information and drawing

on past experiences in order to gain understanding.

The cognitivists also emphasise the importance of an integrated learning experience hence the importance they accord to the physical, emotional and social contexts in which learning occurs. They are mostly concerned with how a learner remembers and retrieves information from memory. In contrast to the animal research of the behaviourists, cognitivists have primarily studied humans. Gestalt theory was one of the early cognitive learning theories, and one of the forerunners of the current information theories.

2.2.3.1 Gestalt theory

Gestalt psychology, which originated in Germany in the early part of the twentieth century, provides the basis for the cognitive learning theories. Leaders in the early development of this theory were Marx Wertheimer (1880-1943), Wolfgang Kohler (1887-1967) and Kurt Koffka (1886-1941). These men were initially concerned with the study of perception and their work emphasised the ability of the individual to organise and integrate what is perceived into an overall pattern or Gestalt (McKenna 1995:25). Much of their research consisted of studies of movements or patterns of action. Gestalt psychologists held the view that the investigation of behaviour and learning can be successful only to the extent that it emphasises the entire person or organism and not merely his parts. The emphasis in learning is not on parts but on an integrated whole. According to Mwamwenda (1993:159) "Gestalt psychologists are interested in perception and behaviour as a whole, for in their view the whole is greater than the sum of its parts". For example, one does not perceive arms, legs, and the trunk and head separately and then recognise them as a person. A person is the whole of these parts. Learning, to the Gestaltist, is a cognitive process. In this context "cognitive" describes the process by which we think about things, see them and know that they exist.

It must be remembered that Gestalt theorists were primarily interested in perception, goal achievement, and problem solving processes. Learning was viewed as of secondary interest. Whereas the behaviourists had described problem solving as trial and error, the Gestaltists proposed a different view of how organisms solve problems. Kohler (Ormrod 1990:132) suggested that problem solving involves mentally combining and recombining the various elements of a problem until a structure that solves the problem is achieved. Thus problem solving involves restructuring and insight. Learning takes place on acquisition of insight.

Learning is defined by these theorists as the organisation or interpretation of parts into a whole through the development of new insights or the modification of old insights; learning behaviour is purposive, explorative, imaginative and creative (O'Connor 1986:41). An insight, according to Duminy et al (1995:245) "is obtained when the solution to a problem suddenly appears or the relations among different particulars to be learnt are suddenly understood and everything suddenly becomes clear to the learner". The classic demonstration of insight learning is the experiment in which apes were placed in cages that had several boxes scattered around, and a bunch of bananas suspended out of reach. The apes were provided with short sticks, which were not long enough to reach the bananas if used singly, although they could be joined together to make a longer stick that could reach the bananas. The apes could reach the bananas by putting the boxes on top of one another and standing on them to reach the bananas, or by joining two sticks together. This is evidence of the many forms of patterns that make learning a change of behaviour due to experience and repetition. Learning becomes a process of patterned organisation and a perceptual problem-solving process. This sudden, immediate, repeatable and transposable behaviour is called insight.

According to Knowles (1986:22), the Gestalt theorists took issue with the proposition that all learning consists of the simple connection of responses to stimuli, insisting that experience is always structured, that we react not to just a mass of separate details, but to a complex pattern

of stimuli. Gestaltists contend that learning occurs as a result of a change in cognitive structures produced by changes in the cognitive field itself and in the motivation and readiness of the learner to perceive objects and events in a new way at a given moment in time. Perception, according to Duminy et al (1995:336), is an awareness of the surrounding world as a result of stimulus of all the senses, and together with it the mental interpretation of these stimuli. Perceptual learning therefore has to do with seeing, smelling, hearing, tasting, and feeling. The sensory mechanisms are therefore the tools of our perception, and the cognitive mechanism of our brains and our sensory apparatus provide us with means of perception.

The Gestalt theorists proposed laws of perception, which govern whether or not a particular stimulus will be perceived as figure rather than ground. According to Hergenhahn (1976:241) the most basic organisation in perception is the separation of the perceptual field into two parts: the figure, which is dominant, unified and is the focus of attention; and the ground, which is more homogeneous, diffuse and provides the setting for the figure. When we attend to something in the environment, it becomes the figure, and everything we are not attending to becomes ground.

These laws of perception are set out as follows by Quinn (1995:45-46):

1. **Law of similarity**. This principle simply says that similar objects tend to be grouped together in our perceptual field. "Placement of equipment on an emergency cart is usually done in accord to this law: pulmonary resuscitation equipment on one shelf, drugs on another" (O'Connor 1986:4).
2. **Law of proximity**. People tend to perceive as a unit those things that are close together in space.
3. **Law of closure stability**. People tend to fill in missing pieces to form a complete picture. Learners try to achieve a satisfying end state of equilibrium; incomplete shapes, missing parts and gaps in information are filled in by the perceiver (Knowles 1973:25).

4. **The law of continuation**. This states that organisation in perception tends to occur in such a manner that a straight line appears to continue as a straight line, a part of a circle as a circle and a three-sided square as a square.

According to Quinn (1992:17) the law of proximity and closure can be said to be at work in the insightful learning of the ape, the former being shown by the fact that all the aspects of the problem, namely the banana and the boxes, must be in the animal's visual field at the same time for insight to occur. Closure is suggested by the sudden awareness of the relationship between the boxes as a means of climbing to the banana, bringing the previously unrelated boxes into a complete, closed Gestalt.

In considering how to provide adult learning experiences, it is important to plan a variety of learning and teaching strategies that involve the use of many senses including feeling, touching, seeing and hearing. The use of only one sense – hearing - in teaching may not be adequate for learners as they may require the stimulation of other senses for learning to occur. According to Abruzzese (1992:216), the estimated amount of learning that occurs through use of the various senses is as follows:

- reading 10%
- listening 20%
- seeing (observing) 30%
- listening and observing 50%
- listening, observing and discussing 70%
- listening, observing, discussing and performing 90%

It is clear therefore that the more senses that are used the greater the amount of learning that takes place. This has implications for different methods of presenting information to learners.

According to Bevis (1973:44), Gestalt and field theorists support the position that progress towards goals is achieved when the learner can attain insight or perceive new patterns in ideas that provide a pathway to a solution. In order to attain this, the learner must have the background knowledge and all the relevant facts, theories and principles to solve the problem. O'Connor (1986:44) contends that the heavy reliance in adult education on the use of the learner's past knowledge and experience as a basis of new learning is an example of the application of the Gestalt psychology in the teaching-learning process. Insight development involves, in part, the re-conceptualisation of one's previous knowledge. Gestalt theory therefore is useful in both the teaching and clinical areas. In the clinical area nurses need to recognise that patients' perception may be altered by illness. In teaching it is important to use methods and teaching aids that hold the attention of the learner.

2.2.4 Humanistic theory of learning

The humanistic school of thought encompasses the major works of Abraham Maslow, Carl Rogers and others. This theory grew out of the human potential movement in psychology, which looked at humans as whole beings, with thoughts, feelings and experiences. According to Quinn (1992:41), the humanists are in direct contrast to the S-R theorists, who study the individual from the point of view of overt behaviour, disregarding inner feelings and experiences. They differ from the cognitivists also, in that the latter are concerned with the thinking aspects of behaviour, with little emphasis on the affective components.

The humanistic point of view is summarised by Hamachek (Quinn 1992:42) as follows:

> It is a 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 per se, but on the subjective qualities of human experience, the personal meaning of an experience to persons, rather than on their objective, observable responses.

According to humanistic theory, motivation for growth towards becoming a self-actualised person is inherent within each one of us. Van Hoozer, Bratton, Ostmoe, Weinholtz, Craft, Albanese and Gjerde (1987:8) describes learning as a process of developing one's full cognitive, affective and psychomotor potential. Humanistic theory emphasises affective rather than cognitive outcomes in learning, and is concerned with feelings and experiences leading to personal growth and individual fulfilment.

Abraham Maslow, one of the exponents of humanist theory, has made a great contribution to motivation theory with his hierarchy of needs theory. The main tenet of this theory is that the first level of needs must be met before one can strive for the next level of needs, the second must be met before one can strive for third level needs and so on up to the last level, which consists of self-actualisation needs. Maslow's hierarchy is organised according to the potency and primacy of needs, as follows:

- physiological needs
- safety needs
- love and belonging needs
- self-esteem needs
- self-actualisation needs

This hierarchy of needs provided a framework for a holistic approach to the study of growth towards self-actualisation. To the humanist, says Quinn (1992:43), "the goal of education is to assist the individual to achieve self-actualisation or to help the person to become the best that he is able to become".

According to McKenna (1995:29), Maslow's theory is closely linked to the work of Carl Rogers and Malcolm Knowles. Rogers, a psychologist, has provided useful insights into the learning process. He emphasised the self-actualisation of the learner as a goal of education and advocated a student-centred approach to learning, where the student is the focal point of learning

and her or his needs and interests are emphasised. Proponents of this approach believe that learning is more successful if the interests and needs of learners are taken into account. Quinn (1992:43) and Cranton (1989:11) state the principles of this approach as follows:

1. Human beings have a natural potential for learning.
2. The learner must perceive the relevance of the subject matter.
3. Learning occurs when the self is not threatened.
4. Much significant learning is acquired through doing.
5. Learning is facilitated when the student participates responsibly in the learning process.
6. Independence, creativity and self-reliance are all facilitated when self-criticism and self-evaluation are basic and evaluation by others is of secondary importance.
7. The most socially useful learning in the modern world is the learning of the process of learning, a continuing openness to experience and incorporation into oneself of the process of change.

Learners are given the responsibility and freedom to choose what they wish to learn and how they are to learn it. Humanistic theory also emphasises relevance, student participation and evaluation of their own learning, and the importance of a non-threatening learning environment. In the past learning was considered to occur only through transmission of information from the informed teacher to the uninformed student. The teacher was regarded as full of knowledge and students and learners as empty vessels into which the teacher would pour his knowledge. Students would passively receive the teaching, and feel they were not good enough to do anything on their own. By contrast, humanistic theory regards what goes on within the learner, his or her prior experiences, self-concept, goals, attitudes, motivation and resistance to changes, as powerful influences on the learning process.

According to Quinn (1992:44) teaching by giving knowledge does not meet the requirements of today's changing world; what is required is the facilitation of learning and change

and this calls for a different set of qualities in the facilitator. What then is the role of the teacher? Rogers (Quinn 1992:44) sees the teacher as a facilitator of learning and provider of resources for learning, someone who shares feelings as well as knowledge with the learners. He suggests a number of qualities that are required in the relationship between the facilitator and the learner, and these are genuineness, trust and acceptance and empathic understanding.

The facilitator should be aware of individual differences and thus accept each learner as he or she is and build on this for group or individual facilitation of learning. Once learners feel that they are accepted as human beings they will also accept themselves and try to work towards their stated goals. Self-acceptance is the basis for a positive self-concept. It is important, too, for the facilitator to show normal reactions to learners so that they can accept him or her as a real person in a genuine situation.

The facilitator should create a good social climate in the learning situation. Questions from learners should be encouraged and welcomed. In a good social climate, learners will be free to express their feelings whether positive or negative. It is from this expression that colleagues or the facilitator will be able to assist a student as necessary, thus enabling him or her to build a better self-concept. In this way they can also develop a helping, trust relationship. McKenna (1995:29) describes such a facilitator as "one who had been through a process of self-discovery and was prepared to become a 'real' person to the students, sharing their joys and disappointments and not being a faceless embodiment of knowledge".

A teacher who over-emphasises examinations and learners' reports, who harasses learners in the presence of peers when they give wrong answers, can create a social environment in the classroom where learners feel tense and unable to voice their opinions or feelings. This disregard for the student as a human being will affect the learner's self-esteem. Learners who are victims of such an environment will have a low self-concept and thus the goal of education will not be achieved.

The educational aims of humanistic theory have been summarised by Burnard (1995:48) citing Rogers (1983) as being concerned with:

- A climate of trust in the classroom in which curiosity and the natural desire to learn can be nourished and enhanced.
- A participatory mode of decision making in all aspects of learning in which students, teachers, and administrators have a part.
- Helping students to prize themselves, to build their confidence and self-esteem.
- Uncovering the excitement in intellectual and emotional discovery, which leads students to become lifelong learners.
- Developing in teachers the attitudes that research has shown to be most effective in facilitating learning.
- Helping teachers to grow as persons, finding rich satisfaction in their interaction with learners.
- An awareness that, for all of us, the good life is within, not something which is dependent on outside sources.

The humanistic approach to nursing education centres on the relationships between learners and facilitators and between nurses and clients, each person being considered as a unique individual. According to Mashaba and Brink (1994:10), in the context of humanism the role of nursing education is to strengthen and develop those human values and feelings in nurses and student nurses that will enable them to reach out to patients and clients in ways that will impart new meanings to life and living. A nursing curriculum based on this theory should emphasise human feelings and relations.

2.2.5 Experiential learning theory

Experiential learning and teaching have been advocated in the teaching of various aspects of nursing. This concept has been used in a variety of ways. Burnard (1995:45) has identified concepts, which various authors have used in the context of experiential learning, as follows:

- learning by doing the job
- learning from life experience
- allowing people credits for their life experience in place of formal qualifications when applying for places at university
- adult education
- humanistic education
- education of feelings as well as thoughts
- progressive and radical educational methods
- education to increase political awareness
- non-formal education
- learning through reflection

David Kolb is well known for his (1984) work on learning styles. He proposed a theory of experiential learning that seems particularly relevant to the education of nurses. He has identified four modes of learning, and four concomitant learning styles. Kolb (1984:38) defines learning as "the process whereby knowledge is created through the transformation of experience". He contends that there are two reasons why learning is called an experience: firstly it has intellectual origins in the work of Dewey, Lewin, and Piaget and secondly it emphasises the central role that experience plays in the learning process. Quinn (1992:187) defines experiential learning as a process that makes the most of experiences and especially of thinking about experiences. Kolb (1984:21) describes learning as a holistic process that involves the integrated

functioning of the total organism that combines experience, thinking, feeling, perceiving, and behaving. Students see experiential learning as a personal and active approach to learning - when you use your own experience and you learn from what you have done (Burnard 1992: 163).

2.2.5.1 Kolb's experiential learning cycle

Merritt (1990:64) defines learning style as the way learners prefer to engage and participate in learning. The emphasis is on how a person prefers to learn. Samples and Hammond (Arndt & Underwood 1990:29) define learning style as the way an individual processes information. According to Keefe (Raveh 1995:68) learning styles are defined as the characteristic behaviours of learners, which serve as relatively stable indicators of how they perceive, interact with and respond to the learning environment.

Kolb explains how the learning model depicted below pursues a framework for examining and strengthening the critical linkages between education, work, and personal development. He contends that it pictures the workplace as a learning environment that can enhance and supplement formal education and can foster personal development through meaningful work and career-development opportunities. He stresses that people learn from their experience.

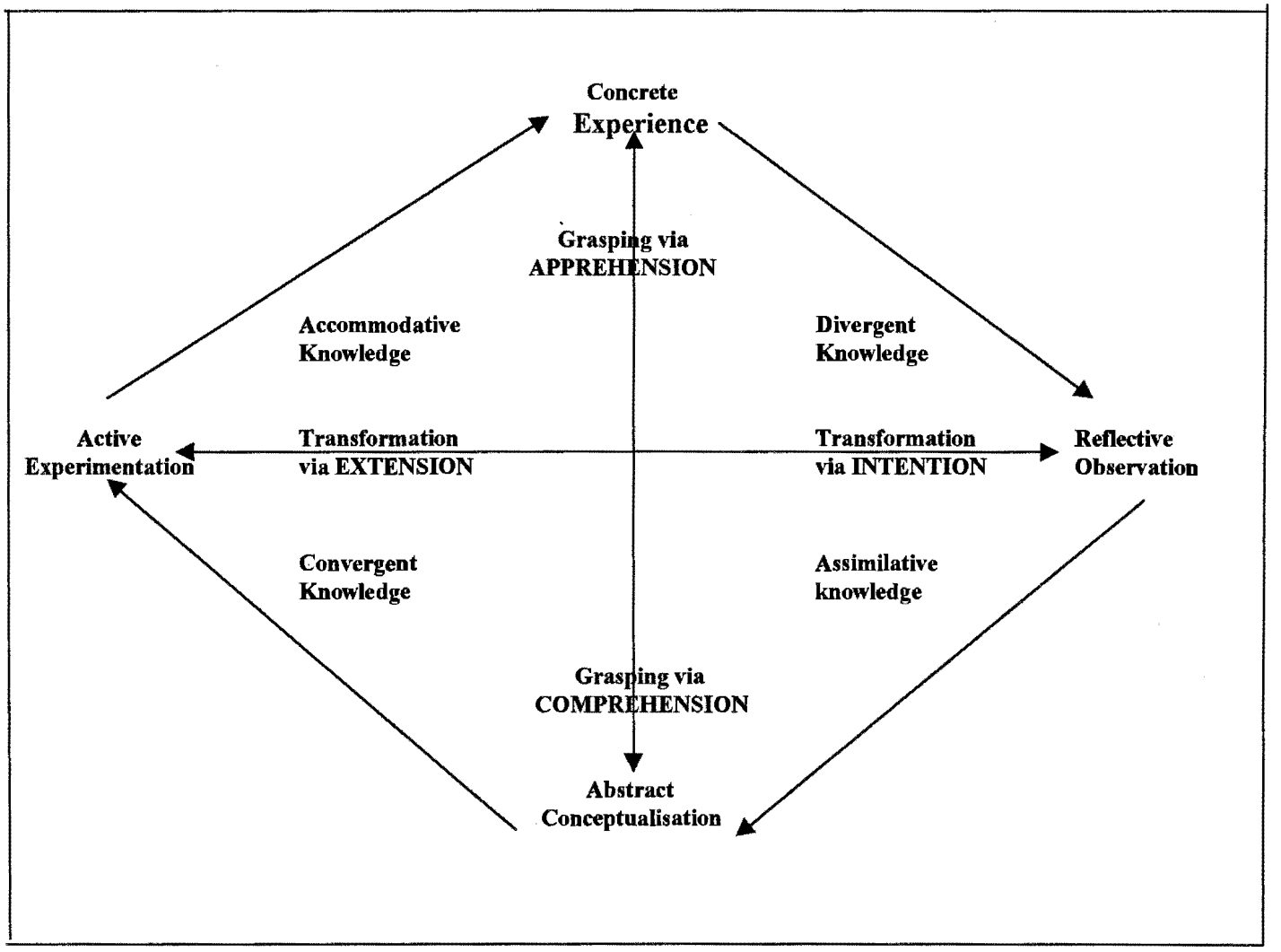

Figure 2.1 Kolb's (1984) four-stage cycle

The process of experiential learning involves a four-stage cycle involving four adaptive learning modes (figure 2.1). According to Kolb (1984:30) if the process of experiential learning is to be effective, learners need to adapt to four different abilities: concrete experience, reflective observation, abstract conceptualisation and active experimentation. He hypothesised that learning involves abilities that are polar opposites, and described two primary dimensions of the learning process. The first dimension has concrete experience at one end and abstract conceptualisation at the other. Reflective observation and active experimentation represent the other two dialectically opposed adaptive dimensions. The learner tends to emphasise one aspect of each of the two dimensions which, when combined, yield the individual's learning style. Kolb described the following learning modes of the experiential learning cycle.

(1) Concrete experience

In this stage learners must be able to involve themselves fully, openly, and without bias in new experiences. Learning takes place by getting involved with people in everyday situations. This is learning through relationships. People with a concrete experience orientation enjoy and are good at relating to others and being involved in real situations, and have an open-minded approach to life (Kolb 1984:68).

(2) Reflective observation

In this stage learners must be able to reflect on and observe their experiences from many perspectives. Learning takes place by watching and listening. The learner must carefully observe before making judgements, objectively view learning from different perspectives, and rely on his or her own thoughts and feelings. The learner prefers to be an observer in the learning process and remains impartial. These learners learn by themselves through observing and listening. People with this orientation like to rely on their own thoughts and feelings to form opinions. They value patience, impartiality and considered, thoughtful judgement (Kolb 1984:68).

(3) Abstract conceptualisation

In this stage learners must be able to create concepts that integrate their observation into logically sound theories. Learning takes place through thinking, theory and expertise, using logic and ideas, rather than feelings, to understand problems. People with abstract orientation are good at quantitative analysis, systematic planning and manipulation of abstract symbols. They value precision, the discipline of analysing ideas and the aesthetic quality of a neat conceptual system (Kolb 1984:68).

(4) Active experimentation

Learners must be able to use theories to make decisions and solve problems. They learn by doing and taking part in whatever is being done or discussed. This mode emphasises practical applications as opposed to reflective understanding; a pragmatic concern with what works as opposed to what is absolute truth; and an emphasis on doing as opposed to observing. People with an active experimentation orientation are good at getting things done, although it might mean taking risks to achieve their goal. They like to see results, which has an influence on the environment (Kolb 1984:69).

Nurse educators need to be clear about what they mean when they apply a given teaching method, and to ensure that students are adequately prepared for any new learning strategies that educators bring to the learning arena. The learner should be able to apply the acquired knowledge in the clinical area. In order to apply the acquired knowledge the learner must reflect, then conceptualise the problem and then be actively involved in solving the problem. As mentioned earlier most nursing is learnt by doing.

2.2.5.2 Kolb's learning styles

Kolb (1984:77) identified four styles of learning: convergent, divergent, assimilative, and accommodative.

The **convergent style** combines abstract conceptualisation and active experimentation. The convergent learners prefers knowledge that can be applied and enjoys hands-on activities. Having a nurse give a return demonstration is an example of such an activity. The strengths of the convergent learner are problem solving, decision making, deductive reasoning, and problem definition.

The **divergent style** combines concrete experience and reflective observation. Divergent learners value people and enjoy being involved. Feelings are emphasised more than thinking. It is important for them to know why they are learning something. Strategies to enhance learning are directed towards beginning with what the learner already knows from past experience. The strengths of the divergent learner are imagination, ability to understand people and recognise problems, and brainstorming.

The **assimilative style** combines abstract conceptualisation and reflective observation. Assimilative learners value facts and knowledge and emphasise thinking over feeling. They value the knowledge of experts, and educators should give factual information to these learners. The strengths of the assimilative learner are planning, creating models, defining problems, and developing theories.

The **accommodative style** combines concrete experience and active experimentation. Accommodative learners are intuitive, artistic, risk-taking individuals who tend to learn through trial and error. They are therefore most likely to experiment, which could be a danger in nursing. The strengths of the accommodative learner are getting things done, leadership, and risk-taking.

These learning styles are depicted diagrammatically in figure 2.2.

Convergent	*Focuses on logic, ideas, and concepts
	*Preference for technical tasks and problems
	*Pragmatic
	*Emphasis on thinking rather than feeling
	*Problem solver, decision-maker
	*Doing as opposed to observing
	*Likes to see results
Divergent	*Focuses on being involved
	*Emphasises feelings as opposed to thinking
	*Intuitive and artistic
	*Values people and being involved
	*Open-minded
	*Good at brainstorming
	*Emphasis on understanding as opposed to practical application of knowledge
	*Values patience and impartiality
	*Imaginative
	*Awareness of meaning and values
Assimilative	*Focuses on logic, ideas, concepts
	*Scientific as opposed to artistic
	*Values precision, rigor, and analysis
	*Reasons by induction
	*Ability to create theoretical models
	*Emphasis on thinking rather than feeling
	*Good at systematic planning
	*Emphasis on reflection as opposed to action; understanding rather than pragmatic
	*Concern with ideas and abstract concepts
Accommodative	*Emphasis on feeling as opposed to thinking
	*Intuitive
	*Open-minded
	*Good at carrying out plans and tasks
	*Tends to problem solve by intuitive trial and error
	*Artistic as opposed to scientific
	*Values people and being involved
	*Risk-taking, action-oriented, seeks opportunities
	*Relies on others for information rather than analyse
Adapted from Kolb, (1984: 77-78) Experiential Learning: Experience as the source of learning and development.	

Figure 2.2 Learning style characteristics

In order to allow students optimal use of their particular learning styles, nurse educators must devise teaching strategies that suit all the possible modes of learning for a given group. According to Arndt and Underwood (1990:30), for every group of learners, approximately 25% will fall into each of the four styles categories. Clinging to a teaching strategy that promotes one way of learning selectively excludes 75% of all learners. Using teaching strategies that address the four learning styles will ensure that a particular mode of the learner will mesh with the educator's teaching at least part of the time. Amdt and Underwood (1990: 30) further contend that although

it is important to tap into individual learning styles, it is equally valuable to assist learners to develop additional modes of learning by exposing them to the other modes.

They advise that an educational programme should begin with activities for the divergent learner and continue with activities for the assimilator, converger, and finally the accommodator. Activities should be appropriately sequenced, as follows:

- connecting to learner's concrete experience (diverger)
- providing logical information (assimilator)
- giving the learner an opportunity to experiment with what has been learnt (converger)
- devising a plan to fit with reality (accommodator)

2.2.5.3 Teaching methods that promote experiential learning

Experiential learning methods are increasingly being used in nursing education and are regarded as useful tools for developing nursing skills, particularly interpersonal skills (Bayntun-Lees 1993:28). Methods that promote experiential learning and high participation include group discussion or sharing, case studies, role-playing, simulation, field training and practical skills training. These methods, which have been used successfully in nursing education, address three areas of learning: psychomotor, cognitive, and affective. They also utilise a vicarious or an actual experience, which is crucial to learning and development.

(1) Group discussions

Group discussions enhance the learning of course material by utilising the skill of each group member (Quinn 1992: 167). Group discussions can be very valuable since learners compare their experiences with one another and learn not only from the educator but also from each other. Apart from the knowledge they gain in these discussions, learners value the social support they gain from belonging to a group. According to Puetz (1987: 92) individuals who have a divergent learning style are creative thinkers who respond best to educational activities that allow them to take a situation and expand it to all its possibilities. She claims that since they are generally talkers,

group discussion is the general approach to choose. The emphasis in group discussions is on participation, which means that the group should be kept relatively small because it is easy to overlook members who do not participate when the group is a large one.

(2) Case studies

Case studies are textual descriptions of specific situations that may either be genuine or fictional and that provide a trigger for the discussion of issues and the examination of real life events (Quinn 1992:182). Case studies play a vital role in the teaching of FNPs. The case study method can be used in both clinical practice and in classroom situations. The purpose of the case study is to provide the learner with the opportunity to use the decision-making process in providing care. It usually describes a real or a theoretical situation. Convergent learners, according to Puetz (1987:92), process a large amount of information in order to arrive at an answer. They would be expected to respond well to such approaches because case studies are essentially problem-solving methods.

(3) Role-playing

Role-playing provides an opportunity for the learner to explore human relations. It can assist in finding personal meaning, exploring feelings, attitudes and values, problem solving, and resolving personal dilemmas (Schoenly 1994:211). According to Puetz (1987:92), for learners who are accommodators, a combination of facts and action is appropriate. They respond well to activities such as role-playing, simulation and other games. Role-playing gives insight into how learners feel in a given situation and allows the group to observe, interact and discuss the role-play. This is a good way of teaching interpersonal and group skills.

(4) Simulation

A simulation is an imitation of some facet of life, usually in a simplified form. One of the important hallmarks of a simulation is that the learner is not required to act out any kind of script; she is expected to behave and react in any way she feels is appropriate (Quinn 1992:179). It

differs from role-playing in that the participants do not assume the role of another person. They remain themselves and do what they normally do in a real situation. Some of the attributes of simulation include active involvement, motivation and development of communication skills.

Beukes (1993:8) describes simulations as working models of reality, which are often simplified or accelerated representations to allow learners to explore situations that are too dangerous, expensive, time-consuming or overwhelming to deal with, such as resuscitation or delivering a baby. Simulations are therefore very lifelike.

2.2.5.4 Application of experiential learning

Experiential learning is an active rather than a passive form of learning. The idea of learning by doing suggests pragmatic approaches to the learning situation. In the classroom there is a variety of learning activities that can be employed for adult learners. Role-playing, simulations, group discussion, and return demonstrations engage learners in concrete experiences which, when processed, lead to cognitive, attitudinal and behavioural change. When using these methods the nurse educator or facilitator should provide adequate time for reflection, observation and conceptualisation. By doing experiential activities in the classroom, learners are allowed to practice and comprehend knowledge and skills that can be transferred to complex, real-life situations in the clinical areas. In addition, says Burnard (Pulsford 1993:141):

> ... practising skills in the classroom through experiential learning methods before being exposed to patients is seen as being safer, as it allows inexperienced students to avoid excess anxiety through having to experience the real distress of patients, and to avoid adding to that distress by saying the wrong thing.

In the clinical setting, learners can be encouraged to discuss their feelings and the insights they may have gained as a result of an experience. They could also try and come up with concrete actions for use in real practice. By taking the role of, for instance, an old, disabled patient, learners can increase their empathic capacity and gain an awareness of the problems involved with old age and disability. The advantages of experiential learning have been summarised as follows by O'Connor (1986:170):

- Experiential/perceptual techniques permit exploration of cognitive and affective responses to situations that lie beyond those normally experienced by learners.
- The vicarious imagining of what it feels like to be in another person's position or to go through an anxiety-provoking experience prepares learners to deal with reality from a more enlightened perspective.
- Content that might not be discussed using other strategies may be dealt with through this technique.

The limitations and disadvantages of experiential learning are:

- Learners may not be able to place themselves in the imaginary situation the educator is trying to evoke.
- Learners may be reluctant to share their feelings and perceptions with others.

2.2.6 Adult learning

Family nurse practitioners, the target audience for CE programmes, are adults. Educators therefore need to tailor their education to accommodate the needs of FNPs as adult learners. Adult education should be seen as a process through which these nurses seek to improve themselves or their society by increasing their knowledge, skills, attitudes and their own lives. An understanding of adult learning is important for the planning and implementation of CE programmes.

Adult learners have specific characteristics that must be identified and understood by those intending to offer CE programmes. The development of the theory of adult learning is attributed to Knowles, whose andragogical model calls for a different approach from that used in the education of children (pedagogy).

Adult learners have developed very individualised learning styles. Mellish and Brink (1989:73-74) have identified special needs that tend to distinguish adults as learners and these are:

1. **Commitment to learning.** The adult learner feels a need to learn and wants to learn. Intrinsic motivation is primarily responsible for successful learning in adults. They want to know why they are learning certain skills or material.
2. **An environment that facilitates learning.** An environment in which adult learners learn more readily is characterised by physical comfort, mutual trust and respect, freedom of expression, the ability and desire to help one another, and acceptance of the fact that achievement levels in the group will differ. The physical as well as psychological environment must be conducive to learning. Adults need special support systems to assist them in their learning environment and they need to know that they are appreciated as significant contributors to the learning experience.
3. **Learning objectives.** In the adult group-learning situation, mutual determination of learning objectives is desirable. The facilitator in the group must encourage the adult students to consider the needs of the group as a whole, the needs of the organisation, the knowledge and skills requirements of the course concerned and above all the needs of society, which they are serving.
4. **Responsibility for learning.** If adult learners are also responsible for planning and organising learning experiences, they become much more committed to learning.
5. **Focus on principles.** Adults have the ability to focus on principles rather than details.
6. **Active participation in learning experience.** Adults do not enjoy listening passively. They enjoy active listening, asking questions and reacting to challenges. Presentation of the material studied, role-playing and discussion are all examples of active participation.
7. **Learning based on past experience.** Adults have accumulated many experiences. They need to use prior experiences, which help them link new knowledge with the old.

8. **Readiness to learn.** The adult is ready to learn what he feels is important in his area of work.

9. **Progression from childhood.** This relates to the development from selfishness to tolerance, helpfulness to others and altruism. The facilitator of adult learning should be aware of this and should use these qualities to motivate groups towards mutual help in the pursuit of learning with a view to an unselfish goal such as better patient care.

10. **Change in time perspective.** The adult's desire to learn is directed towards learning that can bring about immediate results.

Steyn (1998:23) asserts that each adult learns in a different manner, but feels there are certain basic principles that are common to all adult learning. These principles are the following:

- **Meaningful material.** If the learner believes the material that has to be learnt is meaningful in relation to the task that has to be performed on completion of the learning, the material will be learnt more readily and will be remembered longer than material seen as non-meaningful.
- **Appropriate practice.** When relatively straightforward and uncomplicated material is learnt, the amount of practice will actually determine the rate of learning. The more the learner practises, the more effective the learning is going to be. Exercises that give the learner the opportunity to practice knowledge and/or skills obtained in the study process should be included at regular intervals in the course material. Objectives to be achieved in the practice should be clear and attainable.
- **Reinforcement.** Learning something means that the learner should be able to repeat what has been learnt with a certain level of competency and consistency. Reinforcement is anything in the learning situation that is used to increase the probability that the desired behaviour, which proves that something has been learnt, is repeated successfully.

- **Knowledge of results.** Giving an adult feedback immediately after a learning experience as to whether his or her response was correct encourages learning. This immediate feedback acts as a reinforcement of the learning experience. Self-evaluation exercises can provide the student with this immediate feedback. Answers or keys to assignments may also be given with an assignment to enable the student to check whether the learning process is actually successful and to obtain immediate feedback on learning.

  Littlefield (Dowd 1996:103) suggests that adult education as related to nursing and radiological technology must first define the broad mission of adult education and review the philosophical assumptions, as well as combat some common misconceptions. The various philosophical assumptions that must be considered are:

- Education must be planned, organised, and offered on a lifelong basis.
- A national adult and CE programme should be concerned with educational needs and benefits.
- Adult education should be relevant to the needs and interest of all segments of society and within their economic means.

  FNPs are adult learners. They are motivated to learn and they are eager to become competent, knowledgeable members of the profession. The challenge to nurse educators and nursing education is to provide knowledge, experience and training to assist them in achieving their goals (Raudonis 1987:166).

2.3 Continuing Education in nursing

In the literature, CE has been defined by several authors for whom the concept holds different meanings. According to Al-Ma'aitah and Momani (1999:179) CE is a part of lifelong learning that begins after formal education ends. It consists of planned learning experiences organised in a logical manner, which build on previously learnt knowledge, skills and attitudes to effect quality health care. Puetz (1987:3) defines CE of health workers as efforts to change the

health care environment as a result of learning. It is assumed that the changes will affect the outcomes of health care delivery in a positive way. On the other hand, the American Nurses' Association (ANA) (1994:5) has defined CE as:

> Those professional learning experiences designed to enrich the nurse's contribution to quality health care and his or her pursuit of professional career goals. Continuing education includes programs, offerings and independent studies that meet specified criteria for contact hours.

The implication of this definition is that it is a means of improving health care, which also benefits the individual nurse. It is also a means of getting credit for continued learning.

The International Council of Nurses, in a statement of CE in the International Nursing Review (1981:163), describes CE as including a wide spectrum of educational activities such as self-directed individual study, in-service programmes, formal post-basic courses and postgraduate academic studies. Continuing education should be available to all nursing personnel, employing suitable media to reach those working in isolated areas, and recognition, advancement and/or remuneration should reward suitable achievement. Continuing education should be developed by and conducted within the nursing and/or general education system in co-operation with nurses' associations, governments and health agencies.

Cooper (1983:5-6) quotes the following definition of CE taken from the Nursing Thesaurus of International Nursing Index: "educational activities primarily designed to keep nurses abreast of their particular field of interest and that do not lead to any formal advanced standing in the profession". This definition is in contrast with the ICN statement, which includes formal post-basic studies. According to Henderson (1982:104) academic credit is not generally attached to CE, and this does not mean that the quality of the educational offering is any lower, nor that the educational experience is less meaningful to the learner.

According to Mussallem (1981:13) CE may be defined as all learning activities, undertaken after the basic nursing programme, that lead to the enhancement of nursing practice,

nursing education, nursing administration and nursing research. It should contribute to the fulfilment of personal and professional goals. This definition is intended to include the full range of formal and informal opportunities for CE available to nurses.

CE, therefore, is the education an individual undertakes, following completion of a basic educational programme, to improve competence and not with a view to gaining a new qualification. CE, staff development, and in-service training are terms that are sometimes used interchangeably. For the purposes of this study these terms will be treated as having the same meaning. CE is directed towards real practical needs and denotes something needed by every nurse to remain competent in the job in the face of the rapid development of health science and health care. According to the ANA (Wadell 1992:113) the purpose of continuing nursing education is to enhance practice and, therefore, promote the health of the public. Continuing nursing education in some countries is mandatory and requires all professional nurses to have at least 10 credit hours yearly for re-licensure.

2.3.1 Responsibility for continuing nursing education

Individual nurses, employing agencies, educational institutions, government and professional associations all share responsibility for CE. According to Mussallem (1981:14) professional nurses are responsible and accountable for their own growth and development. However, employers have a responsibility to provide CE so as to contribute to the improvement of patient care. Nurses should have access to the resources and services available to educational institutions. Educational institutions should pay attention to the fact that nurses, as adult learners, require the following: a variety of educational opportunities relevant for nurses' particular needs; quality learning experiences that are planned, implemented and evaluated according to accepted principles of adult education (Mussallem1981:15).

According to Puetz (1987:6) a major goal of professional associations is to maintain and enhance the competences of its members. Most associations thus see the provision of CE activities

for their members as one of their major responsibilities. Efforts to ensure that CE is accessible, relevant and affordable need the co-operation of CE providers. Puetz (1987:18) asserts that co-operative ventures require compromise and willingness to work together to achieve mutually beneficial outcomes. It can be hoped that collaborative arrangements will serve the field of CE as well as the profession of nursing.

2.3.2 Mandatory Continuing Education

Mandatory CE is that education required for re-licensure (Cooper 1983:7). In the United States (US) and other developed countries, CE is mandatory for re-licensure or registration. Nurses have long held the assumption that CE is valuable and associated with competent practice. According to Hewlett and Eichelberger (1996:176) it was this assumption that prompted 18 states and one US province to mandate CE as a condition for re-licensure of registered nurses. According to Nolan, Owens and Nolan (1995:552) the ultimate goal of continuing professional education must be the delivery of better patient care. However, this has led some to urge that continuing professional education is effective only to the extent that practice change ensues. This represents an overly simplistic view as, in addition to overt practice benefits, subtler but equally important changes have also been attributed to the educational process. In a study by Hughes (Nolan et al 1995:552) continuing professional education was described as facilitating better care planning and the informal exchange of ideas between participants. Furthermore it is urged that, following CE, practitioners demonstrate greater assertiveness and autonomy, becoming both more competent and accountable.

There are however, problems that are linked to mandatory CE. Bagnall, Schemmel and Hansen (1995:73) have indicated that using traditional methods to providing mandatory CE often proves ineffective and costly when considering the rate of attendance, availability of resources and the logistics of offering programmes. Barriers to in-service attendance among nursing staff have been attributed to inadequate staffing, family responsibilities, and lack of motivation to learn.

Inadequate staffing prevents attendance at in-service offerings during work hours; family responsibilities, especially childcare, affect attendance during non-work hours. According to D'Aurizio, Kilbride, Weeks and Spor (Bagnall et al 1995:73), problems with attendance at mandatory in-service offerings, from a management perspective, include staffing difficulties and expenditures incurred in overtime costs associated with staff in meeting annual requirements.

2.3.3 Need for continuing nursing education

Continuing nursing education has been seen as a vehicle for nurses to respond to rapid changes in health care delivery and to raise professional standards of current practice (McDiarmid 1998:267). Several factors have contributed to the advancement of CE from an individual personal undertaking to a major responsibility for everyone. It is becoming increasingly obvious that technology is rapidly overwhelming nurses' previous encounters with the field. The gap between scientific knowledge and its application grows wider day by day. According to Yuen (1991:1233), one major pressure professional nurses face today involves the demands made by rapid technological improvements, with concomitant changes in medical practice. What might have been adequate preparation for the practice of nursing a few years ago is not sufficient for today's needs. Education must indeed be viewed as a lifelong learning process. The concept of lifelong learning challenges the assumption that all the knowledge and skills needed for a lifetime of active and effective care giving can be learnt during one's basic professional education (O'Connor 1986:1).

Abruzzese (1996:16) states that social trends and challenges demand increasing CE efforts in nursing. One such challenge is that the much debated and delayed health care reform is creating strange combinations and permutations in the delivery of health care. Second, the recognition of health care delivery is creating problems in staffing ratios and quality improvement efforts. Third, there are multiple problems in caring for patients with communicable diseases, some of which are associated with the deepening of the acquired immuno-deficiency syndrome (AIDS) crisis. Added

to that are the problems related to the re-emergence of tuberculosis. Fourth, exploding technology in terms of diagnostic equipment, treatment modalities, and computer advances make change and flexibility a necessity. Fifth, cultural diversity in the workforce and in patients necessitates a new sensitivity and respect for diversity. Last, there is the surge of humanistic caring and respect of individuals. In response to these and other challenges there is most decidedly a need for effective CE. Yuen (1991:1233) reiterates these factors when she states that:

> There is also emerging evidence that with changing patterns in mortality and morbidity (for example, an increasing incidence of degenerative disease and trauma due to road traffic accidents) and with alterations to health care delivery (for example, an increasing emphasis on non-institutionalised care), the role of the nurse, both professionally and industrially, is changing.

In addition, the public's expectation of accountability for the care they receive has also increased. The public view themselves as consumers with rights. Health services must meet their expectations or else providers of health services meet with negative feedback.

According to Mussalem (1981:14), CE accomplishes a number of purposes:

- It enhances the competence of nursing practice and the quality of the care of patients.
- It promotes personal and professional growth.
- It prepares nurses for new roles and responsibilities in clinical, educational, administrative and research positions.
- It renews professional motivation and enthusiasm.
- It encourages inter-professional collaboration and co-operation.
- It maintains learning skills.

What do all these factors mean for CE? All in their own way they contribute to an increased need and demand for CE programmes. The greatest need often arises among those who have the greatest difficulty in obtaining it. This applies particularly to isolated, overworked health workers in the rural and under-served areas, where recruitment is very difficult. Nurses in these areas also find it more difficult to keep abreast of new techniques without some provision of CE.

According to Anderson and Kimber (1991:29), CE helps nurses in rural areas appreciate that their practice is challenging and dynamic. Often, however, access to CE for rural nurses is hampered by distance, cost factors, and the lack of sufficient personnel to provide coverage when nurses are away from work.

2.3.4 Participation in continuing nursing education

A number of studies have identified participation patterns in continuing nursing education. Kersaitis (1997:137) explored the attitudes to and participation in continuing professional education of registered nurses in Australia. Although continuing professional education is not mandatory in Australia the majority of registered nurses (71%) held a positive attitude towards CE and learning. This attitude was also reflected in their participation and willingness to meet costs. Factors found to discourage participation in CE were cost, family commitments and job-related restrictions. Factors that significantly influenced CE participation were age and number of years in clinical practice. Continuing education participation increased with age and experience. This finding, however, is in contrast with those of Young (Turner 1993:10), who found that older nurses and those with less formal education attended fewer CE courses than younger nurses and those with more formal education.

Turner (1993:9) conducted a study as to why nurses do not participate in continuing nursing education and do not use what they learn. Cost was the most frequently reported barrier to participating in continuing nursing education. The reason given most frequently for not using what they learn in continuing nursing education was lack of support from physicians.

DeSilets (1995:207), in assessing registered nurses' reasons for participating in CE, found that they have many incentives for participating in CE. Results of this study indicated that they were interested in maintaining professional competence and keeping abreast of developments in health care. In addition, they were interested in professional service aspects of nursing practice, in learning and interacting in a collegial environment and in enhancing personal benefits and job

security.

2.3.5 Impact of Continuing Education

A question that may be asked is: can CE improve nurses' performance? The question is a complicated one and does not lend itself to a straightforward "yes" or "no" answer. The answer will depend on such factors as: What kind of CE? What is meant by nurses' performance?

Certain types of CE programmes do, indeed, improve nurse's performance and the quality of health care. Yet studies reported in the literature have shown inconsistent results about the impact of CE on nursing practice. Meservy and Monson (Sheaffer, Phillips, Donlevy & Pietruch 1998:35) conducted a study of nursing personnel in three hospitals to determine whether the impact of CE improves the quality of nursing practice and patient care. Their findings confirmed that this is, indeed, the case. Sherwood (1996:124) conducted a study based on Cervero's (1985) assertion that implementation of CE knowledge is determined by the characteristics of the learner, the practice environment, the CE activity and the proposed change. The study was a qualitative enquiry into nurse administrators' perception of the impact of CE in under-served areas. According to this study, nurse managers reported that nurses who participated in CE gained stimuli for professional innovation and were more open to new ideas. Although all respondents agreed that indirect pay-offs would come later, all could cite specific ways patient care had improved as a result of CE participation.

In Warmuth's (1987:6) evaluation of a one-day CE programme, participants were asked, six months after the programme was offered, what uses it had had. She identified five types of use: changes in thinking, changes in nursing practice, changes in nursing perspective, teaching others, and uses outside of work. Penny (Hewlett et al 1996:177) reports that the Florida Board of Nursing believes positive patient outcomes were related to increased CE attendance. However, virtually no data were provided by the Board to support that mandated CE actually resulted in positive patient outcomes.

Waddell (1991:113) conducted a meta-analysis of published and unpublished research on CE for registered nurses. The literature in this study concludes that CE had a positive outcome on nursing practice. Waddell argues, however, that while we know that continuing nursing education contributes to a positive change in practice, there may be other factors that influence the extent of the change.

Barribell, While and Norman (1992:1135-1136) conducted a review of literature on CE for qualified nurses. On looking at whether CE actually resulted in improved patient care, they concluded that:

> There is a repeated assertion in the literature that continuing professional education ought to improve patient care. In spite of this, a review of the literature suggests that comparatively little attention has been paid to the effect of programs on nursing practice and whether or not they are effective for ensuring competence. Within the era of accountability and quality assurance throughout the world this seems a surprising omission.

According to Hewlett et al (1996:176), there is increasing evidence that supports the assertion that CE requirements do not guarantee continuing competence. Citing Peden, Rose and Smith (1992) they agreed that simply attending a CE session serves as no guarantee that a change in nursing practice will take place.

Assisting practitioners to achieve desired outcomes for patients were listed as an appropriate goal of professional continuing education, and CE may also be evaluated in that context (Hewlett et al 1996:177).

Koyama, Holzemer, Kaharu, Watanabe, Yoshi and Otawa (1996:118) identified a CE framework that was useful in evaluating the input, process and outcome of a programme as well as its impact on learners. However, the group felt that the tool could be improved by adding a client/patient dimension to evaluate the impact of the CE on the client as well as on the learner.

According to Turner (1991:104), CE for nurses has come to represent an important means of assuring competent quality care in practising nurses. Statutory requirements, professional

associations and accreditation standards of health care institutions assume that CE can be equated with continuing competency. Yet studies have not fully demonstrated that continuing nursing education results in competence or increased quality of care. According to Wilk (1986:17) acquisition of new skills and information is essential and the customer must be assured of continuous competence. Continuing education may not, however, be sufficient in its current form to provide that assurance. It is therefore important to look at other factors that impact on CE, like the characteristics of the environment, the participants and the resources.

2.3.6 Effective CE programmes

Continuing education is a way of bringing about improvements in the health care delivery system. Continuing education programmes should serve to increase nurses' clinical competence, self-concept and self-esteem in all areas of nursing practice, education, management and research. The expected result of effective CE programmes is an overall increase in the quality and quantity of health care delivery.

Several authors have described different models and approaches all of which aim at providing a systematic approach to CE that maximises resources and leads to practice improvement, improvement of clients' health status and nurses' personal improvement. According to Puetz (1987:75) in a health care environment of cost containment and accountability, it is increasingly important that CE programmes be smoothly planned and implemented to assure that they are successful.

According to the English National Board (1991:41), continuing professional education, if it is to be effective, must:

- Maintain and improve quality care.
- Respond to changing health needs.
- Value and build on what has already been achieved.
- Prepare practitioners for their vital roles.
- Contribute to value for money.
- Develop shared values and a common culture for care.
- Sustain the partnership between practitioners, managers and teachers.
- Meet statutory requirements for safe practice.
- Contribute to workforce and skill mix planning.

In order to comprehend the scope of CE in our daily lives, it is important to identify a systematic approach to CE programmes. Some CE authors suggest models for planning, others list steps to be followed and some offer a combination of these approaches. Most CE models have at least the following phases or stages:

1. **Analysis**. Find out what learners need. What do they want to know? What resources do they need? What are their characteristics? What are their learning styles? How are they motivated? Several authors have endorsed the assessment of needs as a necessary first step in designing a CE programme (Bell 1986:113; Puetz 1987:26; Schlosser et al 1993:135; Trautman & Watson 1995:42). A needs assessment will help establish possible needs, interests and problems that will help providers to formulate goals and objectives for the programme.
2. **Planning**. According to Dolphin and Holtclaw (1983:110), planning encompasses the setting of goals and objectives; the selection of strategies to meet the goals and objectives; the co-ordination of personnel, services, surroundings, and resources to create an effective

programme.

3. **Implementation**. Having identified the methods and strategies for facilitating the programme the next step is implementation. All the planning in the world will be of no avail if the implementation fails to bring about the desired changes in the learner. The aim of implementation is to achieve what you have set out to do.

4. **Evaluation**. The evaluation of the CE experience is essential so that one can look at the product of the CE programme, that is, what the programme has achieved.

Rath, Boblin-Cummings, Baumann, Parrott and Parsons (1996:15) say that evaluation allows one to plan for future activities to build on one another and to make future activities part of yearly performance appraisals.

Kirkpatrick (Abruzzesse 1996:246) proposes an evaluation model using the terms **reaction, learning, behaviour** or **skill application** and **impact** or **results**. In this terminology, reaction evaluation refers to learners' opinions about the learning process; this is the same as measuring customer satisfaction. Learning evaluation is the measurement of the learning experience. Impact or results evaluation measures the effect of the learning experience on a unit or department. In Kirkpatrick's opinion, this has the highest value. According to Abruzzesse (1996:256), process evaluation is the simplest to perform, requires a minimum amount of money and time and is expected of nearly all CE programmes. Content evaluation requires more skill in tool development and more time to develop and administer evaluation procedures. Outcome evaluation requires greater skill in devising strategies, and takes much time to perform well. Impact evaluation is the most difficult, time-consuming and costly of all evaluations.

2.4 Conclusion

This chapter presented a literature study on learning theories and continuing nursing education. Chapter 3 gives an overview of the initial training of the FNP.

CHAPTER 3

INITIAL TRAINING OF FAMILY NURSE PRACTITIONERS IN SWAZILAND

3.1 Introduction

The objective of this chapter is to describe the development of family nurse practitioner (FNP) training in Swaziland at the Swaziland Institute of Health Sciences (SIHS). The report is based on a review of documents of the Ministry of Health and Social Welfare (MOH&SW) and SIHS, and on literature on FNP training and meetings with senior members of MOH&SW staff. The chapter also provides a historical perspective on the FNP programme in the United States of America since most of the main actors in the initial programme came from the United States. Further background is given regarding the primary health care (PHC) nursing services in Swaziland, the curriculum for FNP training in Swaziland including its philosophy, purpose, admission requirements, objectives and required competencies.

3.2 The health sector in Swaziland

3.2.1 Health needs and goals

In developing countries, including Swaziland, expectations of health care are rising more rapidly than socio-economic resources, and people are becoming aware of their needs and demanding better health care. The education of nurses for expanded roles is seen as one of the answers to those demands. Due to sharply rising costs for health care, even in the industrialised countries, there is an increasing necessity for more effective and cost-beneficial care. This means that all human resources have to be used at the right level of expertise. New roles for old professions have to be accepted. Doctors have to realise that assessment and management of medical problems, previously their sole responsibility, can now be undertaken by other health care

introduction of other milks and improper weaning practices. The study also noted that tuberculosis is one of the major causes of morbidity and mortality in all age groups. It has been observed that the number of defaulters has been increasing. A survey carried out in 1990 by the Swaziland MOH&SW revealed a noticeable increase in the number of tuberculosis/human immune virus associated (TB/HIV) cases at the Tuberculosis Hospital, with an estimated prevalence rate of 50% of the inpatients.

Respiratory tract infections are one of the most common causes of outpatient attendance at clinics and hospitals, comprising 50% of all attendances for infants and young children. It is estimated that acute respiratory infections account for 23% of all deaths among under-fives. Factors that make children vulnerable to acute respiratory infections are malnutrition, lack of immunisation and low birth weight (MOH&SW 1996:10).

Swaziland's high rate of maternal mortality (110 per 100,000 live births) and morbidity is correlated with a high incidence of avoidable, high-risk pregnancies. These are attributed to factors such as inadequate care of pregnant women, lack of appropriate health education materials, and under-utilisation of existing services.

Human immune virus/Acquired immuno-deficiency syndrome (AIDS) is without doubt the most common cause for admission to health facilities. All age groups are affected, but the working age population bears the greatest burden Swaziland National AIDS Programme (SNAP Report 1996/97:6). Two thousand four hundred and forty-nine cases of AIDS were reported in Swaziland between 1987 and 1997. The WHO estimates that for every AIDS case reported there are 100 HIV-positive persons, thus at least 20,000 people in Swaziland are infected with the virus. The main goal of the MOH&SW in this area is to control sexually transmitted diseases (STDs) and AIDS as well as to ensure that the rising burden of HIV-related illnesses does not displace the treatment of other diseases with more cost-effective profiles (Economic Review Commission 1995:66).

The overall health status in Swaziland is difficult to ascertain in the absence of reliable epidemiological, up-to-date data. Life expectancy was estimated in 1989 at 53 years for males and 60 years for females or an average of 56 years. Infant mortality remains high at 98 per 1,000 live births, as does under-fives mortality at 141 per 1,000 and maternal mortality at approximately 110 per 100,000 live births (MOH&SW 1996:9).

3.3 Primary Health Care in Swaziland

In 1977 member states of the WHO unanimously adopted the goal of Health for All by the Year 2000. This meant achieving an acceptable level of health for all people of the world. All people in all countries would have a level of health that would permit them to work productively and participate actively in the social life of their community. The declaration of this aim at Alma-Ata in Russia advocated PHC as the key to attaining this commendable goal, and defined as:

> Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. PHC is seen as the central function and main focus of the health system. It is also seen as the first level of contact of individuals, families and communities. It forms an integral part of both the country's health system of which it is the nucleus and of the overall social and economic development of the community (WHO 1978:3).

The Government of Swaziland, through the MOH&SW, made a commitment to the goal of "Health For All By The Year 2000". The Ministry's strategy to achieve this goal was to mobilise all sectors for health in the development of a comprehensive PHC system. In pursuing its policy of providing preventive, promotive, rehabilitative, and curative services, Swaziland adopted the PHC strategy for health service delivery and care to the population in 1983. Prior to this the health system in the country was largely hospital, urban-based and curatively biased. The aim of the strategy was "to reorient health care delivery in such a way that whilst the urban curative is maintained, the spreading of resources for the provision of PHC services in all geographical areas particularly the rural is accelerated" (National Development Plan 1998: 170).

Its emphasis is on prevention of disease and the promotion of healthy living standards. The MOH&SW has also endorsed the key elements essential for attaining an acceptable state of health as:

> Adequate food, safe water, basic sanitation, maternal and child health including family planning, immunisation against communicable diseases, education concerning prevailing health problems and methods of preventing and controlling them, and appropriate treatment for common diseases and injuries (Economic Review Commission 1995:64).

According to the National Health Policy (1983:4) the community should become a central focus. The community's capabilities must be enhanced to enable it and individuals in it to take responsibility for improving health. Accordingly the policy advocates that PHC should be the concern of most government ministries: health, agriculture, education, works and construction, housing, finance, economic planning, and so on. For instance, the Ministry of Agriculture must see to it that the Swazi people are properly fed. AIDS education, on the other hand, should rely on peer education to ensure maximum impact and understanding. A good PHC strategy tackles the main health problems of the community by providing the following services:

Promotive care, which aims at providing an enabling environment for health (eg essential food, water, shelter, education and employment), and promotes changes in unhealthy behaviour (eg smoking, reckless driving, drug and alcohol abuse). The strategy aims at promotion of healthy behaviour and attitudes through health education and community mobilisation.

Preventive services. Disease prevention activities can be classified into three categories, namely primary, secondary and tertiary prevention. Primary prevention seeks to prevent the disease from appearing at all by, for example, avoiding exposure to pollutants, leading healthy lifestyles, or working in safe work environments. Secondary prevention is based on the early detection of a health problem, such as screening for hypertension, diabetes and cervical or breast cancer. Tertiary prevention aims at helping the client live more comfortably with the health problem while trying to avoid further deterioration of health status. Obviously, the greater the success of the

primary prevention strategies the smaller the need for other health services.

While secondary and tertiary disease prevention activities require the presence of health experts, responsibility for primary prevention is shared with many other professionals such as nutritionists, social workers, biologists, agriculturists, environmental scientists educators and so on. It is widely accepted that the major causes of disease in both developing and developed countries are environmental factors and self-destructive lifestyles. Different societies' priorities and strategies will depend on their level of development and on the population's health status. Preventive care has the objective of avoiding illness or injuries before they occur, thus reducing the need for and cost of curative services. The strategy aims at case detection and preventive interventions through immunisation and early treatment of debilitating illnesses.

Other components in preventive and promotive health services include nutritional and dietetic services, family planning, screening for common diseases, water and sanitation, occupational health, bilharzia and malaria control, control of diarrhoeal diseases, acute respiratory infection control, maternal health, HIV/AIDS prevention and control and tuberculosis control.

Curative care addresses problems of diseases and injuries. The division between preventive and curative services is often blurred because timely curative interventions with low technology medicines, such as oral rehydration therapy, effectively prevent young children with diarrhoea from becoming susceptible to respiratory infections and more acute forms of malnutrition. Moreover, most preventive services are delivered from hospital outpatient departments, health centres and rural clinics, which are classified as curative facilities. Hospitals act as referral centres for clinics and health centres, and provide technical and clinical support for all outlying health units. They provide a comprehensive range of in-patient and outpatient services including rehabilitative services.

Rehabilitative care aims at restoring functions due to physical impairment. Disability is a major health problem in Swaziland, and one that is largely unrecognised. Non-communicable diseases

associated with an increased incidence of road and industrial accidents, smoking, changing dietary habits, other lifestyle changes and social and economic conditions are beginning to account for an increasing proportion of the total burden of disease in Swaziland. Examples of people with disabilities in Swaziland include mental disease, blindness, deafness, stroke, epilepsy, injuries, alcoholism and substance abuse, lung diseases especially from pollution from the mines and industries. Much of this emerging disease burden can be prevented. The relatively under-developed state of rehabilitative services in Swaziland is an impediment to reducing the burden of disease associated with road and industrial accidents, and the increased incidence of cardio-vascular diseases and neuro-motor disorders.

According to the National Development Plan (1994 - 1998:184), rehabilitative services are directed at the secondary prevention of avoidable disability and function where disability already exists, focusing on the following areas:

1. As part of the curative process, to prevent disabilities occurring in people suffering from potentially disabling illness of injuries.
2. Early intervention in children with congenital or early-acquired disabilities.
3. Intervention to improve the functioning of those who are already disabled.

The MOH&SW (1996:7) points out, however, that in addition to being poorly developed, the existing rehabilitation services are not well co-ordinated.

3.4 Nursing education at the Swaziland Institute of Health Sciences

From 1927, the Nazarene Nursing College pursued a dynamic ministry of training nurses, which it did unaided until the Swaziland Institute of Health Sciences (SIHS) started operating in 1980. This was a consequence of government having realised the need to share this growing national burden. The SIHS is an autonomous educational institution within the MOH&SW, mandated to train various categories of paramedicals to meet the health needs of the people of

Swaziland

The Institute admitted students who had completed matric. Basic programmes were:

- three years' general nursing or health inspection
- two years' dental hygiene

Post-basic education is offered in the following clinical speciality areas:

- one year community health nursing
- one year midwifery
- one year community mental health
- one year family nurse practice

In 1997 the SIHS was established as a Faculty of Health Sciences at the University of Swaziland. The faculty offers both diploma and degree programmes.

For Swaziland to achieve its objective of "improving the health status of the Swazi people by providing preventive, promotive, rehabilitative and curative health services which are relevant and accessible to all" (National Health Policy1983:1) a multidisciplinary approach was needed. It has become increasingly evident that the provision of comprehensive health care is not an exclusive preserve of one cadre of health professionals. It is therefore crucial for Swaziland to develop a comprehensive human resources plan aimed at educating its people in institutions of higher learning. Health care delivery is a complex entity. According to Searle, Grybowski and Minaar (1992:25):

> To understand and have a holistic view of the environment, health professionals should have research skills which they will use to explore the causative and determinant function ... It is, therefore, crucial that health workers should receive university education.

3.5 Nursing in Primary Health Care

Reid (1995:79) states that nursing's direction is uncertain until the roles of the various categories of health personnel are clearly defined to serve the new levels of service being created.

The role of the nurse in PHC, whether she or he is providing service to the individual, family, group or community, is to assess, plan, implement and evaluate the health care needs of people of all ages, in varying circumstances, in a variety of settings and in collaboration with other health care workers.

The WHO (1985:9) has included other responsibilities for the nurse in PHC, which are also endorsed by the nurses in Swaziland. These are to:

- Encourage the community to participate actively in the development and implementation of health services and in health education programmes.
- Work in partnership with the community and with families and individuals.
- Help families become responsible for their own health by teaching them elementary health concepts and self-care techniques.
- Co-ordinate health-related community development activities with those responsible for social and economic programmes.
- Provide guidance and support to other PHC workers.
- Conduct research.

The professional nurse of today, therefore, faces many exciting challenges and opportunities. In an era of rapid technological change, nurses must be clinically proficient in both technological skills and humanistic concerns.

According to Stark (1987:25) nurses are being recognised for

> the crucial role they play in comprehensive care during illness from the early stages where health teaching is important to the critical care stage, where close supervision and rapid clinical judgements can mean life or death after complex surgery or severe illness, and through the rehabilitative state where a caring and informed nurse can assist the client towards improvement of functional abilities and return to family and community.

Nurses in Swaziland are co-ordinating most of the PHC programmes. Examples of these programmes are:

- Reproductive Health Programme
- Swaziland Expanded Programme of Immunisation
- Acute Respiratory Infections Programme
- Control of Diarrhoeal Diseases Programme
- Swaziland National AIDS Programme
- Swaziland Hospice at Home Programme
- Rural Health Motivators' Programme
- Swaziland Women Action Against Abuse

These programmes are very important to the health and welfare of the people of Swaziland, and indeed, nurses lead the way in PHC.

3.6 Historical perspective on FNP programmes in the United States

In order to understand the birth of the FNP programme in Swaziland, it is useful to highlight the history of the FNP role in the US as an example of one of the key pioneer programmes for the FNP. In 1965 Loretta Ford, the then dean of the University of Colorado's School of Nursing, and Henry Silver, a paediatrician, initiated an innovative programme to train paediatric nurse practitioners. These nurse practitioners would function in an expanded role to deliver ambulatory health care to well children and their families. Ford and Silver (1967:43) noted that the key to their programme was the development of a nurse's ability to judge levels of wellness so that appropriate nursing actions could be taken to achieve health-oriented goals. Ford's vision for the FNP role was of autonomous clinical care using a directed nursing model based on public health nursing principles. The public health nurse therefore, was viewed as providing the closest example of an expanded scope of practice with a relatively high degree of autonomy and the ability to practice in many settings, including rural settings. Ford, as a co-director of the project and as a public health nurse, was well aware of the health needs of the

people of all ages in the community and was confident that nurses could be prepared to meet those needs in collaboration with other health care workers.

A major reason for the development of the FNP programme was the shortage of doctors as more and more of them moved into specialisation, leaving many areas under-served. In addition, the distribution of physicians is invariably a problem in that they tend to be more concentrated in urban areas. Nurses thus saw the opportunity to expand their role in response to the needs of the population, the profession and the health care delivery system.

According to Hamric, Spross and Hanson (1996:18), the consumer movement was at its height in the 1960s and 1970s with people demanding accessible, affordable and sensitive health care. Linked to this was the women's movement, which increased the awareness of both nurses and society that nurses were under-valued and under-utilised. Growing out of the period of social change, the FNP programmes made a major impact on nursing and the health care delivery systems. Ford (1991:287) wrote, in retrospect, "the nurse practitioner movement is one of the finest demonstrations of how nurses exploited trends in the larger health care system to advance their own professional agenda and to realise their great potential to serve society".

Ford and Silver (1967:46) record that the first nurse practitioner programme expanded the role of the nurse to function as a nurse practitioner and to practice within the Colorado Nursing Act. The design of the nurse practitioner programme was drawn from nursing concepts and goals. Ford (1979:517) describes the design components as "care that is person and family centred; clinically directed practice and study; collaboration and team care; collegial relationships, especially with physicians and an orientation towards health and self-care". The programme shifted the focus of practice from the care of medical illness to the family-oriented health promotive approach. According to Hamric et al (1996:18) "family dynamics, growth and development of the child and community cultural values were strongly emphasised". The programme was a 24-month post-baccalaureate programme. The first four months consisted of

an intensive didactic period in which advanced paediatric concepts were taught along with physical assessment skills. The emphasis was, as already mentioned, on the well child. Nurses were specifically prepared to do the following:

> Care for the well child; follow its growth and development and deal with nutrition and immunisation, and be able to detect any patterns, which would appear to be abnormal. The problem oriented health record was introduced as well as the manipulation of selected diagnostic instruments. This type of training for the nurse left the doctor free to use his/her skills more effectively for those conditions and problems that required medical expertise (McDowell 1984:177).

Both nursing and medical faculty taught the content. The second part of the programme was 20 months of clinical practice in a community-based facility. Clinical preceptorship was performed by physicians. The American Nurses Association (1976:3) identified the scope of practice for nurse practitioners in ambulatory settings in 1976 as follows:

> ... assess the physical and psychosocial status of clients by means of interview, health history, physical examination and diagnostic tests. The nurse practitioner interprets the data, develops and implements therapeutic plans, and follows through on the continuum of care of the client. The practitioner implements these plans through independent action, appropriate referrals, health counselling and collaboration with other health care providers.

Although the initial goal in the first nurse practitioner project was to prepare nurses for paediatric care, that changed in order to accommodate the societal demands for accessible, cost-effective health care. A study evaluating the project indicated that paediatric nurse practitioners were highly competent in assessing and managing 75% of well and ill children in community health stations, and 33% of children in private paediatric clinics (Ford & Silver 1967:44). Many other programmes evolved to train nurse practitioners in other speciality areas: adult nurse practitioner, FNP, paediatric nurse practitioner, gerontological nurse practitioner, community health nurse practitioner, obstetric and gynaecology nurse practitioner and others. "All the early programmes were within CE departments, and graduates did not receive academic credit", reports Romaine-Davis (1997:59). Since the mid-1970s, however, nurse practitioner education and practice have become more sophisticated, and education has moved into academic settings and

academic credits are awarded. In nurse practitioner education today FNPs are described as:

> Generalists who offer comprehensive and continuous care to clients across the health continuum and throughout the client's life span, they diagnose and manage human responses to actual and potential health problems in collaboration with the client and other health care providers (Council of Ontario Universities Programme in Nursing 1998:1).

Emphasis in these programmes, most of which are now at master's level, is placed on holistic care, health promotion and disease prevention. According to Romaine-Davis (1997:59), most FNP programmes are at least three semesters long and may require two years to complete. The programme of study is designed in such a way that all nurse practitioner students take core courses in theoretical foundations for nursing, and in health systems and models, pathophysiology, pharmacology and research utilisation.

Some major changes have occurred in the curricula of FNP programmes since the early programmes of the 1960s and 1970s. These changes are mainly in the amount of time devoted to teaching specific content or in the degree of emphasis on courses like physical assessment, health assessment and interviewing that are now part of the basic nursing education programmes and therefore require less attention than before. In addition, in some programmes students are evaluated for prior learning on admission, so that if they have already learnt these skills they can be taught higher-level skills.

Other changes concern faculty who teach the FNP programmes. In early programmes medical doctors used to teach FNPs. This has changed and FNP faculty now teach almost all content. Medical doctors are invited as guest lecturers for specific topics. According to Geolot (1987:134) almost all nurse practitioner programmes have faculty who are maintaining their clinical skills while performing academic roles.

The majority of programmes in the US now offer a master's degree rather than a certificate or bachelor's degree and the orientation of the curriculum has changed from treatment of disease to health promotion. The scope of practice of FNPs is greater than that of other nurse

practitioners in other speciality areas, and the demand for services is also higher because of their ability to care for all family members. In the United States of America, FNPs are required to show evidence of CE as a requirement for re-certification every five years to ensure the safety of patients who come under their care. As a group, FNPs are committed to quality of care and the health of their patients (Romaine-Davis 1997:64).

3.7 FNP programme in Swaziland

3.7.1 Background

The FNP programme in Swaziland is about 20 years old. The initial impetus for the development of the role was a shortage of medical doctors who could provide primary health services, especially in under-served, rural areas. In addition, FNPs would act as preceptors for student nurses. Educational programmes to prepare FNPs began in 1979 at the SIHS as a result of a collaborative effort between the government of Swaziland and the United States Agency for International Development (USAID).

In 1978, the government of Swaziland and USAID signed an agreement designed to "institutionalise the training and strengthen the planning and administrative capability of the MOH&SW" (Yergen 1984:2). The goals of the project, according to Yergen, were to:

1. Extend health care delivery services throughout the country from the urban centres to the remote villages and homesteads of the rural population.
2. Shift the major emphasis of health delivery from illness to health care, preventive medicine and public health services.

An educational institution was therefore to be established to prepare and upgrade nursing personnel and other paramedicals. In addition, administrative and logistical systems would be developed to support the health service delivery system, which is staffed mainly by nursing personnel.

The SIHS currently trains registered nurses, midwives, community health nurses and psychiatric nurses, and it offers a one-year nursing specialisation in family nurse practice.

3.7.2 Location of the FNP programme within the organisational structure of the health care system

The FNP programme is an integral part of the primary health care system in Swaziland. The rural clinics are the backbone of the primary health care system, which aims at providing integrated, comprehensive health care to the entire population at the community level. To provide PHC, nurses have expanded their role, taking on an array of functions, some of which had not been considered part of the nursing domain. As health practitioners, however, nurses have long been assessing and evaluating their clients' health status by listening, questioning and using limited physical assessment techniques.

The FNP has emerged as an effective extended role. This concept was developed mainly in ambulatory care settings for adults and children. In Swaziland the FNP may function in many clinical settings, such as clinics, health centres, rural areas, private practice, health departments, occupational health centres, public units, schools or hospital wards and outpatient departments. The role of the FNP involves health promotion, health maintenance, health assessment, illness prevention and treatment of minor acute and chronic illnesses (SIHS 1987:16). In addition, the nurse practitioners' role includes the co-ordination of health care services to ensure a comprehensive, continuous approach in the delivery of these services. Emphasis is on preventive and promotive care. Fowkes and Hunn (1973:3) have described the FNP role as including:

> ... identifying the health status of an individual or family, screening for problems that need to be referred to a physician or other resource, managing acute or episodic illness, managing stable chronic illness, teaching clients health maintenance, utilising community resources in meeting client needs, counselling and co-ordinating all phases of the client's health care.

In Swaziland the FNP's responsibilities include health screening and assessment including history taking, performing physical examinations, ordering and interpreting laboratory studies,

regulating and prescribing medications and diet, performing health maintenance activities, counselling and teaching clients, and providing an array of preventive, promotive, rehabilitative and curative health services to individuals, families and communities in a variety of settings (Jensen, 1984:8). The FNP functions independently, interdependently and dependently in relation to the medical doctor. She or he maintains communication with all members of the health care team and integrates appropriate resources to provide comprehensive care (SIHS 1987:17).

Family nurse practitioners attached to the rural clinics in Swaziland are leaders of health care teams that comprise a FNP, a registered nurse and midwife, a nursing assistant, a health assistant, one or two orderlies and a variable number of rural health motivators. The FNP works in collaboration with clients and physicians and follows established protocols. If a problem is identified that may require the expertise of a physician, the FNP consults with and/or refers the patient to the physician.

The ability of FNPs to diagnose and treat clients has boosted the provision of PHC and client compliance. While FNPs can provide total care in a variety of settings, the significant thing is that they are considered nurses and not doctors. Health teaching, health promotion and disease prevention are the mainstay of such a role (McDowell 1984:177).

3.7.3 Nature and purpose of programme

The goal of the programme is to prepare graduates who will be able to assist the people of Swaziland to improve their health status and lead productive lives. In addition the programme will enable FNPs to help the government of Swaziland attain its stated goal of providing essential health services to the entire population. Special emphasis is placed on the health of mothers, children, isolated rural families and people who live in peri-urban settlements, since these are the most vulnerable segments of society. The FNP programme was developed in response to a need for nurses who could work effectively in rural health clinics in the absence of physicians. It prepares FNPs to deliver PHC services to clients of varying ages in a variety of settings. The

emphasis is on health promotion, health maintenance and prevention of disabling conditions through early diagnosis and intervention. In addition, the programme is intended to prepare nurses to function in leadership roles in health planning, administration and human resource development. This was to ensure that these nurses would function as independently as possible, "diagnosing and treating up to 80% of cases normally seen by medical doctors and appropriately referring the rest to the nearest health centre or hospital" (SHIS 1994:2).

3.7.4 Rationale for curriculum

The MOH&SW in Swaziland committed itself to the WHO goal of health for all by the year 2000, and identified PHC as the strategy for achieving this goal. Maglacas (1991:1) points out that the success of PHC depends on reorienting the education of all categories of health personnel to ensure that they understand the significance and intrinsic values of PHC and are prepared to support it. In Swaziland, nurses have long been the principal providers of essential health services to large numbers of the population in all settings. Nurses in Swaziland form the largest proportion of health care workers. Because of the shortage of doctors, nurses were often required to make independent medical decisions when they staffed the wards, health centres and clinics. Thus it was the nurses, the most numerous and skilled cadre of health workers, that were chosen as the most appropriate to operationalise government policy in relation to PHC.

The MOH&SW recognises the need to provide education in diagnosis and treatment for nurses employed as FNPs, in order to enhance their skills in providing comprehensive health care and utilising the referral system as necessary. The significance government attaches to this activity is demonstrated by the fact that the education of the FNP has become a priority.

The education of FNPs requires the transmission of a body of knowledge confined to the medical profession, but for this purpose adapted to the science and art of nursing. This body of knowledge determines the scope, safety and comprehensiveness of FNP practice. It represents a compatible integration of medical skills with nursing care to offer the client more meaningful and

comprehensive care from the nurse in the absence of doctors. All aspects of the programme are geared to health promotion, disease prevention, treatment, cure, care and rehabilitation to assist the client in attaining, maintaining and regaining optimum health.

Multidisciplinary input to the course is necessary to produce a well-rounded professional. However, the strength of any profession lies in the influence and control of its members, hence the nursing faculty, in collaboration with other nurses, should decide on the content of the curriculum, clinical experience, scope of practice on completion of the course and certification. Recommendations from other members of the health team, including doctors, are taken into consideration to ensure a full and sensitive awareness of Swaziland's needs. Involving doctors in the education of FNPs allows doctors to become acquainted with their capabilities. This fosters the development of interdependent roles. It is expected that FNPs will make a significant contribution to the health of the population of Swaziland.

3.7.5 Philosophy of the FNP programme

The philosophy of the FNP programme is congruent with that of the SIHS as a whole. It therefore embraces the belief that the client exists as an integrated part of the universe and is more than the sum total of parts; that humans exhibit spiritual, cultural, social, psychological and physical needs; and that any approach to dealing with clients in the area of health must comprise these spheres in order to be effective. The education of FNPs recognises human beings as physical, social, cultural and psychological beings, and it takes a holistic approach to health care to serve and encompass their multidimensional needs (SIHS 1987:2). Holism is basically a theory that describes wholes that are more than the mere sum of elementary particles; it depicts the parts of a person as dependent on each other and co-ordinated in a systematic fashion.

The FNP approach to practice is therefore holistic in that the emphasis is on the interrelatedness of parts and wholes. The client is not treated as a disease entity but is ministered to as part of the family and community. The FNP role utilises the holistic approach in order to

make a positive impact on health care by making services available to those who need them most, the urban and rural poor. In particular FNPs, who maintain clinics and health centres and are equipped with theoretical and practical skills in PHC, are concerned with the provision of total health care to individuals, families, special groups and communities.

The FNP works in partnership with individual families and communities, encouraging their active participation in the development, implementation and evaluation of comprehensive health services and programmes. He or she promotes self-reliance and community development, demonstrating respect for the traditional values and structures of the community.

Family nurse practitioners recognise the family as a basic unit of service in the community and respect its right to make decisions regarding health once it has been given enough information to make an informed decision. The contribution consumers can make to the process of providing health care should be constantly realised, encouraged, respected and evaluated.

Nursing education at any level should serve as a foundation for further studies. The preparation for positions of responsibility should take place in institutions of higher learning and should be based on nursing, behavioural, physiological, natural sciences and liberal arts. Concomitant with the acquisition of advanced professional knowledge and skills, the education of nurses should contribute to developing self-directed individuals capable of adapting to change, assuming responsibility for self-development and keeping abreast with trends in nursing within the PHC system (Faculty of Health Sciences 1997:2).

A core principle of the nursing practitioner programmes is that it is critical for the nurse in PHC to address the issues of both illness and wellness. Family nurse practitioners should thus be educated to provide basic restorative health measures in collaboration with other health workers, as well as promotive and preventive care. A further principle is that health service must be made not only available but also accessible (financially, culturally and physically) to clients (Faculty of Health Sciences 1997:4).

3.7.6 Programme objectives

After completion of the FNP programme the student will be able to:

1. Improve the quality and effectiveness of the health care delivery system, in pursuit of the goal of health for all.
2. Provide PHC service to clients with a variety of health problems throughout the lifespan.
3. Use a systematic approach in nursing and community diagnosis.
4. Assess the health status of individuals and families by taking health histories and performing physical examinations.
5. Request laboratory, X-ray, developmental and other types of tests to ascertain patients' health problems and strengths.
6. Manage and evaluate acute and chronic health problems, in collaboration with physicians and other members of the health team.
7. Provide health education and counselling for individuals, families and communities in relation to self-care.
8. Identify the socio-cultural, economic, political and environmental factors affecting the availability and delivery of health services to individuals, families and communities.
9. Use research findings to improve nursing practice in PHC.
10. Use management skills in supervision, planning, organisation and evaluation of health centres and clinics.
11. Assume a leadership role in the health team in the areas of prevention and health promotion.
12. Use selected models to evaluate the quality of nursing care, in relation to professional and legal standards of practice.

3.7.7 Curriculum

Curriculum design and development are dynamic processes, and they need to be reviewed and refined constantly to ensure that community needs are being met and that sound principles of education are being followed. The Faculty of Health Sciences at the University of Swaziland recognises the need to tailor the programme to the needs of Swaziland and to present material and learning experiences within the cultural, social and economic contexts of the country. It also realises that the programme should continue to meet the needs of the country. It therefore advocates that closer ties with nursing service and staff of the larger systems of health planning and human resource development should be established so that they are involved in programme design.

The curriculum is based entirely on the job description for clinic nurses and on the registration requirements of the National Examination Board of Botswana, Lesotho and Swaziland (NEBBLS). In addition, Swaziland's Second National Development Plan (1973/1977:195-208) provides guidance for the curriculum design plan by highlighting some of Swaziland's health problems, particularly waterborne diseases and diseases of insanitation, which mostly affect the 85% of Swaziland's population who live in rural areas. The age and spatial distribution of the population, as well as its rapid rate of growth, also clearly indicate that improvements in health services should be concentrated on children and in the rural areas. This, too, influenced the development of the curriculum. Yet another influence was that government saw an urgent necessity to re-orientate priorities for development in the health field. There was a shift away from conventional institutional facilities centred on urban areas towards different kinds of programmes, which would be cheaper and more closely geared to the preventive aspects of health, and would therefore achieve a wider impact on the health problems of the rural population at large. Specific objectives of policy set out in the Second National Development Plan (1977:196) that would have to be taken into consideration were:

(i) To maintain present levels of curative services, improving their standards and distribution where possible;
(ii) To create a situation within which a substantial moderation in the rate of population growth can be achieved within a reasonable period.

The MOH&SW acknowledged that a change of emphasis was necessary, especially in pre-service education. It is therefore government's intention to examine possible ways of giving greater emphasis to public health elements in pre-service education and to provide more post-basic training for nurses locally, in the form of public health nursing and family nurse practice education (Second National Development Plan 1977:208).

The curriculum is competency-based and problem-oriented, including only the information essential to training the FNP to do the job. This conforms with the position of Staab, Grannenman and Page-Reahr (1996:139), who maintain that competency-based education is primarily concerned with ensuring that learners can perform the activities required in their daily role.

The primary focus is on the development of skills through active learning methods such as demonstrations and practical fieldwork. However, FNPs as adult learners are encouraged to draw upon their own collective experience in planning strategies for resolving the problems they encounter in delivering PHC services. Family nurse practitioners also need to be creative in identifying and using available resources to solve problems as they emerge.

Students are taught to manage health problems within the parameters of the country's system of medical supervision and referrals, taking into account the resources available in the health facilities and in the transportation and communication system.

3.7.8 Programme structure

This post-basic diploma programme takes one academic year of 48 weeks' duration to complete. The FNP programme is divided into trimesters of 16 weeks each. It builds on competencies acquired in the basic nursing programme and the midwifery programme. To meet the objectives of the programme, activities are designed to facilitate co-ordination between the

classroom and the clinical areas, thus there is integration between theory and practice. Students practice their skills in the demonstration laboratory, in outpatients' departments, clinics, schools and health centres.

The nurse lecturers, medical doctors, and other nurse supervisors do supervision of students in the clinical area. Objectives of the programme are rooted in health promotion and illness prevention. Family nurse practitioners develop their assessment and diagnostic skills to enable them to successfully manage both emergency and non-emergency conditions involving all age groups and all types of clients (adults, children, pregnant women and so on).

3.7.9 Course outline

The FNP programme is divided into three 16-week trimesters. Each term, students are in either the classroom or the clinical practice for a full day during the week. The programme consists of at least 700 hours of theory. Clinical practice begins from the first week of class and increases until the third semester, when students study full-time. This component extends over 1215 hours, and includes 170 hours of skills' training at the college and 1040 hours' structured, supervised learning in the clinical area. Structured accompaniment of the student is done either by the lecturer concerned or by competent clinical preceptors in the clinical setting.

Trimester I

Course	Theory (hours)	Practice (hours)
Family Nurse Practice 1	90	60
Community Health Nursing	90	60
Pathophysiology	48	integrated
Health Education	48	integrated
Clinical Pharmacology	48	integrated
Clinical Microbiology	48	20
Study hours	48	0
Total	420	140

Trimester II

Course	Theory (hours)	Practice (hours)
Family Nurse Practice II	90	120
Community Mental Health	32	30
Leadership and Management	48	40
Nursing Research	48	Project
Environmental Health	16	25
Study hours	46	0
Total	280	215

Trimester III

Course	Theory (hours)	Practice (hours)
Clinical Nurse Practice III	-	664
Total	700	1015

(SIHS Bulletin 1994.)

3.7.10 Description of core courses

The following is a description of the courses taught in this programme at the SIHS.

3.7.10.1 Family Nurse Practice I

This course is in two parts, in the first trimester and second semesters. The first trimester course focuses on the development of skills in health assessment and diagnosis. The purpose is to help students conduct a full range of health assessments towards the goal of providing comprehensive, holistic health care. The FNP student elicits a health history from clients of all ages and from families. She or he performs the appropriate physical examination of normal and abnormal conditions, reporting the findings in a systematic, concise verbal and written form. Application of theory is accomplished in both actual and simulated client encounters. Communication concepts are integrated in all aspects of this course, for instance obtaining information necessary to evaluate the patient's condition and to intervene appropriately. The FNP student therefore has to establish good rapport in order to conduct a successful interview. FNP students use the full scope of nursing practice, further advancing clinical decision-making and diagnostic reasoning skills

3.7.10.2 Community Health Nursing

This course discusses the health situation in Swaziland and describes health policies and PHC. The family, as a unit of service, is described within a theoretical framework, and in the context of the community. Emphasis is placed on professionalism and ethical issues in community health nursing. Maternal and child health and family planning are given special emphasis because of the impact family health has on national development, and because mothers and children are the most numerous as well as the most vulnerable members of Swaziland's population. This content is presented in accordance with government policy, which has placed it amongst its priorities. Because nurses coming to this course are qualified midwives, they bring with them a wealth of information in this area.

Building upon their knowledge base, this course introduces a systematic approach to common PHC problems in Swaziland, while demonstrating the integrative nature of health and patient education, nutrition, community health and social science. Organisation of the family and its effect on health, disease and the development of its members is also emphasised, together with important customs and habits and their relation to health. Major social changes like immigration, education, occupation, urbanisation and the effect these have on the health of the family are dealt with. Public health statistics are used to illustrate the impact of community and family health on development. Students learn to interpret statistical information to understand epidemiological care so that they can design relevant interventions. They are also taught how to recognise specific diseases, how to prevent them from occurring and how to control their spread using appropriate client management. Students also learn how to collaborate and co-ordinate with other members of the health team, including physicians, administrators, health inspectors, teachers, agriculturists, nutritionists, community leaders and auxiliaries. Client follow-up through home visits and intervention within the home setting also form part of this course.

3.7.10.3 Community Health Practica

The purpose of community health nursing practica is to build a close, appropriate connection between theory and practice. They are therefore designed to provide structured learning experiences and active participation in the community health process, to enable the student to utilise and put into practice the concepts and principles of community health nursing. The practica include supervised clinical and community practice, independent student projects and formal seminars.

3.7.10.4 Pathophysiology

A systems approach is used to examine concepts in pathophysiology as a basis for understanding the disease process. Case studies provide a comprehensive overview of the causes, pathogenesis, and clinical manifestations of disease in adults and children. Building on knowledge

of normal anatomy and physiology across the lifespan, students learn to demonstrate an understanding of pathophysiological principles such as clinical manifestations, alterations in physiological function in organ systems and the impact of stress on age-related, acute, episodic and chronic conditions found in PHC practice. The concepts of pathophysiology provide the basis for the management of clients with minor ailments.

3.7.10.5 Health Education

This course emphasises the significance of health education in influencing the knowledge, attitudes and practices of individuals, groups and communities with a view to promoting health. It highlights, as well, the significance of health education in primary, secondary and tertiary disease prevention. The course also covers all of the following: principles, methods and practices of health education; importance of individual, family and community participation and co-operation in health programmes; and social, cultural, psychological and economic factors affecting health education programmes.

The course further includes principles and procedures in community organisation; diagnosis of the community; definitions and personality of the community; individual roles, mass approach; working with the community and formation of health committees; working with established organisations such as schools; health education prevention and control of diseases; the role of each team member; evaluation and operational research.

3.7.10.6 Pharmacology

This course builds upon previously acquired knowledge and skills. A majority of the FNP students have already been prescribing and dispensing medications in their employment setting. In fact, the prescribing of drugs has historically been accepted as a nursing function in Swaziland. The pharmacology course focuses on the safe administration of drugs, prescribing being perceived as a medical function. Students are expected to apply knowledge of pharmacology in the curative, palliative and supportive treatment of common primary health conditions.

Students are taught how to select and prescribe the drug of choice for a particular client condition, taking into account the essential drug list for Swaziland, the availability of the drugs and the therapeutic protocols developed by the National Standing Committee on Drugs. Students are also taught how to monitor adherence to pharmaceutical therapy for the purpose of compliance counselling.

3.7.10.7 Family Nurse Practice II

This course focuses on the identification of common health problems based on the history and physical assessment, and signs and symptoms of common disease conditions in Swaziland. It is designed to develop the knowledge, skills and competencies required of the FNP in managing common health problems and injuries through a variety of clinical therapeutic strategies, within established protocols.

The course is organised around the presentation of case studies on common health problems like tuberculosis, the diarrhoeas, diabetes, hypertension and other common conditions in Swaziland. Students are also taught how to counsel and educate clients in areas of health promotion and maintenance, and to involve them in planning their own health care. For instance, in clinical intervention for diabetes the client is educated on the medical regime, but also on diet and exercise as promotional interventions. The student is also taught how to collaborate with team members in utilising the referral process. Concepts of problem-based learning, self-directed study and critical thinking are an integral part of the course.

3.7.10.8 Community Mental Health

This course deals with the concepts of mental health, with emphasis on prevention and management of mental illness and mental health problems. Instruction regarding mental health interventions and counselling allows FNPs to work within the existing structure for the delivery of mental health services. Currently, practising nurses appear to under-estimate their potential to foster mental health and provide follow-up maintenance to those who have mental health

problems. This course also emphasises communication and interviewing skills, the ability to assess interpersonal and family relationships, and knowledge of therapeutic interventions so that FNP students can integrate mental health concepts in their own practice.

3.7.10.9 Leadership and Management

This course is designed to provide students with the knowledge, skills and judgement that are essential for planning, directing, and evaluating health and nursing care for individuals, groups, families and communities. Emphasis is placed on the utilisation of an inter-sectoral approach in managing PHC programmes for the solution of health problems. Students are encouraged to be involved in activities that will have a positive impact on their role in the PHC delivery system.

3.7.10.10 Nursing Research

This course prepares students to identify priority areas of action for family nurse practice research and to employ appropriate operational research methodologies. Students are taught how to collect and utilise basic health statistics at the operational level; to identify priority areas for research; and to carry out operational, health-related research. Students are required to complete a research project at the end of the course.

3.7.10.11 Environmental Health

Environmental health problems that can be controlled through primary prevention and interventions are covered by this course. Students participate in activities related to the identification of environmental health problems and the initiation of appropriate interventions. They collaborate with environmental health officers and other health workers to improve environmental health.

3.7.10.12 Microbiology

This is designed to assist students to explain host resistance to disease and the immune system, to differentiate among the methods for control of micro-organisms, and to perform and interpret laboratory procedures for diagnostic purposes. This clinical laboratory skills course

assists the FNP, who is usually out in the rural areas by herself, to quickly diagnose and treat certain health problems.

3.7.10.13 Clinical Practicum

This is a field practicum in which students practice their skills in the diagnosis and treatment of PHC problems under the supervision of the physician, the FNP tutor and, where possible, an experienced FNP. There are two seven-week clinical rotations in PHC settings in which students are expected to complete a specified number of patient encounters within certain diagnostic categories. The students in the community and PHC settings encounter patients with communicable and non-communicable diseases such as tuberculosis, measles, gastro-enteritis, pneumonia, diabetes mellitus, and a range of parasitic infections.

Many of the conditions encountered by these students are caused by sub-standard living conditions, inadequate public health control measures and lack of knowledge of health practices. There is a great need for health promotion in these areas. The student nurse practitioner is therefore encouraged to ensure the health and wellness of her clients by assuming responsibility for providing direct and indirect care management and consultation. The goal is to achieve optimal wellness and illness management by frequent contact with the client, routine health screening and assessment, referrals, intense health education and follow-up. Collaboration with all disciplines is emphasised during this field practicum in order to provide a continuum of health care for the client.

Between rotations students attend a one-week seminar designed to help them integrate the concepts present in the didactic experience acquired during the field practicum. Emphasis is on issues related to role development and role change as well as on clinical problem solving. Opportunities are provided for self-evaluation and peer review. Case studies are also used in the seminars to complement the learning occurring in the concurrent clinical practicum. Case discussions focus on preventive PHC, acute common health concerns and chronic conditions

requiring holistic therapeutic interventions. The enrichment of these seminars reflects the diverse PHC needs of different population groups.

3.8 Conclusion

In Swaziland and elsewhere there has been much discussion about expanding the role of the nurse. In Swaziland the FNP programme was developed to support nurses in their role as PHC practitioners. The Government of Swaziland was well aware of the need to improve the health status of the general population in Swaziland, and committed itself to achieving this goal. This could be accomplished through establishing an effective national health care delivery system. The shortage of doctors contributed towards nurses becoming more and more responsible for providing expert care in rural areas, no matter how deprived.

Government, particularly the MOH&SW, recognised the need for this category of health worker if it was to meet the goal of health for all by the year 2000. The MOH&SW further recognises the need to provide education for nurses employed as FNPs, in order to enhance their skills in providing comprehensive health care and utilising the referral system as necessary. The significance the Ministry attaches to this activity is demonstrated by the fact that the education of FNPs is now a priority.

Family nurse practitioners have acquired the knowledge and skills to identify the problems of the individual, the family and the community; the insight and flexibility necessary to consider alternatives in planning care by acting as primary care givers or by co-ordinating care; and the ability to participate with the interdisciplinary team as a partner in the delivery of PHC. Their programme is designed to prepare them for competence in the following:

1. Assessing the health status of individuals and families through health and medical histories, interviews and physical examinations.
2. Developing and instituting a service plan collaboratively with clients or others to ensure

understanding of and compliance with interventions.

3. Utilising established protocols and recognising when to refer or discontinue service or follow-up if required.

(4) Using skills in health assessment and planning in the development and implementation of new approaches to service delivery for consumers in the community.

To date this programme has produced over 100 nurses who are employed in different health care settings. The FNP programme constitutes an integral part of the PHC system in Swaziland and is considered an important part of this system by senior officials in the MOH&SW.

In chapter 4, the current practice of FNPs is analysed. The chapter also describes and discusses a qualitative study using focus group interviews.

CHAPTER 4

ANALYSIS OF THE CURRENT PRACTICE OF FAMILY NURSE PRACTITIONERS IN SWAZILAND

4.1 Introduction

The purpose of this chapter is to provide information on the current practice issues of FNPs in Swaziland. A qualitative study utilising focus group interviews was conducted in order to

1. Analyse and define the role of FNPs.
2. Determine the current and future needs of FNPs in the delivery of PHC services in Swaziland.
3. Determine the strengths of the FNP in Swaziland.
4. Determine the barriers to practice of the FNP in Swaziland.
5. Identify the curriculum needed to successfully prepare FNPs to meet the ever-changing health care needs of the people of Swaziland.

The chapter also sets out the research design and methods used in conducting this study.

In the face of changing health care needs and demands, the roles of nurses and other health care workers are changing. As stated by Maglacas (1985:15), roles and functions change and evolve as health care needs change over time. Professional nurses have continually been called upon to adjust, extend or expand their roles in order to meet new health demands and needs.

In Swaziland, nurses have long been the main providers of essential health care to the majority of the Swazi people. The State Registered Nurses (SRNs), who are double-qualified as both Nurses and midwives, constitute an essential part of Swaziland's health care delivery system. They work at all levels of the health care system as hospital nurses, community health nurses, clinic nurses, occupational health nurses and private nurses providing PHC services. According to the Draft Swaziland National Health and Social Welfare Policy (1998:18) there were 1742

nurses employed in the public, missions and private sectors in 1996. Fifty percent (871) of nurses worked in the public sector, 29% in the private sector and 21% in missions. Since 1986 a significant increase in nurses has occurred, with the largest growth taking place in the private sector.

The need for FNPs in Swaziland came about because of the shortage of medical doctors in the rural and under-serviced areas, and the unmet demands of the ever-changing health care system and the health needs of the people of Swaziland.

4.2 Research design

4.2.1 Exploratory-descriptive design

In exploratory-descriptive design, according to Brink and Wood (1989:21,) little or no theory or prior research has usually addressed the variable under study. Alternatively, prior research on the variable may have been conducted, but the phenomena are either understudied or may need to be re-explored because of recent events. The current practice of FNPs in Swaziland has never been researched. The exploratory-descriptive design was therefore chosen because very little information could be found in the nursing literature about current FNP practice in developing countries, particularly Swaziland. According to Polit and Hungler (1993:435) descriptive research gives an accurate portrayal of the characteristics of individuals, situations or groups, and the frequency with which certain phenomena occur. It may lead to new ways of knowing, doing and thinking and it may move from just describing data to theory formulation. Descriptive research was conducted to achieve those goals and to arrive at a holistic understanding of patterns, characteristics and meanings (Woods & Catanzaro 1988:134) of family nurse practice.

4.2.2 Data gathering

Method

A hermeneutic phenomenological method of data collection by means of focus group interviewing was used. In this type of study, the researcher investigates the particular experiences of individuals in a given situation (Uys & Basson 1995:52). The inquiry focuses on lived experiences as described by those who have experienced them, in accordance with their perception and interpretation.According to Stanford (1987:94), phenomenological research usually occurs in a natural or field setting and utilises methods of data collection which yield complex and diversified explanations, primary participant observation, self report and interviewing. The investigator is considered the key instrument in both data collection and analysis. Brink and Wood (1989:162) and Polit and Hungler (1993:3) describe four steps involved in phenomenological inquiry and these are:

1. **Bracketing.** –This is a process of identifying and holding in abeyance any preconceived beliefs and opinions one might have about the phenomena under investigation. The researcher blocks out or puts aside all previous views about the phenomena in order not to bias or influence the interpretation. Donaldson (1987:89) describes the philosophical and methodological value of bracketing as reducing the effects of preconceptions, assumptions, and observer bias on the observation and perception of a specified phenomenon. In using the phenomenological method in this study, the researcher's perspective had to be bracketed. Prior to commencing the focus group process, the researcher attempted to bracket her own experiential knowledge in order to capture the "empirical reality" outside (Swanson-Kauffman & Schonwald, cited by Bousfield 1997:247).
2. **Intuiting.**– This occurs when the researcher remains open to the meanings attributed to the phenomenon by those who have experienced it.

3. **Analysing.** At this point the researcher compares and contrasts descriptions of the phenomenon under study. This allows for identification of recurring themes and interrelationships. In this step the researcher does the coding and categorising, and makes sense of the essential meanings of the phenomenon.

4. **Describing.**– This occurs when the researcher comes to understand and define the phenomena. The researcher communicates her or his findings.

The hermeneutic phenomenological method, says Omery (Chabeli 1995:16), is used to interpret the concealed meanings in the phenomena that are not immediately exposed to direct investigation The hermeneutic method has been described by Wilkie (1987:99) as "good science" for some nursing questions, to obtain information that may remain hidden to other methods of inquiry. She contends that studies that seek to describe and explain the meaning of human responses may appropriately use hermeneutics.

In addition to the above, the qualitative method seemed most suited to exploring the current practice issues of FNPs in Swaziland. The strength of qualitative research lies in its ability to allow understanding of process and meaning within a contextual framework, thus enabling particular contingent situations to be explained (Atkin and Lunt 1996:500).

4.2.2.1 Focus group technique

The focus group interview is a qualitative research method for obtaining primary data for a specific purpose. Zemke and Kramlinger (Kamfer 1989:7) describe a focus group as a facilitato-led group discussion on a specific topic with which all participants are familiar. The objective is to obtain responses from a group of people familiar with the topic or experience being discussed. Basch (1987:411) describes a focus group interview as a qualitative research technique used to obtain data about feelings and opinions of small groups of participants about a given problem, experience, service or other phenomenon. He specifies the number of participants in a focus group I as 4 to 12 participants. He argues that "groups this size allow everyone to participate while still

eliciting a range of responses." It is essential that each group is homogeneous, that is the members have as many characteristics in common as possible so that demographic and socio-economic variables do not bias the discussion.

Nyamathi and Schuler (1990:1282) describe the focus group as a method of gathering information which, when carried out in a permissive, non-threatening environment, allows the investigation of a multitude of perceptions about a defined area of interest.Similarly, Carey (1994:224) describes focus groups as something "where you want to get the thinking, the feeling and not just the behaviour".

Although focus groups have been used in market research for many years, often in an exploratory role, they have now gained recognition and attention in nursing and the health field. Nyamathi and Schuler (1990:1282), in their study of Black and Hispanic women, have described focus groups as a means of identifying needs, concerns, coping responses and levels of esteem and control. Other authors in the field of nursing (Brooks, Fletcher & Watilstedt 1998:27-31; Kingry, Tiedje & Friedman 1990:125; Torn & McNichol 1998:1202-11; VanCott, Lengacher, Heinemann, Mabe, Swymer & Bistritz (1997:83) have used focus group interviews to validate constructs prior to developing a more quantitative measure, and as a means of conducting CE needs assessments.

Focus group discussions afford an opportunity to learn directly from those concerned, and in their own words, what their opinions are about a certain topic. Byers and Wilcox (1991:65-66) Kingry, Tiedje and Friedman (1990:125) and Torn and McNichol (1998:1202), have listed several conditions for a successful focus group interview:

1. The aim and goal of the focus group should be clearly defined.
2. The recruitment procedure should meet the requirements of homogeneity and adequate numbers.
3. Focus groups should be held in a comfortable, non-threatening environment.

4. The discussion is generated around a specific topic. The discussion has a "loose" structure and is guided by a facilitator whose role is to develop the exploration of the topic in question.
5. The facilitator should prepare carefully structured and sequenced questions based on the purpose of the study.
6. Dialogue should be allowed to flow although the facilitator should retain control.
7. The group is usually audio-taped and may be transcribed.
8. Data analysis should be handled skilfully.

Lovemore and Van Schoor (1996:42) maintain that if the above conditions are adhered to, the focus group technique has several distinct advantages. Byers and Wilcox (1991:66), O'Connor (1994:74), and Stewart and Shamdasami (1990:15) also discuss a number of advantages of this technique. These advantages are:

1. Focus groups provide data from a group of people much more quickly and at less cost than would be the case if each individual were interviewed separately.
2. Participants can be assembled at much shorter notice than would be required for a more systematic, larger survey.
3. Focus groups allow the researcher to interact directly with respondents. Thismeans that the researcher can clarify responses, ask follow-up questions, and probe responses. Respondents can qualify responses or give contingent answers to questions. In addition, the researcher is able to observe non-verbal responses, which may carry information that supplements and on occasion contradicts the verbal responses.
4. Individual participants tend to be released from their inhibitions and are able to express their perceptions, experiences and attitudes freely.
5. The focus group provides a richer and more varied database than a questionnaire.

No research technique is without disadvantages. Sevier (1989:5) discusses and warns against the following limitations of focus groups:

1. One must resist the temptation to over-generalise information gained from a few focus groups and to apply that data to a much larger population. Because focus groups are small and not randomly selected, the data generated from these discussions cannot be used to quantify a problem or to make projections that would generalise the findings to other populations.
2. A second potential limitation is group dynamic bias. Although participants are co-operative and expressive, facilitators must be prepared to cope with those who are unusually verbose, passive or in competition for group leadership.
3. Recruiting participants who represent the population in which the researcher is most interested is usually more difficult and time-consuming than is immediately apparent.
4. Focus groups are inappropriate for sensitive and intimate topics.

4.3 Focus group methodology

The researcher chose the focus group method to gain an in-depth understanding of the current practice issues of FNPs in Swaziland. The focus group discussion method was therefore chosen because of the rich data that can be gathered by this means. A summary of the various tasks and activities involved is provided in the sections that follow.

4.3.1 Preparation

The participants were recruited because of their involvement with FNPs in the health care delivery system as nurse managers, nurse educators, MOH&SW nurse executives and practitioners. The purpose and objectives of the focus group were clearly explained to participants, and their willingness to participate was carefully ascertained before commencing with the discussion. A tape recorder with cassette in position was used, with their permission.

4.3.2 Population and sampling

Purposive or theoretical sampling was used to select the participants in this study. Brink and Wood (1989:149) describe purposive sampling as a design for small samples that are chosen through a deliberate process to represent the desired perspective. Polit and Hungler (1993:444), on the other hand, define purpose sampling as a type of non-probability sampling method in which the researcher selects subjects on the basis of personal judgement about which ones are the most representative or productive. The rationale for deciding on purposive sampling was that all the respondents recruited had the requisite knowledge about FNP. The researcher was interested in ideas from different groups of nurses like managers, educators and practitioners. The nurse managers, nurse educators, nurse practitioners and nurse executives from the MOH&SW, such as the chief nursing officer and deputy chief nursing officer, were all potential beneficiaries of the FNP programme. Some of these nurses were products of the FNP training and others were people who had worked closely with FNPs. They were chosen also because they had many common characteristics, so that interacting demographic and socio-economic variables would not bias the discussions. Nyamathi and Schuler (1990:1285) maintain that homogeneity of the group is important and that selection of participants who are similar in terms of occupation, social class and environmental characteristics will encourage a smooth communication pattern.

4.3.3 Procedure

The purpose of the focus group was communicated to participants before the start of the discussions. All discussions were audio-taped, and permission to audiotape was obtained from participants. They were assured that all tapes would be kept in confidence and that all the tapes would be destroyed once the research project had been completed. The rationale for using an audio-tape was the difficulty of manually recording everything during the discussions. Note-taking was also done to complement the audiotape and to ensure that there would be a full record of the discussions. According to Nyamathi and Schuler (1990:1285), written notes are an invaluable

supplement particularly as tape malfunction is not an uncommon occurrence. The researcher led the discussion while a lecturer assisted with note-taking. Both the researcher and the note taker observed intra-group interactions, paying particular attention to symbolic gestures reflecting consensus or disagreement.

4.3.4 Discussion guide

The discussion guide used the same framework as the questionnaire,in that it directed discussion to the role of the FNPs, their current scope of practice, barriers to practice, needs of FNPs, relationships with co-workers, successes of the FNPs and health needs of the clients, etc (see appendix A). The same guide was used for all groups. The focus group discussion differed from the questionnaire in how it elicited the information. While most items in the questionnaire pre-specified some possible responses to minimise the effects of the respondents' subjective interpretations, the focus group guide encouraged natural conversation about the themes to encourage spontaneous emergence of subjective meanings. When necessary, further prompting narrowed the discussion to specifics. The focus group discussions lasted on average 60 minutes. After each group discussion, participants were invited to tea and sandwiches as a way of thanking them for their time spent and their contributions. The researcher later transcribed the tapes.

4.3.5 Transcription of data

Tesch's guidelines (Chabeli 1995:19) were used, to some extent, in analysing and transcribing the data obtained from the focus group discussions.

1. Tesch's method stipulates that, immediately the interview is completed, the researcher should get a sense of the whole by listening to the tapes, transcribing, and reading through the transcriptions carefully, jotting down ideas as they come to mind. Accordingly, following each discussion the tape recording was transcribed verbatim by the researcher and the note-taker. Notes taken during the discussions were used to fill in the gaps in the transcripts. Each transcript was preceded by a description of the participants, the venue

and the proceedings. The researcher listened to the tapes repeatedly in order to get the full meaning of the content, and then transcribed the content verbatim. The researcher also read and re-read the notes and the transcription, and then identified themes that expressed the group's perception of the current practice issues and role of the FNP in Swaziland.

2. The next step, says Tesch (Chabeli 1995:19), is to "pick one interview tape and go through it, asking what it is about, thinking of the underlying meaning. Then write thoughts in the margin". The researcher listened to the tapes carefully several times, paying attention especially to participants' perception of the role and practice issues of the FNP. She focused particularly on the underlying meaning and kept a written record of the emerging thoughts.

3. Tesch (Chabeli 1995:19) recommends, next, that when the researcher "has completed the task for several interviews, she will make a list of all topics. Cluster together similar topics. Arrange these topics in columns under major topics, unique topics and left overs". The researcher identified similar feelings and perceptions from all four focus group discussions, and grouped them together. The transcribed data were grouped into themes, which were then quantified. Qualitative content analysis was then done and major themes and categories in the data were identified.

4. "Find the most descriptive wording for the topics and turn them into categories. Reduce the total list of categories by grouping together topics that relate to each other. Draw lines between the categories to show interrelationships" (Tesch cited by Chebali 1995:19). This step was completed according to the guideline.

5. Finally, the data belonging to each category was assembled in one place and preliminary analysis was carried out.

4.3.6 Trustworthiness

Data and investigator triangulation were used to ensure the credibility of the study. Denzin (Polit & Hungler 1993:254) suggests four modes or types of triangulation: **Data triangulation**– is the use of multiple data sources in a study, for example interviewing multiple key informants about the same topic.

- **Investigator triangulation** is the use of multiple individuals to collect, analyse and interpret a single set of data.
- **Theory triangulation** is the use of multiple perspectives to interpret a single set of data.
- **Method triangulation** is the use of multiple methods, such as observation, structured questionnaires and interviews, to address a research problem.

To ensure trustworthiness the researcher used the same schedule-ordering for all groups interviewed. In addition, as a nurse, the researcher was well versed in the skill of conducting a good interview. The audio-taped information was compared with the notes taken by the note-taker to ensure consistency, and this is referred to as investigator triangulation. According to Polit and Hungler (1993:254) the purpose of triangulation is to provide a basis for convergence on the truth by using multiple methods and perspectives so that true information can be distinguished from information with errors. This approach also helped counteract biases of the researcher that could have led to false conclusions. Multiple data triangulation was achieved from the different focus groups of nurses interviewed and by drawing on existing literature on the practice of FNPs.

To enhance the trustworthiness of the data the criteria of transferability and dependability have been met. Purposeful sampling which has been used aids transferability. When credibility is achieved it actually also demonstrates dependabililty (Lincoln and Guba 1985:301,305,316,317). This was accomplished by the overlaping methods (focus groups and questionnaires) which yielded the same findings. This also represent triangulation of data as discussed.

4.4 Results from focus group discussions

Four focus groups discussions were held with nurse managers, nurse educators, FNPs and MOH&SW nurse executives. These discussions were held at Mbabane Government Hospital, the Faculty of Health Sciences, the Public Health Unit and the MOH&SW Headquarters respectively. The size of the groups ranged from 4 to10 participants, whose ages ranged from 28 to53 years. All were females. Participants included nursing sisters, lecturers, FNPs in practice, matrons and PHC programme heads. Educationally they were state registered nurses and midwives with post-registration certificates and diplomas, some of whom had nursing degrees.

A sample of 30 nurses participated in the four focus groups. Their years of experience ranged from 5 to20 years. Of the 30 participants, 10 (33.3%) were in nursing education at the Faculty of Health Sciences; 8 (26.6%) were nurse managers at the Mbabane Government Hospital, another 8 (26.6%) were FNPs in clinical practice and 4 (13.3%) were senior matrons working in the MOH&SW, including the registrar of the Swaziland Nursing Council. Fifty-three percent (53%) of these nurses held nursing degrees, ranging from bachelors to doctorates. Twenty-six percent (26%) of the participants practised in rural areas and sixty percent (60%) practised in urban or peri-urban areas. The representation of 26% of participants seems an unfair representation however, because of distances between clinics in the rural areas it was difficult to assemble them for focus groups.

The results of focus groups are usually presented in the form of a long list of quotations and, according to Lovemore and Van Schoor (1996:44), readers are left to make their own interpretations. Bertrand, Brown and Ward (1992:206), on the other hand, state that direct quotations of participant responses add to the richness and authenticity of the data. Radel and Loubser (1988:219) caution against this practice because it can lead the reader to over-interpret the information.

Major current themes emerged from the content analysis. The themes or categories are

the expected role and function of FNPs, their strengths, needs, problems and future direction. These categories were not drawn up in advance but were developed as the information was analysed. Each category will be individually discussed and the data will be compared with themes from nurse practitioner literature.

4.5 Discussion guide for focus group interview

A discussion guide for focus group interviews was formulated and used to facilitate the focus group discussion. This guide is displayed as annexure A. These questions related to, among other things: the role, training, needs, barriers, achievements and relationships of the family nurse practitioner.

Table 4.1 Definition and roles of the FNP

Categories	Sub-categories
Definition	Mini doctor
	Expert nurse
	Semi-autonomous
Roles/Functions	
1. Primary care provider/clinical practitioner	Curative
	Preventive
	Promotive
	Collaborative
	Referral
	Home visiting
2. Educator	Health education
	Counselling
	In service education
3. Researcher	Conducts research
	Uses research findings
4. Leader and Manager	Role model
	Supervisor
	Team leader

4:6 Definition

In the focus groups discussions, it came out that there was some confusion about the role definition of the FNP.

4.6.1 Mini doctors

Some participants regard the FNP as a mini doctor, and some see this role as synonymous with that of a physician assistant or extender. It was, however, noteworthy that most of the participants felt that FNPs should be regarded as nurses and not mini doctors. As one participant put it, " they are functioning in an expanded and extended role, thus providing holistic care in which the caring role is combined with the diagnostic techniques once considered the sole domain of the medical doctor".

4.6.2 Expert nurse

The groups felt that FNPs do nursing and that this is their role. They regarded FNPs as expert nurses using expertise from both medical and nursing fields. They argued that the approach of the FNP is holistic, that is, it is concerned with the whole person - his or her physical, psychosocial and spiritual wellbeing. There was some concern, though, that in pursuing a holistic approach, the FNP should also deal with the psychosocial factors that have an impact on health. As one nurse educator put it:

> Even though they diagnose the problem and treat it, they should find out as nurses, because they are nurses first and foremost, what conditions in the person's surroundings and home environment bring about the illnesses that they are encountering, so that they don't only treat medically but they also deal with causative factors that may contribute to illness, because as nurses we should nurse the person physically, socially and in all the other means that we should.

Kaufman (1996:44) has also noted that definitions of the role of FNPs have proved problematic. A set of defining characteristics developed by Pickersgill (1995:26) suggest, she says, that a nurse practitioner is commonly thought to be an independent, autonomous, expert clinician educated at an advanced level.

4.6.3 Semi-autonomous

In terms of Pickersgill's (1995:26) defining characteristics, FNPs in Swaziland are not fully independent and autonomous because they use protocols and have limited prescription authority. The groups felt that FNPs in the outpatient department do a lot of triaging for the doctor and prescribe only when there is no doctor. Only those nurses who work in clinics where there is no doctor can be said to be semi-autonomous in terms of the authority and independence they have in assessing, diagnosing, managing and prescribing treatment for their clients and then referring what they cannot manage to the doctor or hospital. Although the FNP has been trained and has the knowledge to order certain drugs, she is prevented from doing so by policies and procedures. She may not sign sick leave forms for her clients (only doctors may do so) and this means patients

have to be referred to the doctor for a sick sheet because she or he is the only one who can grant a client that privilege.

Although the FNP is able to make the right decisions independently about her clients' care, the nurse in Swaziland is not considered autonomous as her role is not legislated as such. McMahon (Rolfe & Phillips 1997:119) defines a nurse practitioner as an independent practitioner with the professional autonomy to take her own clinical decisions, to plan her own therapeutic interventions, and to try out innovations in practice and to evaluate their effectiveness. This autonomy is not possible in Swaziland.

4.7 Roles and functions

4.7.1 Primary care provider/clinical practitioner

According to the focus group participants, the FNP is expected to be the primary care provider in areas of curative, preventive, promotive and rehabilitative services for individuals, families and communities. The FNPs in Swaziland, it came out, were primarily trained as multi-purpose clinic nurses serving in rural and under serviced areas.

4.7.1.1 Curative role

It was stated that FNPs are expected to do assessment, diagnosis of minor and major ailments, order laboratory investigations, and prescribe and manage minor ailments that they encounter in the environments in which they work. In addition, they provide health education and counselling and refer those they cannot manage to other professionals, usually using standardised treatment guides or protocols.

The protocols in Swaziland have been developed to provide the nurse in the clinic (usually an FNP) with a method for making accurate diagnoses and instituting appropriate treatment, prevention of disease and promotion of health when dealing with people with symptoms and signs of diseases and during home visits.Training and experience in clinical work are essential before the protocols can be used. They are of no use without adequate knowledge and skills in history

taking and physical examination techniques. FNPs give more personal care during their consultation with their clients.

4.7.1.2 Preventive and promotive role

The groups expected that FNPs would apply concepts of health maintenance and promotion to the care of their clients in a variety of health settings. They were perceived as spending a lot of time counselling and teaching their clients about health promotion and disease prevention. In addition to the services provided by other health care workers, FNPs provide disease prevention and health promotion services. Areas they are most concerned with are:

- Providing preventive and promotive health services to vulnerable groups, for example women, children, poor, chronologically ill, youth and rural populations.
- Prevention, management and surveillance of poor nutrition, through the use of growth charts.
- Prevention and management of diarrhoeal diseases by teaching mothers and other care givers about the disease process, promotion of breast feeding, advocating safe water supply, basic sanitary facilities, environmental sanitation, promoting and teaching about the oral dehydration solutions that can be prepared at home for use in diarrhoeal diseases.
- Prevention of immunisable diseases through immunisation. These diseases are tuberculosis, tetanus, measles, whooping cough, diphtheria, polio and hepatitis
- Prevention and control of malaria.
- Prevention and control of HIV/AIDS through teaching clients about HIV/AIDS.
- Advocating safe sex practices, such as the use of condoms, urging abstinence, discouraging multiple partners, and treating sexually transmitted infections.
- Counselling for testing, proper nutrition and prevention of further infections.

Health promotion and education

Family nurse practitioners are also involved in health promotion and education. They encourage adequate child spacing (and provide family planning and counselling services); physical activity and fitness; sound nutrition; stress reduction and management; breast feeding and safe weaning practices; safe sex habits; and occupational health and safety. They teach clients about high-risk habits like smoking, drug abuse, drinking and improper eating habits; and they provide counselling on violent and abusive behaviour, accidents and injury and environmental health.

4.7.1.3 Collaborative role

Group members stated that FNPs work in collaboration with other team members - doctors, nurses, health inspectors, dentists, dental hygienists and nutritionists - and with other sectors like education and agriculture. Members emphasised the need to ensure that FNPs possess the skills of advanced nursing practice.

These findings on what is expected of FNPs are similar to those of Kaufman (1996:44), who describes the role of the nurse practitioner as diagnosing major and minor health problems, prescribing treatment and referring patients to other professionals and agencies when necessary, usually within set protocols. Hawkins and Thibodeau (1983:20) identified the functions of FNPs as taking a health history, performing a physical examination, patient care management, surveillance of well persons and illness care. Maglacas (1991:2) sees the role of the FNP as carrying out a wide range of PHC services including nursing, medical care and management, preventive care and health promotion. On the other hand, Ford and Walsh (1994:156) state that:

> The exact functions vary from state to state but typically include thorough assessment, including a complete physical examination using techniques which used to be thought of as purely medical such as chest auscultation; ordering laboratory tests and X-rays; performing minor surgery, including local anaesthetic infiltration; prescribing and dispensing medications from stock and independently assessing and managing caseloads. The nurse can act on her or his own judgement, only referring to a doctor when necessary.

4.7.1.4 Home visiting

In this role, the groups felt the FNP is also expected to act as a bridge between the client and the health care system to ensure that clients' needs are met. This is also true when the FNP is called upon to provide direct care for those who are chronically ill at home, to supervise and teach them how to take care of themselves. Rolfe and Fulbrook (1998:112) affirm that "the nurse practitioner is a self-directed practitioner who directs, provides and evaluates inpatients, outpatients and community based patients founded on medical and nursing practice models. Her main function was to ensure continuity of care for the patient within her care in the face of a reduction in junior doctor cover and rotation of consultant coverage".

It also transpired that FNPs were taught to do home visiting for continuity of care of their clients. Although all FNPs have been taught and encouraged to do home visits, clinic nurses can do so only when there are two registered nurses in the clinic, freeing one of them to follow up the clients, or on days when relatively few patients have come to the clinic. In fact, according to a report by the Medical Service Corporation International (1991:36), nurses from only a few clinics conduct any home visits, while those who do conduct very few.

4.7.2 Educator

Another role that was identified by the groups is that of educator. It was stated that the FNP acts as an educator who teaches individuals, families, groups, communities, students and other health care professions. According to Rolfe and Fulbrook (1998:112) "the incumbent directs and develops innovative educational programmes (formal and informal) for health care professionals, patients, families and students". Focus group members saw the FNP as giving health education, counselling and in-service education in his or her role as educator.

4.7.2.1 Health education

The FNP is supposed to bring about meaningful social changes in the lives of the people with whom she works. In providing health education, she is a change agent in the eyes of both the

community and her employer. As one participant stressed: "She should teach community members to become their own change agents, capable of identifying problems of health care and disease prevention and of actively seeking solutions. People should be aware of the risks which are associated with certain lifestyles and activities such as smoking, drinking alcohol, unprotected sex, child abuse so as to make informed decisions about their lives".

In this respect, Lewis (1980:12) believes that unless patients are satisfied with their care, knowledgeable about their problems and its treatment and, most importantly, motivated, the desired outcomes of care may not be achieved. She relates the improved outcomes to the function of art of care, which may relate to the emphasis nurses place on psychosocial aspects of care, including patient education.

4.7.2.2 Counselling

FNPs were also said to provide counselling to their clients in the areas of health promotion and disease prevention. Teaching and counselling emphasise the caring role of the FNP. The groups felt that this was why it was important to emphasise interpersonal skills in the training of FNPs. In discussing this role, the groups felt that this aspect was not well emphasised in their preparation. Several studies have documented the importance of client counselling by the FNP (Jarvis & Gibson 1997:29; Hamric et al 1996:344).

4.7.2.3 In-service education

It was also stated that the FNP teaches individuals, families, groups, communities, students and other health professionals. "In fact this is why the role of the FNP as a preceptor is very important. The FNPs should be adequately prepared to supervise and teach in all these clinical practice areas." This statement came from one of the lecturers involved in the teaching and supervision of FNP students . The FNP teaches other health care workers in her area of work and is sometimes called upon to teach community health workers, it was stated.

4.7.3 Researcher

Focus group members also felt that FNPs should act as researchers.

4.7.3.1 Conducting research

FNPs are involved in doing community diagnosis and household surveys and these activities help them to develop programmes in response to their clients' needs. The groups felt that the FNP could also identify problems that might require investigation, and liase with relevant colleagues to investigate.

4.7.3.2 Uses research findings

It was pointed out that the FNP could, further, utilise research findings to provide more effective care to her clients. FNPs are expected to extrapolate research findings from a variety of sources to derive implications for advanced nursing practice specific to their clients, especially women and children with minor health deviations. According to Rolfe and Fulbrook (1998:113) the FNP critically analyses current research, and models and facilitates the incorporation of appropriate research findings into practice. McGee (1996:292), on the other hand, links research with quality assurance, where the clinical expertise of the FNP allows for anticipation, identification and prioritisation of specific care issues, as evaluated in the quality assurance process. Thus, the FNP should therefore be able to utilise research-based skills to promote and develop the research aspect of her role.

4.7.4 Leader and manager

Other functions attributed to the FNP role were those of leader, co-ordinator and manager.

4.7.4.1 Supervisor

Most of the activities of the FNP place her in the role of a leader and manager especially, since most of FNPs work in isolated, remote areas in clinics and health centres. It is the FNP who keeps the clinic running smoothly, organises, and supervises other health care workers and liases

between the clinic and other facilities in the community.

4.7.4.2 Team leader

As a team leader the FNP should be able to build and motivate effective teams that will provide essential quality care in a cost-effective and acceptable manner. Participants in this study said that the FNP assumed leadership and management roles in assessing planning implementing and evaluating the health care services in collaboration with multi-disciplinary and multi-sectoral health teams. It was stated that FNPs, especially those in rural clinics, need to know how to plan, organise, direct, control and co-ordinate his or her resources.

As a team member, the FNP participates in decision-making processes in respect of her clients. Team members may include doctors, radiographers, environmental health officers, other nurses, pharmacists, nutritionists, oral health personnel, teachers, farmers and rural health motivators. The FNP, it was said, also collaborates with individuals, groups and families in helping them to identify and solve their problems. It was stressed that as a manager the FNP is accountable to clients, the staff, and the organisation for which she or he works. The nurse executives from the MOH&SW felt that the management and supervisory aspects of the FNPs' role present problems, because the clinic system is extensive and it is difficult to obtain supervision from other components of the health care system. The FNP would therefore have to rely on his or her own skills to manage a clinic, supervise other health workers, such as registered nurses, nursing assistants and other support staff, and also act as role model for these people.

Table 4.2 Present issues that impact on the practice of FNPs

Categories	Sub-categories
Strengths/Achievements	Effectiveness
	Acceptability and accessibility
	Autonomy
Needs	Formal continuing education
	Supervision
	Career Development/Rewards
	Training/Education
	Integration of theory and practice
Barriers	
1. Work-related	Lack of adequate equipment, supplies and drugs
	Shortage of human resources
	Referral and follow up
2. Legislation of scope of practice	
3. Relationship with colleagues and clients	
4. Expectations and role conflict	
Deployment	Clinic
	Health centre
	Hospital-OPD
	Shortage of FNPs

4.8 Strengths and Achievements

The Swaziland Nursing Council register shows that over 100 FNPs have been trained and are registered with the council.

4.8.1 Effectiveness

The groups felt that FNPs were very effective. The quality of their work was, they said, widely respected and most people seemed to be satisfied with their work. They felt however, that those who are very effective have support from their supervisors. They emphasised that FNPs combine the caring aspect, which is the core of nursing, and the acquired curing aspect from their training and this combination makes the approach a holistic one in that it uses both nursing and medical approaches. Other achievements cited were, of FNPs managing acute respiratory infections, reproductive health, expanded programmes of immunisation, Schools' HIV/AIDS Population Education (SHAPE) and skin disease programmes, where it was said these nurses were programme managers. In the clinics, FNPs provide leadership and supervision for the workers under them and take full responsibility for patients' care. Paralleling these assertions,

Salisbury and Tettersell and Stillwell et al (Hicks & Hennessy 1997:390) suggest that nurse practitioners provide both a function distinct from that of the doctor and extend the range of case choices for the patient.

4.8.2 Accessibility and acceptability

Another strength of FNPs that was mentioned in the focus group discussionswas their number and their provision of care around the clock. Another advantage was that clients and some doctors accept their skills. It was also pointed out that they provide quality care that is accessible to the majority of clients. Kaufman (1996:44), citing Bowling and Stillwell (1998), indicates that evidence from the work of FNPs in the United States of America suggests that they offer care that is safe, effective and acceptable to patients. A study on nurse practitioner roles in the United Kingdom supports this view and concludes that nurse practitioners provide safe and valued service to selected groups of patients, according to Kaufman.

4.8.3 Autonomy

Focus group members pointed out that FNPs also have the benefit of being experts in PHC. The combination of diagnostic, treatment and PHC skills provides FNPs with valuable tools for starting their own private clinics. In fact, FNP licensure is a requirement for approval to start a private clinic. The FNP eases the doctor's workload so that she or he can concentrate on more complicated cases. Participants said this is especially so in hospitals' outpatients departments. In addition, they asserted that OPD patients do not have to wait for a long time to see the doctor if they have minor ailments, because they can be treated by the FNP to their satisfaction

These statements are in line with what Atkin and Lunt (1996:501-502) report regarding the perceived benefits of FNPs for patients:

> The first concerned a range of services offered to the patient in a primary health care setting. Secondly, nurse practitioners emphasised their importance in meeting the practice targets and ensuring that the practice was responsive to local population needs. Thirdly nurse practitioners highlighted their interpersonal skills and ability to listen to the patient.

4.9 Needs

4.9.1 Formal Continuing Education

The groups pointed out that lack of continuing and in-service education for FNPs has resulted in the deterioration of their skills. The barriers to further education thwart the desire of to continue their learning by updating and upgrading their skills. The FNPs in the groups agreed that they do not have opportunities to update their knowledge and skills and solve the problems they encounter in their work settings.

All the groups maintained that there was a need for workshops, seminars and group meetings targeted at FNPs. They felt, too, that there is a need for structured in-service education programmes based on the needs of the FNPs and their clients. Although the nurse executives from the MOH&SW pointed out that the Ministry does provide in-service education for nurses, they acknowledged that this training is general, for all nurses, and is not based on a needs assessment for FNPs. The groups felt that workshops would also provide a forum for FNPs to network - to share information and discuss issues related to their practice. They felt FNPs need to keep abreast with what is happening, update their knowledge and skills, and keep up with ever-changing disease patterns, technology and treatment regimes.

4.9.2 Supervision

From the focus group discussions it was evident that FNPs who are deployed in clinics where there is no doctor experience problems with supervision or support from visiting doctors. Issues of both over referral and under-referral arise, so it was said, because of working in isolation without any visits from doctors. FNPs who are, perhaps, inexperienced tend to refer most of their cases; or they may fear that they are over-referring and may therefore fail to refer cases that should be referred. The nurse educator group indicated that clinical supervision was a problem because of diverse clinical rotation requirements and not enough lecturers to do clinical supervision. They felt that it was therefore left to the staff in the clinical areas in hospitals, health

centres, clinics and outpatients departments to carry out supervision of students. The group from the service area stated that staff in these areas are often too busy with patient care to provide adequate training and supervision. Further, they pointed out that these nurses receive no rewards or recognition for teaching, and some see the added responsibility as a burden. Their ability to teach effectively has also been questioned since they may not have been trained as nurse educators, the groups stated.

4.9.3 Career development

According to the groups, a competency-based career ladder does not exist. Adequate rewards in terms of higher-grade levels, or advanced educational placements are not available to FNPs. They believe FNPs are consequently frustrated and that without an adequate reward system it is difficult for them to maintain the enthusiasm and energy crucial to good job performance. None of the FNPs receive extra payments for their additional responsibilities and only a small number, according to the groups, have been promoted to positions as nursing sisters, clinic supervisors, matrons or programme manager posts. This was stated as one of the frustrations of non-recognition of the extra training the FNP received.

4.9.4 Training

All groups felt there the curricula used in training these nurses should be reviewed. The groups from clinical practice and the MOH&SW felt that they had been left out when the curricula were designed and thus their input, which is very valuable, is not reflected, and theory is not synchronised with the practicum. They felt that closer ties should be established with the nursing service, and the staff of the larger systems of health planning and human resource development must be encouraged to become involved in the programme. In addition, mechanisms need to be developed to ensure that the programme continues to meet the needs of the country.

Currently, the FNPs appear to under-estimate their potential to foster mental health and provide follow-up maintenance services to those who have mental health problems.

Communication skills, interviewing skills, the ability to assess interpersonal and family relationships and knowledge of therapeutic interventions are central to the nursing process and need to be identified and made part of the curriculum of the FNP. The inclusion of mental health concepts in the curriculum will enable students to integrate mental health concepts into their own practices. This opinion was expressed by the nurse educators,who felt FNPs meet many patients with mental problems in their work.

Most of the focus group members felt that the FNP course should be upgraded to degree level, and that some components should be added to the curriculum, or strengthened. Those that need strengthening, according to group members, are:

- research skills
- teaching skills
- counselling skills
- psycho-social aspects
- role orientation
- group dynamics and team building

It was recommended that emergency care and intensive care should be added to the course because of the need for nurses with such skills in the hospitals.

There were some in the groups, however, who felt that the training wasadequate, and that it just needed emphasis in the areas mentioned above. One participant expressed her concern about amplifying the programme as follows:

> It looks like the FNP is looked upon as a Jack of all trades. Their role is really a tall order, we are expecting a lot from them. Now she is a social worker, a driver, a radiographer, laboratory technician, etc - it is just too much. I feel what should happen is that they are thoroughly prepared to have competence in assessment, so that after they have assessed they know who to refer to. What should be put in place is refresher courses that address the changing needs of our clients and the FNP.

The groups felt that what should be taught to the FNPs should focus on their role. This, they said, should include health assessment, diagnosis and treatment, problem solving, preventive and promotive health, interpersonal skills, management of resources, leadership, counselling, teaching and research. The groups pointed out that although teaching and research skills were mentioned as part of the FNP role they seem not to be emphasised in their preparation. Leadership and management skills also seemed, in the opinion of some group members, to receive insufficient attention in the education of FNPs, although it was pointed out that the MOH&SW had now come up with a programme of CE for nurses in management and leadership.

The importance of carrying out a needs assessment to estimate and determine the future and present need for FNPs in the delivery of PHC was also emphasised. Groups felt that more FNPs needed to be deployed in the clinics, health centres and hospitals.

4.9.5 Integration of theory and practice

The groups identified a lack of correlation between theory and practice. They felt that to ensure an optimal learning experience for the student, it is essential that classroom and clinical objectives be the same. Objectives and learning experiences need to be developed simultaneously by the lecturers and service preceptors. This, they felt, could be arranged by scheduling fortnightly meetings between the service nurses and the nurse educators. At these meetings, the preceptor would have an opportunity to increase her knowledge of development of objectives, updating her skills and knowledge, selecting learning experiences and evaluating the performance of the students.The groups felt this would make the preceptor feel that she is more a part of the programme. Flowing from this, it was agreed that suitable candidates for preceptorship would have to be identified, and they should be given preparation and training in clinical instruction and updates on health assessment. The groups felt this could be done by the nurse educators, as they should be playing a role in the CE of nurses.

4.10 Barriers and problems

4.10.1 Work-related

4.10.1.1 Lack of adequate equipment, supplies and drugs

It was pointed out by all groups that FNPs do not have adequate equipment and supplies to carry on their practice. There is even a lack of basic equipment for screening the patients. This was especially so with FNPs employed by government.

4.10.1.2 Shortage of human resources

All groups were in harmony that there is a shortage of doctors, nurses and even FNPs, such that the nurse patient ratio is too high and FNPs find they have to rush through their work. This, they pointed out, makes it impossible for the FNP to assist in the supervision and teaching of student nurses and to provide quality of care.

4.10.1.3 Referral and follow-up

Clinical and health problems that the FNP cannot handle are referred to other relevant health care members. In such cases, the FNP writes a referral letter outlining the client's problems and any relevant assessment and interventions that she has done. The groups indicated that problems frequently arise whenFNPs refer a patient, in that they do not always get feedback from the hospital or health centre to which they have referred. Clients are sometimes lost in the system and there is no proper follow-up of the patient. According to McGuire, Gerber and Clemen-Stone (1996:218) organisations need to develop well-established referral systems to assist in the process of linking clients to community resources, and practitioners need to have an understanding of the basic principles and clinical and theoretical aspects of the referral process.

4.10.2 Legislation of scope of practice

The groups indicated that there is limited authority and autonomy. FNPs are still limited in their ability to expand their scope of practice in Swaziland. FNPs are often deployed in clinics or health centres where there is no doctor and they have to provide comprehensive preventive,

promotive, curative and rehabilitative health care to many clients. The emergence of the HIV/AIDS pandemic and other chronic diseases is overburdening the hospital care system with the result that the clinics are being flooded with these cases. All these changes have implications for the scope of practice and role of the FNP. The groups felt that these have to be reflected in appropriate legislation that allows a safe yet unrestricted scope of practice. The groups felt this should be communicated to medical practitioners, many of whom seem not to know what the scope of work of the FNP is. Focus group members believed legislation would allow the FNP to perform clinical activities traditionally done by medical doctors. According to Safriet (Hamric et al 1996:348), nurse practitioners have been limited by restrictions on their scope of practice, prescriptive authority and eligibility for reimbursement. The group stated that what was happening at that very moment was that prescriptions of most drugs fell outside the legal scope of practice of the FNP. This was equally true, they said, of other procedures like suturing, applications of plaster of Paris and some safe motherhood initiatives such as vacuum extraction.

The groups were, however, cautious about FNPs having to do all these procedures and responsibilities without legislation. They were concerned about the safety of both the FNPs and their patients and clients. They urged that legislation should be promulgated to allow FNPs do these procedures, so that they would be working within legal limits and were properly prepared and trained to do them.

4.10.3 Relationship with colleagues and clients

The groups felt that FNPs were accepted and respected by both colleagues and clients. The FNPs in the groups said they felt confident and were satisfied with their work and that they thought they were adequately prepared for this role. However, they felt strongly about the need for CE so that they could be kept up-to-date on developments in their field. Some groups felt that there were doctors who felt threatened by the FNP taking over part of what was traditionally the doctor's role, but as one respondent stated: "The truth of the matter is that the FNP provides a

different kind of care to that given by the doctor. We give holistic care."

The FNP group felt that this acceptance did not come without resentment from both colleagues and medical doctors in the beginning. "We used to be called all sorts of names - bush doctors, mini doctors, the American nurse - but after recognising our value, worth and knowledge we now see many clients who say they have been told by some of our colleagues to come to this clinic for certain conditions," said one member of the group. A second respondent said: "Another thing about this role is that it is not known. The nurses do not know about it, the doctors also do not know who FNPs are. Some of the doctors think we are physician assistants or we should be called physician assistants. I feel we should market ourselves that we are nurses, but I don't know how." There was a strong feeling among the FNP group that they need a forum or an association where they can talk about FNP issues.

The group of educators felt that doctors and FNPs should have meetings where they can present cases of interest in order to properly understand the relationships between the two disciplines and the role differentiation that is beginning to emerge. FNPs should be encouraged to share their knowledge and skills with other health workers, but as members of a health team, not as authorities in nursing or health.

4.10.4 Expectations and role conflict

The groups felt that there were conflicting expectations about the role of the FNP. Clients, medical doctors, other health care workers and FNPs all seemed to have different concepts of what the FNP should do. Some participants feared that, lacking a clear idea of expectations and adequate role models, support and supervision, the FNP could easily fall back into the "old ways" of doing things, and not use the skills and knowledge as effectively as he or she might.

4.11 Deployment

4.11.1 Clinics and health centres

The objective of the FNP programme in Swaziland was to fulfil the requirements of the role and job description for clinic nurses. According to the MOH&SW nurse executives, the goal for the FNP programme was and will still be to train nurses for clinic work, and FNPs should be employed as clinic nurses. Most of the FNPs are deployed in clinics and health centres, usually where there is no doctor.

4.11.2 Hospital outpatient department

Certain participants felt it should be noted that during the development of the programme a number of FNPs have been employed at hospitals, mainly at outpatient departments. This practice has been useful in many ways, but the FNPs in such a position cannot fully utilise all their additional skills. Unfortunately, this trend in the deployment of FNPs is expected to continue. The groups noted that this practice forces FNPs to ignore other nursing duties and concentrate on the screening function. At times the nursing care has been neglected or overlooked as something inferior to what the FNP has been additionally trained to do. She is sometimes not following a holistic approach to nursing, but acts as a mini doctor. The groups believed the FNP ought, as far as possible, to be employed in a position where she can make the best use of the additional knowledge and skills acquired through the FNP programme.

4.12 Shortage of FNPs

The groups also felt that the number of FNPs in service is very small to be deployed in all these areas. Most of those who were trained as FNPs, they said, had been promoted into higher positions where they no longer used the knowledge and skills of the FNP. More FNPs should be trained to fill the gaps left by these nurses. Participants also mentioned the problem of FNPs staying in the clinics for decades without any rotation. This is a serious problem, since most nurses do not like prolonged service in rural areas, where there usually are inadequate schooling facilities

for their children. Family and social difficulties arise from this, and from the fact that their husbands tend to work in the cities and towns.

4.13 Conclusion

The focus group discussions proved to be interesting, effective and rewarding in terms of the richness, and depth of knowledge and information coming from group participants. The findings of the investigation highlighted the urgent need for CE for FNPs, the strengths of FNPs, the lack of legislation of the scope of practice (which has not yet been legislated in the Nurses and Midwifes Act), barriers to their practice and promoting the role of FNP.

In chapter, five a survey of the role function and continuing education needs for FNPs is discussed.

CHAPTER 5

A SURVEY OF THE ROLE, FUNCTIONS AND CONTINUING EDUCATION NEEDS OF FAMILY NURSE PRACTITIONERS.

5.1 Introduction

This chapter describes the research methodology used to conduct a study to determine the role and continuing education (CE) needs of family nurse practitioners (FNPs), so that, a CE programme can be designed or proposed based on the identified needs. The discussion is structured around the research design and instruments, sampling design, pretesting of the instrument and strategies for collecting and analysing the data. This chapter also contains the analysis of data.

The study was initiated to address the objectives set out in chapter 1 of this dissertation (see 1.5).

5.2 Research Design

A descriptive exploratory design using the survey method was used in the study to collect data on the FNPs in Swaziland. According to Polit and Hungler (1993:14) exploratory research is aimed at exploring the dimensions of a phenomenon, the way in which it is manifested and other related factors. In this case very little was known about the learning needs and roles of the FNP in Swaziland.

According to Fawcett and Downs (1992:8) the survey approach in research yields accurate, factual descriptions of tangible phenomenon such as attributes, attitudes, knowledge and opinion. The survey method also allocates numerical values to non-numerical characteristics of human behaviour in such a way that the interpretations of these values are generally valid (Uys and Basson 1991:50-51).

5.3 Research Instruments

The researcher designed two different questionnaires for two different groups. One questionnaire was for the FNPs and, the other for nurse managers and nurse educators. Both questionnaires consisted mainly of closed questions. One open-ended question at the end of each section was included to capture any information that might have been left out and to allow the respondents to express their feelings, thoughts and experiences. The closed-ended questions required "yes" or "no" answers, or a selection from a fixed set of responses.

According to Puetz (1987:35-36) closed questions often are used because they are easier to respond to and the data collected can be more readily tabulated and analysed. However, the responses to open-ended questions express respondents' feelings and individuality. Open-ended questions allow for a richer and fuller perspective on the topic of interest if the respondents are verbally expressive and co-operative (Polit and Hungler 1993:203).

5.3.1 Questionnaire for FNPs

This questionnaire sought to elicit data on the following:

1. Respondents' characteristics as useful predictors of CE programmes.
2. Perception of the expanded role and function of the FNP.
3. Adequacy of the FNPs preparation in relation to their needs and to current practice.
4. Successes and barriers to current practice and the health problems frequently encountered in their work setting.
5. Desired content and teaching and learning activities of CE offerings.
6. Perceived motivators and barriers to CE and practice.

The sample size was determined by using the total population of practising FNPs in Swaziland (Treece & Treece 1986:234). Ninety questionnaires were sent to the addresses

contained in the register of the Swaziland Nursing Council. Fifty-seven questionnaires were returned (63%) and the information was used for analysis.

5.3.2 Questionnaire for nurse managers and nurse educators

The questionnaire sought to elicit data on the following:

1. What the role of the FNP was.
2. These respondents' perception of the expanded role, function and preparation of the FNP.
3. The need for formal, structured CE programmes.
4. What they would take into consideration in planning and conducting effective CE programmes for FNPs.
5. Participants' views on the adequacy of FNPs' preparation for current practice, their strengths, problems, needs and relationship with other health care workers.

Eleven questionnaires were sent out, four for the hospital matrons in each region, two for nurse managers in the MOH&SW, and five for nurse educators involved in the training of FNPs. All questionnaires (100%) were completed and returned by this group of participants. The presentation of the results of this questionnaire is based on objectives 2, 3, 4 and 5.

5.4 Results

This section describes the questionnaire results, with reference to the research objectives. The results of the two questionnaires are analysed separately. The questionnaire for FNPs is analysed first and objectives 1, 2, 4 and 5 pertain to these questions.

5.4.1 Questionnaire for FNPs

Objective 1: To identify the characteristics (demographic aspects, motivators and preferred teaching learning methods) of practising FNPs registered with the Swaziland Nursing Council.

Items 1-8 and 23 from section A of the FNP questionnaire and item 3 of section B address this objective. The questions were intended to elicit the profile of the FNPs.

5.4.1.1 Demographic characteristics

Items 1 to 8 from the FNP questionnaire were used to identify the demographic characteristics, set out in table 5.1.

Table 5.1 Demographic Characteristics of the FNP respondents (N=57)

CHARACTERISTIC	FREQUENCY	PERCENTAGE
1. GENDER: Male	0	0
Female	57	100
2. AGE DISTRIBUTION (YEARS)		
26 – 35 years	6	10.5
36 – 45 years	20	35.1
46 – 55 years	20	35.1
56 years and above	11	19.3
3. LEVEL OF EDUCATION		
Certificate	27	47.3
Diploma	28	49.1
Degree	1	1.8
One (1) person did not specify level of education		1.8
4. EXPERIENCE AS FNPs		
0 - 5 years	15	26.3
6 - 10 years	6	10.5
Over 10 years	36	63.2
5. LENGTH OF TRAINING		
9 - 12 months	51	89.5
13 – 18 months	4	7
Over 18 months	2	3.5
6. PRACTICE SETTING		
Clinics and Health Centres	30	52.6
Hospitals	17	29.8
Education Institutions	10	17.6
7. OWNERSHIP OF INSTITUTION		
Government	38	66.7
Private	6	10.5
Mission	4	7
Industry	4	7
Own	2	3.5
Not stated	3	5.3
8. CURRENT POSITION		
Staff nurse	21	36.8
Sister	19	33.3
Matron	2	3.5
Programme Manager	4	7
Educator	3	5.3
Clinic Supervisor	5	8.8
Other	3	5.3

(1) Gender and Age

Fifty-seven FNPs (100%) involved in the study were all females, with their ages ranging from 26 to more than 55 years. Seventy percent of them were aged between 36 and 55 years. This finding demonstrates that more FNPs will, in all likelihood, need to be trained to replace

those who opt to retire at 55, which is the voluntary retirement age in Swaziland.

(2) Level of Education

Fifty percent of the FNPs had a diploma, 48.2% a certificate and 1.8% (n=1) a University degree. The training of FNPs who had diplomas and certificates had been of equal duration. Those who trained from 1979-1989 received certificates and those who trained from 1990-1996 received diplomas. The reason for this change was that the curriculum was reviewed and upgraded to suit the health needs that had been identified in Swaziland. Research and teaching courses were added to the curriculum and the leadership and management courses were strengthened. The single FNP who had a University degree was trained outside the country, to Master's level. A Masters degree level is necessary to teach in the FNP programme. More FNPs should be trained to this level to increase the number of educators who can teach the programme. Previously, medical practitioners in addition to the nurse educators carried out the training of FNPs.

According to Ford and Walsh (1994:176) the role of nursing education in preparing the nurse practitioner is crucial. They argue that nursing must not make the mistake of thinking that nurse practitioners need no more than a low level of education to function if nursing excellence is the desired result.

(3) Experience as FNPs

The number of years of experience as FNP ranged between 0 and over 10 years. Sixty-three percent of the FNPs had more than ten years experience. This result fits in with the fact that the programme was started in 1979.

(4) Length of Training

About ninety percent (89.5%) of the respondents reported that their training had taken over nine months. The length of training for FNPs in Swaziland is 12 months, and the majority of respondents had been trained inside the country. Seven percent reported that they had training between 13 and 18 months. Only one person had training for more than 18 months, and this was

at Master's degree outside the country.

(5) Setting of practice

On analysing the data 52% of the respondents (n=30) worked in settings where there are no doctors, that is, in clinics, health centres, public health units and their own clinics. This was expected, since the initial aim of the FNP programme was to deploy these nurses to the undeserved areas, where there are no doctors. Those who are attached to hospitals work under the supervision of a medical practitioner or nursing sister.

(6) Ownership of Institution

As expected about 67% of these nurses are employed by government, which started the programme in order to meet the needs of the people in rural and undeserved areas. This strategy has been adopted by other health care providers like the private sector with 11%, mission and industry 7% each. Of the FNPs surveyed 3.5% having their own clinics. Five percent (5.3%) did not state the ownership of the institution for which they worked.

(7) Current job position

Thirty seven percent (37%) of FNPs are currently employed as staff-nurses (the entry level of employment in nursing for registered nurses) while 33% are employed as nursing sisters. The remainder, (30.9%) are employed in other categories such as administration and education. There is no clinical career ladder for FNPs. Promotions from staff-nurse to sister position or clinical supervisor take place because of many years of experience and good performance. Promotion to matron depends on service and performance as a nursing sister. Promotion for programme managers is based on post-basic training in management. Appropriate qualifications and experience are needed to hold the position of educator or researcher.

5.4.1.2 Motivators for Attending Continuing Education Programme

Item 23 in section A from FNP questionnaire dealt with motivators for attending continuing programmes. A rating scale of 1-4 was used (4 = high, 3 = moderate, 2 = fair and 1 = low). From the results set out in table 5.2, it can be seen that professional development, keeping abreast of new developments and personal development received the highest ratings (74%, 72%, and 70% respectively).

Table 5.2 Motivators for Attending Continuing Education

MOTIVATOR	HIGH %	MODERATE %	FAIR %	LOW %
Professional self development	74	17	5	4
Personal self development	70	26	2	2
Relevant topic	46	36	14	4
Interesting topic	31	45	16	8
Keeping abreast of trends	72	19	5	4
Relief from routine	15	21	20	44
Compliance with employer	32	23	17	28
Earn credit	21	30	11	38

Carmody (1982) cited by Pellefier, Donoghue, Duffield, Adams and Brown (1998:422) found nurses were concerned with status and prestige, and this, along with increased knowledge, social welfare skills, and professional advancement was the main motivators for upgrading qualifications. It is noteworthy that the respondents in this study gave earning a credit and relief from routine low ratings as motivators for attending CE offerings. Continuing education is not mandatory in Swaziland and therefore earning a credit is not considered important for these nurses. In addition, career progress in nursing is not at present linked to extra or higher qualifications, whereas other professions are openly rewarding the achievement of higher or extra qualifications.

5.4.1.3 Preferred Teaching Learning Methods

Item 3 of section B in the FNP questionnaire covered the preferred teaching/learning activities. These activities were identified as an important characteristic of CE for FNPs. Table 5.3 relates to this item.

Table 5.3 **Preferred teaching/learning activities**

METHODS	STANDARD DEVIATION	MEAN
Lecture	3.25	5.34
Discussion	2.49	3.92
Workshop	2.15	3.39
Case Studies	2.39	4.53
Case Histories	2.06	6.53
Simulation	1.75	9.34
Learning Packages/ Distance Learning	2.77	7.07
Demonstrations	2.82	5.21
Panel Discussions with Expect	3.34	6.19
Role Play	2.94	6.36

NB: The lower the mean, the higher the ranking.

The respondents were asked to rank in order of importance their preferred teaching/learning activities. Table 5.3 shows that workshops, with a mean of 3.39 were the most preferred activity, while learning packages/distance learning and simulations were the least preferred.

Two respondents rated learning packages highly since they could not attend workshops due to clinic work and other commitments. Sherperd (1995:69) in his study on training needs, found that other groups of nursing practitioners did not identify distance learning as a preferred style. One of the reasons he suggests for this is that many of the respondents had not experienced this type of learning and were therefore unable to judge its worth. This could hold true for respondents in this study as well.

Objective 2: To assess and examine FNPs as well as nurse educators and managers perceptions of the FNPs roles/functions and continuing education needs and issues relevant to their current and future professional development.

Items 9-20 and item 27 from section A, and items 4-6 in section B of the FNP questionnaire relate to the above objective. FNPs were asked what they considered their roles to be and whether they felt adequately prepared for these roles. They were also asked whether they felt their preparation was relevant to their practice. Other questions related to interval of CE and need for a formally structured CE programme.

5.4.1.4 Role and function of FNPs

Item 9 of the FNPs questionnaire required them to identify their roles and function. All the roles and functions described below are related to this item. Descriptive analysis of responses to item 9 is displayed in table 5.4.

Table 5.4 Expected Role and function of FNPs

ROLE/FUNCTION	FREQUENCY	PERCENTAGE
Clinical practice	56	98
Education/teaching	42	74
Leadership	41	72
Management	46	81
Health Education	53	93
Counselling	53	93
Research	44	77
Collaborating	46	81
Referral	50	88
Home Visiting	41	72
Advocacy	44	77

(1) Clinical practice

Of the 57 respondents, 56 (98%) identified clinical practice as part of their role/function. Clinical practice, according to Albarran and Whittle (1997:75) means being competent in patient care and possessing theoretical knowledge to support FNPs clinical judgement. These writers further assert that a practitioner would demonstrate clinical expertise, a deeper knowledge and advanced problem solving skills. There was one respondent, who did not regard clinical practice as part of her role/function.

(2) Education/teaching

Seventy-four percent (n=42) of the respondents felt education/teaching was part of the role/function of a FNP. The data obtained reflect that teaching is considered to be part of the function of the FNP. Family nurse practitioners are involved in the teaching of clients, students and auxiliaries. According to Meng and Morris (1995:180) nurses in advanced practice roles like FNPs are increasingly being sought as clinical preceptors to teach nursing students.

(3) Leadership

Seventy two percent (72%) of the respondents felt leadership was part of the FNP role. Albarran and Whittle (1997:77) contend that the managers and consumers of health care would expect FNPs to fulfil the role of a leader or administrator. In addition, they expect the individual FNP to have a refined ability for decision making that is transferable across a variety of settings; these writers also refer to commitment and vision to developing the nursing services.

(4) Management

Eighty one percent of the respondents felt that management was part of the role of FNPs. Management involves skills such as assessing, planning, organising, directing and evaluating. Management is an essential component of the FNP role because all the standard facets of the FNP role (educator, researcher, and clinician) require management abilities.

(5) Health education

Ninety-three percent of the respondents felt health education was part of the FNP role. Family nurse practitioners educate individuals and families on the primary prevention of illness, and on promotive and supportive health measures. According to Coutts and Hardy (1985:42) the educational model of health education assumes that health behaviour is the result of learning. An educational process in which the FNP assumes the role of teacher can influence health behaviour.

(6) Counselling

Ninety three percent of the respondents felt that counselling was part of the role of the FNP. According to Hamric, Spross and Hanson (1996:343) patient education and counselling strategies are part of the management of health illness status. The counselling role of an FNP is to educate and advise individuals, families and communities on healthy life styles and how to cope with illness and health problems.

(7) Research

Seventy seven percent of the respondents felt research was part of the role of the FNP. Ford and Walsh (1994:162) maintain that there is strong support for the research role of the FNP. They stress that this need not be formal, empirical research but could involve the use of action research techniques, which would be complementary to reflective practice.

(8) Collaborating

Eighty one percent of the respondents felt collaboration was part of the role of FNPs. Collaboration and referral are sometimes used interchangeably. However, Hamric et al (1996:232) define collaboration as an interpersonal process in which two or more individuals make a commitment to interact constructively to solve problems and accomplish identified goals, purposes, or outcomes. The individuals recognise and articulate the shared values that make this commitment possible. Family nurse practitioners work in collaboration with other health care professionals including physicians.

(9) Referral

Eighty eight percent of the respondents felt referral was part of the role and function of the FNP. Referral is a process by which the FNP directs the client to a physician or another practitioner for management of a particular problem or on aspects of the client's care when the problem is beyond his or her expertise (Hamric et al 1996:232).

(10) Home visiting

In response to this item 72% (n=41) of the respondents felt that home visiting was part of the role of FNPs. Home visiting would include follow-up of clients for continuity of care. Clients who are supposed to be followed up are antenatal and post natal clients, tubercolosis defaulters and children with malnutrition. Home visiting has, however, been on the decline due to FNPs workload, lack of transport and clients' positive response to the health messages urging them to use health facilities.

(11) Advocacy

In response to this item 77% (n=44) of the FNPs indicated, that advocacy was part of their role. An advocate is one who speaks for or on behalf of some other person or group. The FNP is seen as someone who can stand between the client and frustration, fear and confusion caused by fragmented or impersonal health care services.

5.4.1.5 Preparedness for Role and Function

Items10-19 from section A of the FNP questionnaire were used to assess the FNPs' preparedness for their role and function. Table 5.5 sets out the relevant data.

Table 5.5 Level of Preparedness for Role and Function

ROLE/FUNCTION	FREQUENCY	PERCENTAGE
Clinical practice	52	91
Health Education	52	91
Counselling	37	65
Leadership	31	54
Management	31	54
Research	21	37
Referral	54	95
Collaborating	46	81
Education/teaching	31	54
Home Visiting	45	79

(1) Preparedness for Clinical Practice

Item 10 required FNPs to identify their preparedness for the clinical role. Most respondents (91%) felt that they were adequately prepared for clinical practice. This finding shows that FNPs feel they are well prepared to assess, diagnose and manage the health problems of their clients. Bloom in Albarran et al (1997:75) points out that a practitioner should demonstrate clinical expertise, a deeper knowledge and advanced problem solving skills. Jowett and Thompson (1989:11) contend that the preparation of the FNPs enables them to recognise rapidly, evaluate patient changes, and prioritise interventions.

(2) Preparedness for health education

In response to this question 91% of the respondents felt they were adequately prepared for the health education role. Health education is seen as an integral part of practice and should be executed as a purposeful activity, using interactive teaching strategies, which involve the learner in planning and evaluating his or her learning. The FNP is in a position to teach and can purposefully help the clients to become aware of their health status. Clients can then develop the motivation to maintain a level of well being that allows them to experience an informed, self determined quality of life.

(3) Preparedness for counselling

Item 12 in the FNP questionnaire refer to the preparedness of FNPs for the counselling role. Although 93% (n=53) of the FNPs perceived counselling as a role of the FNP, only sixty-five percent (65%) of the FNPs felt they were adequately prepared for the counselling role. Counselling is a much-needed skill of the FNP and respondents felt they needed counselling skills for HIV/AIDS counselling and to assist clients to change their behaviours.

Thirty five percent (35%) of respondents thought they were not properly prepared for counselling. This finding suggest that a review of the FNP curriculum should stress counselling. In order for nurses to provide holistic care to their clients, they need listening skills, which should be used together with counselling skills. Maglacas, Ulin and Sheps (1987:16) maintains that therapeutic communication and willingness to take time to listen, motivate and counsel are some of the practical skills that make nurses different from other health care professionals.

(4) Preparedness for leadership and management

Items 13 and 14 required the FNPs to identify their preparedness for leadership and management roles. Fifty four percent (54%) of the respondents felt they were adequately prepared for these roles. Family nurse practitioners in the age groups 46 years and over were more prepared in leadership and management, as shown by the data, with a significance of 0.05%. Some

respondents (46%) indicated that they were not well prepared to perform in these roles. In addition, skills such as time management, personnel management, communication, formulation of policies and protocols, project writing, problem solving and further advanced education at degree level on management were identified by FNPs as important. Management knowledge and skills should be emphasised in the preparation of FNPs because they are deployed to supervise in health centres and clinics, and they make decisions about how to run health services and about client care. Their ability to prioritise problems and come up with interventions is very crucial. According to Adams (1991:16) nurse practitioners face new challenges as increased problem solving and decision making skills are required of them. Scurfield cited in Adams (1991:16) argues that nursing professionals frequently have little educational preparation for their management function.

(5) Preparedness for the research role

Item 15 in the FNP questionnaire required these respondents to evaluate their preparedness for the research role. Only 37% felt they were prepared for this role. The majority (63%) felt they were not adequately prepared. This is understandable, as earlier curriculum emphasis was on the clinical assessment, diagnosis, health education, management of common health problems and referral skills. Those who felt they were not adequately prepared for research indicated, in the open-ended questions, that they needed research skills and project writing skills. Clinically-based research is required to enhance the knowledge base of nursing, and in terms of the MOH&SW research targets, FNPs are expected to contribute to this endeavour.

Hicks and Hennessy (1997:396) report similar findings regarding research skills, and they also claim that the business, administrative and management functions are of increasing importance for FNPs in clinical practice. Family nurse practitioner curriculum planners should therefore take cognisance of the changing role of the FNP.

(6) Preparedness for the referral role

Item 16 of the FNP questionnaire deals with preparedness for the referral role. Ninety-five percent of the respondents felt they were adequately prepared for this. However, they felt there should be a review of the referral system and guidelines used in the health care delivery system. At the moment there is no follow up of referrals to hospitals. There is no systematic procedure whereby referees get feedback on the clients they have referred. Where a procedure does exist, it is often ignored.

(7) Preparedness for Collaboration

This was addressed by item 17 of the FNP questionnaire. Although 81% (n = 46) of the respondents felt they were adequately prepared for collaboration, some felt that there is poor doctor - nurse collaboration. Some reported that their prescriptions were sometimes ignored by the pharmacists or cancelled by the doctors. The FNPs employed in government institutions appeared to be more willing to collaborate with other stakeholders than FNPs in private or other institutions.

(8) Preparedness for education/teaching role

Item 18 of the FNP questionnaire required respondents to assess their preparedness for the education/teaching role. About half 54% (n=31) of the respondents felt that they were adequately prepared for this function. Suggestions for CE were inputs on teaching skills, principles of education and preceptorship skills. According to Hamric et al (1996:343), teaching and counselling competencies are critical elements of FNP practice, which can be seen as the backbone of health promotion and disease prevention.

(9) Preparedness for the home visiting

Item 19 of the FNP questionnaire asked about preparedness for the home-visiting role. Although 79% of the respondents felt they were adequately prepared, some (10%) stated that

they did not have time to do home visiting since much of their time was taken up with clinic work. Those who felt they needed skills in home visiting stated that they needed skills related to community-based care. Home visiting allows for full continuity in delivering PHC to individuals and community groups, and can be used for primary and secondary disease prevention and health promotion. An essential part of home visiting is liason with rural health motivators, who work with communities and deal with their daily health needs. Combined responses from both open-ended and closed questions suggest that the following topics should be considered priorities for the education of FNPs: **clinical practice, education, counselling, research, leadership** and **management.**

(10) Preparedness for advocacy

Item 9 of the FNP questionnaire related to the advocacy role. Respondents were not, however, asked about their preparedness for the role of advocacy. It is noted that there is a need for the FNP to speak for clients, or help them to speak for themselves, when their health needs are not being met. However, FNPs need to be trained so that they can draw government attention to issues that relate to the lives and care of their clients.

5.4.1.6 Relevance to Current Practice

Item 20 of section A of the FNP questionnaire used dichotomous responses related to relevance to current practice of FNPs. Most participants (86%) felt that their preparation was relevant to the current practice. They felt that the education prepared them to function independently, confidently and in a self-reliant way. The open-ended responses regarding limitations referred to the prescribing of essential drugs, which were also said to be in short supply. Family nurse practitioners are expected to prescribe drugs based on clinical findings, but they cannot prescribe drugs not listed as essential. The essential drug list has raised concern because it limits drug stocks on hand in all the clinics.

Respondents did, however, feel that their knowledge and skills were well applied.

Refresher courses and in-service training were mentioned as being important for keeping FNPs updated in their practice. Concern was expressed about the lack of refresher courses to update knowledge and skills, the scarcity of drugs and shortages of equipment and supplies. These were considered as hampering FNPs in their practice. Because of the shortage of doctors, respondents felt there was a need for all clinic nurses to be trained as FNPs. Every Public Health Unit should also have nurses with FNP skills since these nurses also work where there is no doctor. Most of those who felt their work was not relevant to what they had been taught were either doing administrative work or heading other programmes.

5.4.1.7 Needs Identified from Open-ended Questions

Item 27 requested respondents to enumerate needs that were not covered in the questionnaire. The themes derived from the grouping of these needs were professional, work-related, social and welfare issues. The needs are summarised as follows:

(1) Educational Needs

- continuing education
- in-service education to update knowledge and skills
- recognition of role by the employer and other health care workers.

(2) Social and Welfare Needs

- improved conditions of services, particularly as regards pay and hours of work
- recognition of extra qualification
- more personnel

Nurses including FNPs, have poor working conditions. Staff shortages, in particular, mean they work long hours and carry heavy workloads. With their diverse skills, FNPs tend to be severely overloaded. In addition, in-appropriate remuneration for work done demotivates staff.

(3) Environmental Needs

- basic equipment and supplies which are inadequate
- legal protection – the scope of practice for FNPs is not regulated in the Nurses and Midwives Act
- forum for exchange of information in networking
- clarification and recognition of the role
- Support from other health care workers.

Appropriate and adequate resources are important in the provision of quality care. Inadequate resources are likely to cause insecurity, demotivation, frustration, apathy and progressively declining standards. Networking is important so as to get in contact with other FNPs and to exchange information and new ideas. The role of a nurse is compromised when she assumes a medical role in the management of health problems and nursing role in caring for the clients.

5.4.1.8 Need for formal, structured continuing education programme

Item 4 requested respondents to indicate if there was a need for a formal structure CE programme for FNPs. This was a dichotomous question requiring "yes" or "no" for an answer. Almost all respondents (96%) saw a need for CE. Only one respondent felt there was no need for a formal CE programme because CE is not mandatory for practice. One respondent did not answer this question.

(1) Frequency of attendance of CE

Item 5 requested respondents to indicate frequency of attendance to CE. Responses are set out in table 5.6.

Table 5.6 Suggested Interval of Attendance to Continuing Education

INTERVAL	FREQUENCY	PERCENTAGE
Per month	1	1.8
Per 3 months	3	5.1
Per 6 months	7	12.3
Per 9 months	16	28.1
Per 12 months	25	43.9
Per 24 months	4	7.0
Missing	1	1.8

The majority (44%) of respondents thought that FNPs should attend CE at least once a year or more frequently.

(2) Reasons for attendance

Item 6 requested respondents to identify important reasons for attending CE programme using a scale of 1-4 (4 being the important and 1least important).

Table 5.7 Reasons for Attendance at a continuing education programme

REASON	VERY IMPORTANT (%)	IMPORTANT (%)	SOME WHAT IMPORTANT (%)	LEAST IMPORTANT (%)
Update knowledge and skills	62.7	27.5	5.9	3.9
Meet colleagues	19.2	21.2	15.4	44.2
New knowledge and skills	90.7	9.3	-	-
Identify learning needs	61.5	32.7	3.8	1.9
Meet learning needs	62	28	10	-
Learn new skills	92.3	7.7	-	-
Learn neglected skills	52.9	23.5	17.6	5.9
Earn credit	34.8	23.9	21.7	19.6

The results reveal that acquiring new knowledge and new skills was rated very highly by most respondents (90.7% and 92.3% respectively). Earning a credit was considered not important for attendance at CE.

Objective 4: To identify the content of a CE programme for FNPs and select an appropriate mode of teaching.

5.4.1.9 Content to be Included in a CE programme

Item 21 in section A and items 1 and 2 in section B of the FNPs' questionnaire relate to objective 4.

Common health problems

Item 21, section A requests participants to rate the health problems they encounter in their health settings using a scale of 1-4 (4 being the most common and 1 being the least common). Table 5.8 illustrates the common health problems and how the respondents rated them.

Table 5.8 **Common Health Problems Encountered by FNPs**

COMMON PROBLEM	FREQUENCY	PERCENTAGE %
1. Respiratory	54	95
2. Diarrhoeal Diseases	49	93
3. Tuberculosis	41	76
4. Hypertension	41	77
5. Diabetes	30	59
6. Sexually Transmitted Infections	51	93
7. Nutritional Diseases	21	40
8. Maternal Health	24	45
9. Child Health	32	65
10. Family Planning	35	66
11. Malaria	24	45
12. Mental Health	15	30
13. HIV/AIDS	44	84
14. Skin Diseases	43	77

The results show that 95% of the respondents identified respiratory diseases as the leading cause of morbidity in the settings where FNPs work. This was followed by sexually transmitted infections and diarrhoeal infections (93%). Mental health (30%) and nutritional diseases (40%) were found to be the least common health problems. These ratings reflect the trends revealed in the Swaziland National Statistics (1997:2), which show diseases of the respiratory system as the leading cause of morbidity in Swaziland's outpatient departments, followed by diarrhoeal diseases. Common health problems have implications for CE content that should be strengthened, as FNPs have to be updated in the assessment, diagnosis, treatment, and management of these problems. They are part of the FNP curriculum, and management protocols have been developed to address them. According to Reid 91982:171), the major health problems at the various stages of the life cycle become course content, from which teaching/learning strategies and learning experiences are derived. All the data gathered should therefore be fed into the curriculum.

(2) Required content according to priority

In section B of the FNP questionnaire, item 1 required respondents to rank, in order of importance, topics they would like to see included in CE. Respondents used a scale of 1-4, with

4 being the most and 1 the least important. These topics are listed in table 5.9; mean rankings ranging between 2.78 and 3.74.

Table 5.9 **Content areas according to priority**

TOPIC	FREQUENCY	MEAN
Physical assessment	56	3.46
Diagnosis of common health problems	54	3.5
Management of common health problems	52	3.63
Pharmacology	54	3.52
Safe motherhood initiatives	54	3.27
Community health nursing	54	3.39
Environmental health	54	3.30
Community based care	54	3.33
Epidemiology	52	3.5
Bio-statistics	46	3.21
Patient teaching	53	3.47
Clinical teaching	52	3.3
Mental health nursing	51	2.78
Leadership	54	3.58
Management	54	3.63
Professionalism	52	3.48
Emergency care	53	3.70
Disaster management	52	3.56
Sexually transmitted infections	55	3.51
Communication	53	3.68
Clinical laboratory skills	52	3.21
Legal aspects of nursing	53	3.74

The top needs were legal aspects of nursing practice and emergency care, with a mean of 3.7, followed by communication (3.68). Management of health problems and management both had a mean of 3.63. The least popular topics were mental health with a mean of 2.7 and biostatistics at 3.21. It is interesting to note that even in the listing of content areas, leadership and management were identified as important topics.

(3) Content germane to the role of FNPs

Item 2 of section B requests respondents to identify additional relevant knowledge and skills needed for CE of FNPs. Content was rated on a scale of 1-4, (1being the lowest and 4 the

highest). Thirteen content areas were listed for prioritisation. These were derived from literature that identified the knowledge and skills common to the FNPs role, for purposes of data analysis.

Table 5.10 **Content germane to the role of FNPs**

CONTENT AREAS	FREQUENCY	PERCENTAGE
Clinical practice skills	53	92.9
Teaching skills	53	92.9
Learning skills	50	87.7
Patient teaching skills	52	91.2
Counselling skills	53	92.2
Health education skills	53	92.2
Leadership skills	53	92.2
Management skills	52	91.2
Referral skills	51	89.4
Collaboration skills	53	92.9
Research skills	52	91.2
Problem solving skills	54	94.7
Case management skills	52	91.2

Problem solving (3.9) and counselling (3.8) received the highest ratings, followed by case management (3.7) health education, clinical practice, patient teaching, management and research (all at 3.6) and leadership (3.5). These content areas are all part of the FNP curriculum.

Objective 5: To identify enabling factors and barriers in the practice and education of FNPs.

Items 22, 24, 26 and 27 in section A of the FNP questionnaire referred to this objective.

5.4.1.10 Enabling factors in the practice and education of FNPs

(1) Achievements and successes

Table 5.11 Achievements and successes of FNPs

ACHIEVEMENT	HIGH %	FAIR %	MODERATE %	LOW %
Professional growth	69	19	6	6
Self satisfaction	57	25	11	7
Promotion	23	17	11	49
Better salary	7	9	16	68
Greater collaboration	52	26	13	9
Better knowledge and skills	58	35	4	3
Confidence	76	22	2	-
Recognition	28	37	15	20
Respect	29	49	11	11

Item 22 asks respondents to identify their successes or achievements, and from the data it can be noted that FNPs identify areas of personal and professional successes. Achievements that were ranked high were confidence (76% of the respondents), followed by professional growth (69%), and better knowledge and skills (58%). Fifty seven percent felt satisfied with their work and 52% enjoyed greater collaboration with other health workers. Sixty seven percent gave a low rating to salary-related achievement followed by promotion (49%).

According to Robbins (1996:192), employees want remuneration and promotion policies that they perceive as being just, unambiguous, and in line with their expectations. Pay satisfaction does not depend on the actual amount one is paid, rather it derives from the perception of fairness. Promotions provide opportunities for personal growth, more responsibilities, and increased social status. Nurses, including FNPs, have traditionally been awarded low salaries in comparison with other professional groups, because of their low status as women. Career prospects are limited to few higher graded nursing posts.

(2) Continuing Education attendance

Item 24 in section A of the FNP questionnaire requests participants to provide information about the patterns of CE attendance.

Table 5.12 **Distribution of FNPs' attendance in CE programmes**

PERIOD/INTERVAL	FREQUENCY	PERCENTAGE
6 months	26	47
7 - 12 months	12	21
13 - 24 months	1	2
> 2 years	18	30

Respondents were asked to state when they had attended a CE programme and what topics they selected. Forty seven percent (n=26) respondents had attended a CE programme in the past six months. Eighteen (30%) participants had not attended a CE programme for over 2 years. Knowledge gained from CE can be used individually in nursing practice as well as to teach and share with other staff members, offering a dual opportunity to improve client care. According to Waddell (DeSilets 1995:207), the effects of CE in nursing practice have demonstrated that participation in CE is an important contributor to quality practice.

What can be noted in this study is that a fair number of the important aspects of the FNP function were covered in the topics selected by those who had attended CE programmes in the past 6 months (see table 5.13). Fifteen of the respondents 926%), had attended training on diarrhoeal diseases; 23% on respiratory infections; 35% on immunisation; 12% on family planning; 37% on HIV/AIDS; 21% on tuberculosis; 14% on common ailments; 16% on malaria management; 26% on leadership; 39% on management; 11% on research; 9% on health education; 21% on counselling; 29% on health promotion and disease prevention and 9% on rehabilitation. Very few – 5% - attended training on mental health.

Table 5.13 **Topics attended at CE**

TOPIC	FREQUENCY	PERCENTAGE
Management of diarrhoeal diseases	15	26
Management of respiratory infections	13	23
Immunisation	20	35
Family Planning	7	12
HIV/Aids	21	37
Tuberculosis	12	21
Management of common ailments	8	14
Management of Malaria	9	16
Leadership	15	26
Management	22	39
Health systems research	6	11
Health Education	5	9
Counselling	12	21
Health Promotion	6	11
Disease Prevention	10	18
Rehabilitation	5	9
Mental Health	3	5

(3) Factors that might maximise CE attendance

Item 26 of the FNP questionnaire requests respondents to indicate additional provisions they would like to see in their work setting to maximise their CE attendance.

Table 5.14 **Factors that might maximise CE attendance (N=57)**

FACTORS	VERY IMPORTANT %	IMPORTANT %	LEAST %	NOT IMPORTANT %
Increased staffing levels	82	9	9	-
Advanced notification	76	21	4	-
Relevant topic	60	33	4	3
Learner needs addressed	72	15	6	7
Budget for continuing education	80	15	3	2

The majority of respondents (82%) regarded increased staffing levels as essential to maximise CE attendance. Eighty percent of the respondents felt a budget for CE was essential. Advanced notification was identified by 76% of the respondents as very important to enable planning for attendance.

(4) Enabling factors from the open-ended questions

Item 27, an opened-ended question, was designed to ascertain needs of FNPs that were not covered in the questions. Four areas that were identified are reported on in a qualitative format.

(a) Family Nurse Practitioners have expertise

- Collaborating and sharing of information, knowledge and skills with colleagues
- Use of medical and nursing skills
- Providing better and timely patient coverage
- Triaging of patients especially in outpatient department.

Expertise is a backbone of providing health care services to clients. FNPs work in isolation and felt that clinical skills require regular upgrading through seminars, conference and workshops. Also, there was need for sharing information about problem solving skills. Case studies should be circulated to the different clinics for update on management strategies. Triage is important to avoid unexpected deaths in the waiting areas.

(b) Family Nurse Practitioners are accessible

- Increased client coverage in areas where there is no doctor and as a first point of entry for the clients
- Performing a wide range of comprehensive activities which generally expand nursing practice, as well as replacing some of the work previously performed by the medical practitioner
- Follow up of clients even in their homes
- Need good referral system.

Rural clinics often have to cope with extremely large patient attendance. Most clinics have no emergency units and the FNPs is responsible for trauma cases.

(c) Continuing Education

- Education must equip the FNP with more than technical skills. It must teach the FNP to be a critical, reflective thinker with well developed interpersonal and communication skills, and necessary research, management and leadership skills
- Preparation at least up to first degree via a clinical forecast route is needed.

Without appropriate CE courses to upgrade their knowledge and skills, FNPs cannot function within the expected roles.

(d) Deployment

Family nurse practitioners should be deployed according to qualifications. They should be deployed in departments where they will apply the acquired skills. Deployment should be carried out by officials who know the objectives that led to the training of the FNPs.

These results show that FNPs have expertise in their work, are accessible to their clients and have needs for CE in areas related to their practice. They need to work where they can use their skills so that they do not forget them.

5.4.1.11 Barriers to Continuing Education

Respondents were requested to identify problems or frustrations in their work setting. Item 25 and 27 in section A of the FNP questionnaire relates to this issue.

(1) Problems or frustrations

Item 25 requests respondents to identify problems or frustrations in their work settings. These problems are listed in Table 5.15 below.

Table 5.15 Problems or Frustrations in FNPs Work Setting

PROBLEMS	FRUSTRATING %	LEAST %
No continuing education	79	21
Shortage of staff	77	23
Lack of recognition	72	28
Inadequate equipment	70	30
Low salaries	67	33
Lack of security	61	39
Inadequate supplies	60	40
Insufficient drugs	59	41

As can be seen from the table 5.15, lack of CE, shortage of staff, lack of recognition and inadequate equipment were cited as the most frustrating problems. Lack of CE was experienced as problematic by 79% of the respondents. Issues related to the welfare of FNPs were also given

high ratings, for instance shortage of staff (77% of respondents) and inadequate salary (67%). The provision of regular CE or in-service education programmes is a very important issue when one considers the fact that all FNPs in the study practised in the expanded role and most of them had not had a refresher course for a long time.

Lack of resources, like equipment supplies and drugs, reveals that the needs referred to here are for what can be considered basic requirements for efficient functioning. In fact, these requirements are necessities that are often taken for granted by nurses working in developed countries - blood pressure machines, tape measure, transport and so on.

According to World Health Organisation (WHO) (1997:21) the shortage of drugs, equipment and supplies in many countries; the lack of transport in most countries; and the deteriorating health facilities in many rural areas makes work difficult and discouraging.

5.4.2 Questionnaire for nurse managers and nurse educators

Objective 1: To identify the characteristics and definition of FNPs practising and registered with Swaziland Nursing Council.

5.4.2.1 Definition of FNP

Item 1 asked the managers and educators to define FNP. Responses to this question are reported verbatim below. The family nurse practitioner was defined as:

Respondent 1: A professional nurse who assesses conditions of patients diagnoses, treats and evaluates treatment given.

Respondent 2: A registered nurse, who has advanced preparation in family nurse practice sometimes called diagnostic nurse.

Respondent 3: A nurse who practices generally, gives services to adults and children and works in all settings.

Respondent 4: A nurse clinician who is able to assess and diagnose patients and offer them treatment and refer as necessary.

Respondent 5: A nurse supposed to be taking care of families at their home and in hospitals, health centres and clinics.

Respondent 6: An extended role of a registered nurse, which includes diagnosis and treatment, counselling of common diseases in the society.

Respondent 7: Registered nurse who practices her profession for gain in a capacity that prescribes registration as a FNP.

Respondent 8: A nurse who has skills in the management of family ailments i.e. diagnosis, assessment and treatment.

Respondent 9: A nurse with general and midwifery who has undergone training which enables him/her to diagnose and treat minor ailments.

Respondent 10: A registered professional nurse with advanced skills and knowledge in diagnosis and management of clients and patients using the nursing process with great expertise.

Respondent 11: A nurse who has undergone a course of training in order to assess, diagnose and treat minor ailments of patients and clients.

These can be summarised thus: The FNP is a nurse with basic nursing, midwifery and clinical preperation at the post-basic level working in a variety of settings, mostly in under-served areas. FNPs assess, diagnose and manage common and minor ailments to clients of all ages, and as such they are sometimes referred to as diagnostic nurses. From this definition it is clear that the FNP is regarded as someone who has acquired clinical skills. None of the respondents mentioned the other skills the FNP is proficient in, and that are described as being part of her or his role. This finding reflects the absence of a formal outline of the scope of practice in the country.

Objective 2: To assess and examine FNPs as well as nurse educators and managers perceptions of the FNPs role, needs and issues relevant to their current and future professional development.

5.4.2.2 Role, needs, issues and relevance to practice

Item 2 on the nurse managers and educators' questionnaire was used to identify these perceptions.

Table 5.16 Role/function of the FNP as perceived by nurse managers and educators

ROLE/FUNCTION	FREQUENCY	PERCENTAGE
Clinical Practice	11	100
Health Education	11	100
Counselling	11	100
Leadership	9	82
Management	9	82
Collaboration	10	91
Referral	11	100
Research	11	100
Student and Auxiliary Teaching	10	91

(1) Clinical practice, health education, counselling, referral and research

All the respondents (n=11) felt that clinical practice, health education, counselling, referral and research were part of the role of the FNP. These results indicate that nurse managers and educators fully accept these roles as functions of the FNP.

(2) Leadership/management

Eighty-two percent (n=9) of the respondents mentioned that the role of the FNP requires skills in leadership and management. This includes communicating effectively, motivating others, facilitating task accomplishment and co-ordinating all client care under her or his jurisdiction. Management is a form of leadership that focuses on achievement of organisational goals.

(3) Collaboration and student/auxiliary teaching role

Ninety one percent (n=10) of the respondents perceived collaboration and student/auxiliary teaching as part of the role of the FNP. These results demonstrate that nurse managers and educators do endorse the expanded, multiple roles and functions of the FNP. Nurse managers and educators are in a position to support the FNPs in maintaining these skills and keeping abreast of new developments related to these roles and functions.

5.4.2.3 Preparedness

Item 3 on the questionnaire for nurse managers and educators elicited opinions about the level of preparedness for FNPs. Table 5.17 displays their responses.

Table 5.17 Level of Preparedness of FNPs as Perceived by Nurse Managers and Nurse Educators

ROLE/FUNCTION	FREQUENCY	PERCENTAGE
Clinical Practice	11	100
Health Education	10	91
Counselling	7	64
Leadership	7	64
Management	6	55
Collaboration	9	82
Referral	11	100
Research	4	36
Student/Auxiliary Teaching	4	36

(1) Preparedness for clinical practice

One hundred percent (N=11) of the respondents felt that the FNPs were adequately prepared for this function. This indicates that FNPs function adequately and have won the respect of nurse managers and educators as clinicians. Clinical practice skills include history taking, physical examination, diagnosis and intervention and management.

(2) Preparedness for health education

Most respondents (91%; n=10) felt that FNPs were adequately prepared for the health education function. Only one respondent felt that FNPs were not adequately prepared for this role. Bearing in mind the magnitude of health problems in Swaziland, it is essential that FNPs, who work closely with communities, should be involved in the education of communities on prevalent health problems, and on preventing and/or controlling these health problems.

(3) Preparedness for counselling

It is interesting to note that 64% of the nurse managers and educators felt that FNPs were adequately prepared for the counselling role. Although all of the respondents felt this was part of

the FNPs' role, 36% (N=57) did not feel adequately prepared for this role and the nurse managers, who are their supervisors, are aware of this deficiency. Nurse managers and nurse educators are challenged to make opportunities for these nurses to acquire the counselling skills they need in order to interact therapeutically with their clients.

(4) Preparedness for leadership

Sixty four percent (64%) (n=7) of the respondents felt that FNPs were adequately prepared for the leadership role. This has implications for both educators and managers whose roles include CE for these nurses. The results indicate that FNPs are not comfortable with their role as leaders.

(5) Preparedness for management

Fifty five percent (n=6) of the respondents felt that FNPs were prepared for the management role/function. These results endorse the need for CE for FNPs in management so that they are better able to manage the resources in their work settings.

(6) Preparedness for collaboration

Eighty two percent (n=9) of the respondents felt FNPs were adequately prepared for the collaborative role.

(7) Preparedness for referral

One hundred percent (n=11) of the respondents felt FNPs were adequately prepared for the referral function and role.

(8) Preparedness for research

Thirty six percent (n=4) of the respondents felt that FNPs were adequately prepared for the research function. The majority, 64% (n=7), perceived FNPs as not adequately prepared for this role.

(9) Preparedness for student/auxiliary teaching

Only thirty-six percent (n=4) of the respondents felt FNPs were adequately prepared for

this role. This is a disappointing finding since one of the aims when the FNP programme was first started was to use the graduates of the programme as preceptors for basic nursing students. These findings may well have implications regarding curriculum changes to ensure that FNPs are, in fact, adequately prepared to teach and supervise students and other health care workers. According to these results, nurse managers and educators have identified gaps in the preparation of FNPs for this function.

5.4.2.4 Need for a formal structured in-service CE programme

Item 4 of the questionnaire requested input about whether there is a need for a formal, structured, in-service CE programme.

Ninety-one percent 91% (n=10) of the respondents agreed that there is a need for a non-mandatory, formal, structured CE programme aimed at updating FNPs' knowledge and skills. Fifty-five percent (n =6) felt that this programme should have a budget, should be provided with staff and should be conducted at least once a year and as necessary to cater for new developments.

5.4.2.5 Relevance of training

Item 8 of the questionnaire relates to relationship between current practice and FNP training. Responses for this question are given verbatim, as follows:

Respondent 1: Relevant though they need to be updated especially in physical examination, ordering of laboratory tests and counselling of clients in crisis.

Respondent 2: It is related though may need to consider increasing the time for teaching physical and diagnostic techniques, pharmacology and current trends and economics.

Respondent 3: They are overdue for in-service education and seminars to update for current practice.

Respondent 4: Related to needs of our country as a developing country.

Respondent 5: I think their role is confused with being substitutes for medical practitioners. Their role is not very clear.

Respondent 6: Some relevancy – need for updates.

Respondent 7: Needs updating.

Respondent 8: They are only trained to be mini doctors with no community work and family management.

Respondent 9: It relates very well, but refresher courses are necessary to match the disease patterns and trends.

Respondent 10: There is need to strengthen clinical guidance e.g. involvement of medical doctors, senior nursing personnel with expertise and attachment to mentors.

Respondent 11: Needs to be updates to keep abreast with current health problems especially on research and drug therapy.

It is clear from the findings that these nurse managers and educators felt that the training of FNPs had some relevance to their practice. Five respondents felt that the FNPs' training was definitely relevant to the FNP practice, but the majority of respondents (n=8) felt the FNPs needed refresher courses to update themselves on new technology and skills. Courses such as physical assessment, diagnostic techniques, pharmacology, research and management of common health problems were included in the content identified for CE. In addition, there was consensus that FNPs need CE and a strengthening of the FNP content and current trends. However, about 18% (n=2) of the respondents felt that the role of the FNP was not clear.

5.4.2.6 Suggestions for input to CE design

Item15 requested respondents to give ideas, comments or suggestions that could be

helpful in identifying the CE needs of FNPs, so that a programme can be designed to meet these needs and those of the clients. One suggestion, put forward by 36% of the respondents, was to conduct a needs assessment and then provide a CE programme. Further suggestions were to market the programme (9%); upgrade the programme to degree level 18%; select for training those interested in working in clinics, and strengthen counselling (28%). On the other hand 9% mentioned leadership and research skills to improve the working conditions and make available adequate resources to implement the role of FNPs.

5.4.2.7 FNPs' needs, and practice and educational issues

(1) Planning an effective CE programme

Item 5 asked nurse managers and nurse educators to rate what consideration they would take into account when planning an effective CE programme. They were asked to use a scale of 1-4, (4 being very important and 1 least important).

Table 5.18 Planning an effective CE programme

Planning considerations	Very important %	Important %	Somewhat important %	Least important %
Learner needs involved	91	9	--	--
Plan with learners	91	9	--	--
Plan with stakeholders	82	18	--	--
Topic relevance	91	9	--	--
Preferred learning strategies	46	46	8	--
Preferred attendance time	36	65	9	--
Advanced notification	73	27	--	--
Marketing of program	100	--	--	--

All the respondents rated the marketing of the programme as very important. Planning the programme with the learners and stakeholders was also considered very important by 91% (n=10) and 82% (n=9) of the respondents respectively. Relevance of topics to meet the needs of FNPs was also considered very important by 91% (n=10) of the respondents. Preferred learning strategies and preferred attendance time were rated low by 46% (n=5) and 36% (n=4) of the respondents respectively.

(2) Frequency of CE attendance

Item 6 asked respondents to indicate the frequency with which FNPs should attend CE programmes. Just over half of the respondents (54%; n=6) felt FNPs should attend CE programmes at least once a year, and when necessary.

(3) Relationship between FNPs and medical doctors

Item 13 requested respondents to indicate the relationship between FNPs and medical doctors. A list of five options presented to respondents and from this it was ascertained that 7 felt the relationship was collaborative, 4 felt it was a threat to the doctor, 2 felt it was a threat to the FNP. Only 2 felt it was neither a help nor a hindrance. Family nurse practitioners, as a new cadre of nurses and health care worker, have not succeeded in making themselves known or in creating a niche for themselves. They are sometimes seen as mini doctors and thus become a threat to the doctor. This may be the reason why some doctors do not recognise the FNP. From these results it is clear that the majority of respondents feel that the FNPs relationship with other nurses is either collegial or helpful. There was, however, one person who felt FNPs were a threat to other nurses. In most cases, doctors and supervisors respect FNPs for their acquired knowledge and skills, which may result in other nurses envying the expertise of the FNP. According to Mazibuko, McKenzie, and Scheneider (1989:40), their skills are not always appreciated, they can be seen as troublemakers and are at times not properly utilised and promotion in certain areas is retarded. These writers contend that FNPs need to be encouraged and used effectively. They suggest FNPs should form networks so that they can come together and discuss issues that relate to their role.

(4) Relationship between FNPs and other nurses

Item 14 requested nurse managers and nurse educators to describe the relationship between the FNP to other nurses. Seven respondents felt it was collegial, 4 felt it was a helpful relationship and only 1 felt it was a threat to other nurses.

Objective 4: To identify the required/needed content and mode of teaching which will direct nurse educators in providing a programme of CE for FNPs.

5.4.2.8 Nurse managers and educators preferred methods of teaching

Item 7 relates to nurse managers and nurse educators preferred methods of teaching.

Table 5.19 **Methods of Presentation of Continuing Education**

METHOD	VERY IMPORTANT (%)	IMPORTANT (%)	SOME WHAT IMPORTANT (%)	LEAST IMPORTANT (%)
Teacher centred lectures	-	20	-	80
Group work	73	9	18	-
Learner centred lectures	82	9	9	-
Role play	64	36	-	-
Case studies	100	-	-	-
Case histories	82	9	9	-
Distance learning	10	10	30	50
Simulations	46	27	18	9
Demonstrations	64	36	-	-

Respondents were requested to rate the preferred methods of presenting content to FNPs on a scale of 1-4, 4 being very important and 1 least important. As can be seen from the above table, the results are as follows:

Case studies were rated highly by all the respondents, followed by learner-centred lectures 82% (n=9), case histories 82% (n=9), group work 73% (n=8), demonstrations and role-play 64% (n=7). This is an expected result since the incorporation of multiple learning methods fosters learning by addressing the needs of adult learners. Teacher-centred lectures (20%), simulations (46%) and distance learning (10%) were the least preferred methods. It is noteworthy that nurse educators, managers and FNPs do not favour that distance education. The reason for this may be that nurse managers and educators are not familiar with this concept. It is important to note that adult learners with diverse backgrounds are capable of identifying their own learning needs.

5.4.2.9 Health problems encountered by FNPs

In item 9, nurse managers and educators were asked to identify types of health problems

that FNPs most frequently provide care for. Responses for this question are reported verbatim.

Respondent 1: For all uncomplicated conditions and all investigations needed before patients are referred.

Respondent 2: All types of health problems found in Swaziland.

Respondent 3: Common colds, diarrhoeas, skin conditions, sexually transmitted infections, chronic diseases like diabetes, hypertension, congestive cardiac failure and acute respiratory infections.

Respondent 4: Minor ailments and injuries.

Respondent 5: Acute and chronic diseases.

Respondent 6: Current health problems.

Respondent 7: Maternal child health and family planning prevalent diseases.

Respondent 8: Minor ailments and upper respiratory infections.

Respondent 9: Minor ailments and injuries and management of certain clinics e.g. diabetic clinic.

Respondent 10: Common health problems and then refer as need arise.

Respondent 11: Minor ailments such as tonsillitis.

These findings indicate that FNPs encounter common, minor, acute and chronic health problems prevalent in Swaziland. The common health problems across the life span provide course content and learning experiences for learners. Examples of such problems include diabetes, maternal child and family planning, upper respiratory infections, HIV/AIDS, tuberculosis, and others.

Objective 5: To identify the barriers and enabling factors in the practice and education of family nurse practitioners.

5.4.2.10 Motivators of FNPs as perceived by nurse managers and educators

Item 10 of the nurse managers and educators' questionnaire requested respondents to identify what motivates FNPs. The results from this item will be reported verbatim, as follows:

Respondent 1: Good referral system.

In-service education/continuing education.

Good conditions of service.

Good packages.

Respondent 2: Good working conditions.

Continuing education.

Better salary/pay.

Respondent 3: Attractive salary.

Job satisfaction of being important.

Recognition of the FNP role.

Respondent 4: New diseases.

New information update and sophistication of clientele.

Respondent 5: Nothing. When this course was first established it was said that these nurses will be able to work efficiently where there is no doctor, but how can this be if there are no workshops, or refresher courses for these nurses. There is a need for a forum for FNPs to discuss their issues and to network.

Respondent 6: Being able to provide needed services when there is no doctor.

Respondent 7: A self drive to care for the sick and disabled. There is need to train more FNPs because their need is great especially in the rural areas where most nurses do not want to go. These nurses should be given incentives for

working in these hardship areas

Respondent 8: Recognition in salary grade.

Independence in case management and prescription of drugs.

A policy to protect them in functioning in an expanded role is important for recognition by the public.

Respondent 9: Allowance for extra qualification.

Respondent 10: Nurses are first line health providers and are sometimes the sole health provider with little or no other professional support or backing.

Respondent 11: Recognition particularly financial and upgrading of the FNP course to degree.

These results shows that these respondents regard good working conditions, including better salaries, a good referral system, provision of CE, good policies, recognition, support and autonomy as motivators for the FNPs. In addition, they feel that FNPs need a legal instrument to protect them in functioning in an expanded role.

5.4.2.11 Strengths and successes of FNPs as perceived by nurse managers and educators

Item 11 requested respondents to identify strengths and successes of the FNPs. The answers are reported verbatim, as follows:

Respondent 1: They have acquired skills to maintain life in the absence of a doctor

Ability to diagnose using a stethoscope and laboratory tests and prescribe drugs and know when to transfer to a doctor.

Respondent 2: Working with minimal supervision.

Accessible to clients all the time.

Respondent 3: Have been seen as experts by other nurses. Manage most of the conditions

in outpatients department.

Respondent 4: Diagnostic skills are their greatest strength.

Respondent 5: Provision better and timely patient coverage.

Respondent 6: Being able to educate, diagnose and treat common health problems.

Respondent 7: Increased client attendance, assess, prescribe, implement and evaluate care.

Increased financial benefit for those who can start up their own clinics.

Respondent 8: Being able to triage in the outpatients department so that they can easily prioritise the care given.

Respondent 9: Being able to document findings and care in a problem-solving manner using the nursing process.

Respondent 10: Ability to give more or less precise diagnosis and relevant treatment.

Respondent 11: They are the first points of entry to the client.

They have acquired leadership, diagnostic and treatment skills.

It is noted that FNPs were said to be providing quality care using assessing, diagnosing, management and referral of clients, with very minimal supervision (autonomy). This was identified by 6 of the respondents. Other areas of success mentioned were leadership and management skills (n=3) including problem solving skills and effective documentation. Some of the other strengths mentioned, such as triage and teaching, were not grouped although they are of equal importance.

5.4.2.12 FNPs' problems or frustrations

Responses to item 12, which requested to respondents to identify FNPs' problems and frustrations, are reported verbatim, as follows:

Respondent 1: Poor salary, long working hours, no medical support or backup shortage of manpower resulting in their over stretching.

Respondent 2: Lack of support system with regard to:

- Transport for referral, personnel, backup, good working environment, inefficient communication, system, and lack of legal protection for prescription of drugs. The nursing Act does not provide such legal protection.
- Equipment, materials and supplies.
- Lack of support from medical doctors.

Respondent 3: Lack of recognition and acknowledgement.

Low salaries and fringe benefits.

If they are inadequately prepared lack of continuing education on new trends in nursing and health reforms.

Respondent 4: Limitations due to equipment, drugs and lack of opportunities for updating knowledge and skills.

Respondent 5: Not recognised fully by the system role confusion.

Respondent 6: Lack of resources.

Respondent 7: Lack of finance to purchase requisite drugs and required equipment.

Respondent 8: Lack of recognition by public/clients.

Rejection of FNPs prescriptions by pharmacy department.

Lack of medical protection and support in medical legal incidences.

Lack of legal protection in case management.

Inadequate numbers of role models in the clinical areas.

Respondent 9: Not paid for extra qualification.

Some opposition by some doctors in case management.

Unavailability of some equipment.

Respondent 10: Role conflict. Sometimes they want to diagnose and leave other patient

management to non-nurse practitioners, which makes their care not to be holistic.

Respondent 11: Lack of support and finance/pay.

These responses can be placed in five main categories. Conditions of service, resources, lack of recognition and support, and lack of legislation.

(1) Conditions of service:

- poor salaries.
- shortage of staff.
- long working hours.
- family nurse practitioners not paid for extra qualifications.

The shortage of nurses including FNPs has remained a problem in Swaziland for quite some time. This problem is complicated by a serious maldistribution of health personnel in general. FNPs are mostly deployed in the remote areas where few other health personnel, including doctors, are deployed. Often there is no appropriate incentive or career scheme that would stimulate health personnel to work where they are most needed. There is a need to develop and implement consistent human resource policies and plans that are responsive to the needs of the people of Swaziland, where 85% of the population lives in the rural areas. This is therefore where there should be a concentration of health personnel, and where the bulk of resources should be apportioned.

(2) Resources:

- lack of equipment and supplies.
- lack of finance to purchase drugs and equipment.
- lack of transport for referrals and home visits.

All of these constraints make the work of the FNP extremely difficult. A large proportion of resources for the delivery of health care is concentrated in the urban areas, where most of the health workers are but where few of the people are. These resources are devoted to expensive, highly sophisticated technology, unduly emphasising one element of care (curative).

(3) Lack of recognition and support

- by doctors.
- by clients.
- by pharmacists.

The role of the FNP needs to be communicated to other health care workers. Family nurse practitioners need forums where roles and issues that relate to their practice can be debated and discussed. Family nurse practitioners also need to become active in community development projects, as these will have a direct bearing on how the clients and communities view them. This type of participation could enhance their role and bring them recognition.

(4) Lack of continuing education

- on updating knowledge and skills.
- on new treatment regimes.
- on health sector reforms.

From these results, it is clear that it is not enough to educate these nurses for a year and then send them back to their work settings. Most of their skills, especially those related to clinical practice, deteriorate over time as new diseases emerge and new treatment regimes have to be learnt and applied in the care of clients. During training it is important to stress the need for life-long learning, and structures have to be put in place that will facilitate continued learning.

(5) Lack of legal instrument

- for role clarification.
- for prescription of drugs.
- for lack of continuing education.

A FNP is a nurse who is supposed to be working with minimal supervision and be fully accountable of his/her actions. In considering the role of the FNP the guiding principles should be the scope of practice and code of professional practice. There is, however, no formal description of scope of practice for FNPs in Swaziland. According to Dimond (Ford and Walsh 1994:154), the legal principle is that a nurse should only work within his or her level of

competence and skill unless in a dire emergency, and should at all times take reasonable care and precautions. The FNP then should be accountable to the professional code of conduct, the law, to the employer in addition to being accountable to herself or himself. This instrument is long overdue in Swaziland and efforts should be made to speed up the process.

5.5 Comparison of the two sets of questionnaires

In this section, the results of the two questionnaires were examined, compared and related to the objectives of the study. The questions in the questionnaires and the demographic data are arranged so as to facilitate a comparison of results. The relevant objectives for this section are 2,4 and 5.

5.5.1 Role, need and issues relevant to the practice of FNPs (objective 2)

The following questions attempted to elicit responses to meet objective 2.

5.5.1.1 Questions from FNPs questionnaire

- What do you consider to be the role and function of the FNP?
- Were you adequately prepared for the following functions?
    - clinical practice
    - health education
    - counselling
    - leadership
    - management
    - research
    - referral
    - collaboration
    - education/teaching
    - home visiting?

- Do you consider that your FNP education is relevant to your current work practice?
- Do you think there is need for a formal structured CE programme for FNPs?
- Choose the interval between which you think you should attend CE.

5.5.1.2 Corresponding questions from the nurse managers' and nurse educators' questionnaires

- What do you consider as the role/function of the FNP?
- Did the training of the FNPs prepare them for the following?
    - clinical Practice
    - health education
    - counselling
    - leadership
    - management
    - collaboration
    - referral
    - research
    - student/auxiliary teaching
- Do you think the preparation of FNPs is adequate for the expanded role and function?
- Do you think there is need for a formal, structured, in-service CE programme?
- How often do you think FNPs should attend CE offerings?

1. With regard to the role and function of the FNP, respondents rated clinical practice (98%), health education and counselling (93%), referral (88%) and collaboration and management (81%) as the most important components. Although most of them seem to be involved in the above-mentioned functions it is apparent that the other roles, such as, research, advocacy, teaching/education, leadership and home visiting were regarded as important parts of their role.

The responses given by the FNPs revealed the actual roles they fulfil in their work settings, while the responses of the nurse managers and educators relate to the expected roles of FNPs. Comparison of the two shows that the expectations of nurse managers and educators are higher than the actual performance of the roles as perceived by FNPs. The fact that the working circumstances vary depending on where they are deployed and that not all the roles and functions are required from all FNPs (see 5.4.1.4 and 5.4.1.5) may explain the differences.

6. On the level of preparedness, most of the FNP respondents (95%) and all of the nurse managers and nurse educators felt that FNPs were well prepared for the role of referrals. Similarly, 91% of the FNPs and all the nurse managers and educators felt that the training for clinical practice was adequate. On health education 91% of both sets of respondents rated the preparedness as adequate. Only 37% of FNPs and 36% of the nurse managers and educators considered that FNPs were adequately prepared for the research function.

The high level of preparedness for clinical practice, health education and referral is an indication that FNPs devote most of their time to these areas and spend less time in the activities for which they were regarded as inadequately prepared. Because of the lack of formal, structured CE, practising FNPs may very well forget the skills for these roles. The lack of expertise and confidence in performing all the expected roles makes the FNPs hesitant about calling these their roles or even claiming that they were adequately prepared. Workload may also be a barrier to performing some of the roles as expected. When the responses of the FNPs are compared with those of the nurse managers and nurse educators (See tables 5.5 and 5.17) it becomes clear that there are differences on education/teaching practice, where 54% of the FNPs felt adequately prepared and only 36% of the managers and educators felt these nurses were prepared for this role. These findings have implications for CE on counselling, leadership, management, teaching and research. Although clinical practice does not seem to be a priority for CE, there may be a

need to update knowledge and skills because of the emerging illnesses and treatment regimes (See 5.4.1.5 and 5.4.2.3).

3. On relevance to current practice, 86% of the FNP respondents felt that their preparation was relevant to current practice. However, they expressed a need for refresher courses and in-service education. Other limitations, which impinged on their practice, were shortages of drugs, equipment and supplies. Most of those who felt their practice was not relevant were practising in other roles as administrators or educators.

Only 45% (n=5) of the nurse managers and educator respondents felt the FNP training was relevant to their practice. This contrasts with the views of the FNPs reported above. The majority of nurse managers and educators 73% (n=8) felt that FNPs need refresher courses to update them on new technology and skills. It is important that FNPs as adults are taught information that they will use. Future programmes should be based on the needs of the learners and on society's needs (See 5.4.1.6 and 5.4.2.5).

4. On the need for CE, 96% (n=55) of the FNPs saw a need for a formal, structured CE programme. The nurse managers and nurse educators had a similar view: 91% (n=10) of the respondents felt there was such a need. Although CE is not mandatory in Swaziland, nurses feel they need to keep updated on current trends and new developments regarding technology and treatment regimes (see 5.4.1.7 and 5.4.2.5)

The nurse managers and educators felt that this programme should be non-mandatory but should have a budget and its own personnel (see 5.4.1.8 and 5.4.1.7). On frequency of attendance, the majority of respondents (more than 44%) felt FNPs should attend CE more frequently. These results are in agreement because the majority of FNPs (43.9%) said they should attend once a year (see table 5.6), while nurse managers and educators felt that FNPs should have continuing education at least once a year and as necessary when there are new developments (see 5.4.1.8 and

5.4.2.4.)

5.5.2 Content and Mode of Teaching (Objective 4)

The following questions attempted to elicit responses to meet objective 4.

5.5.2.1 Questions from FNPs' questionnaire

- Rate the common health problems you encounter in your health setting.
- Rank the most preferred method for presentation of CE programme.

5.5.2.2 Corresponding questions from nurse managers' and educators questionnaire

- For what types of health problems the FNP frequently, provide care for?
- What methods of presentation would you prefer when conducting a CE programme?

1. Respiratory diseases were found to be the leading cause of morbidity, followed by diarrhoeal infections. The least commonly encountered problems were mental health (30%) and nutritional diseases (40%). Most FNPs work in clinics, while mental health problems are usually managed at the National Psychiatric Centre. The national statistics confirm this trend.

Some of the nurse manager and educator respondents identified the same problems mentioned by the FNPs. Common problems identified included tuberculosis, respiratory infections, diarrhoeal diseases, sexually transmitted infections, maternal child health and family planning. These health problems should be taken into account when designing CE programmes and reviewing a curriculum for the FNPs. (See 5.4.1.9 and 5.4.2.9).

2. Workshops, case studies and discussions were the most preferred teaching learning strategies identified by the majority of respondents to the two sets of questionnaires. Two FNP respondents, however, rated learning packages as their most preferred method since they could not attend workshops due to work and other commitments. FNPs, as adult learners, prefer teaching-learning strategies that can help solve their work-related problems.

It is noted that because of the needs of adult learners, nurse educators have to be trained

to facilitate the education of these learners (see 5.4.1.3 and 5.4.2.8)

5.5.3 Barriers and enabling factors in the practice and education of FNPs (objective 5)

5.5.3.1 Questions from FNPs questionnaire

- Identify your successes or achievements.
- Identify problems or frustrations in your work setting.

5.5.3.2 Corresponding questions from the nurse managers' and nurse educators' questionnaire

- What do you identify as family nurse practitioners strengths or successes?
- What do you identify as family nurse practitioners problems or frustrations?

1. On the successes and achievement of FNPs, confidence in their work received a high ranking from 76% (N=57) of the respondents. This was followed by professional growth by (69% n=57) and better knowledge and skills at (58% n=57). These results show that professional achievement was the success most readily identified by the FNP respondents. Only 7% of the respondents identified salary as an achievement, showing that very few of the FNP respondents feel they can measure their success in monetary terms.

The nurse managers and educators also identified areas of achievements related to what they see as the role of the FNP. These were mostly related to the clinical role, where 6 of the respondents identified this as a success or achievement. Three of these respondents felt that their leadership and management roles were successes of FNPs. These results have implications for the employers, nurse managers and nurse educators. (See 5.4.1.10 and 5.4.2.11).

2. With regard to problems and frustrations, lack of CE was rated highly by 79% of the respondents, followed by shortage of staff (77%). Other problems were also rated highly by a good number of the respondents, for instance inadequate equipment (70%), low salaries (67%)

and inadequate supplies (60%) and lack of security (61%). The above results show that FNPs are experiencing a lot of problems and frustrations, which have a bearing on their practice. Nurse managers and nurse educators identified similar problems that are a hindrance to the FNP practice. Among the problems mentioned by nurse managers were lack of resources, low salaries and shortage of staff. (See 5.4.1.10 and 5.4.2.12)

5.6 Conclusion

In this chapter, the research methodology was described and the data analysis of the two questionnaires was presented. The CE needs identified and relevant issues pertaining to the FNPs were discussed so that the results could be used to design a CE programme for FNPs based on these needs.

In chapter 6 a summary of findings, conclusions, limitations and recommendations will be discussed.

CHAPTER 6

SUMMARY, FINDINGS, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 Summary

In this chapter, the research questions are answered by summarising the most significant findings and conclusions from the survey and the focus group discussions. Limitations identified during the study are presented, implications for further research are discussed and recommendations for quality improvement in family nurse practice, education and support of FNPs in their work settings are made.

The aim of the study was to explore the CE needs and issues of FNPs so that a CE programme could be proposed or designed, based on the findings. Knowledge of the learning needs of FNPs is useful to nurse educators and nurse managers to facilitate planning, designing, implementation and evaluation of CE programmes. It is necessary to have a wide knowledge of and insight into the learning needs of FNPs in order to understand the uniqueness of these learners.

To achieve this aim a postal survey by means of questionnaires was undertaken. In addition, focus group discussions were conducted in order to complement findings from the survey. A combination of quantitative and qualitative approaches was used in an attempt to expand and elucidate the understanding of the role and issues of FNPs. It has been acknowledged that both paradigms have inherent weaknesses, which to a certain extent could be compensated for by the strengths of the other. The strength of quantitative methods is that they produce facts about data that can be generalised to a larger population. On the other hand, qualitative methods allow the researcher to gain an in-depth understanding of the phenomena being studied.

Significant findings of both qualitative and quantitative methods are summarised in relation to the objectives of the study.

6.2 Findings and conclusions

Objective 1: To identify the characteristics (demographics, motivators, and preferred methods of learning) of practising FNPs registered with the Swaziland Nursing Council.

6.2.1 Demographics

A comparison of the characteristics revealed no statistical significance between the variables tested. The results do, however, demonstrate a statistical correlation between preparedness for management and age. Participants who were 46 years and older were more likely to be prepared for management than the younger group.

The results show that 70% of the FNPs surveyed were over 55 years of age. Since the voluntary retirement age in Swaziland is 55, this suggests that there may well be a need to replace a fair number of FNPs. The additional training that this would involve holds implications for the provision of CE and academic programmes.

The number of years in practice extended from less than a year to over 10 years. The length of preparation, as a characteristic of the academic profile of FNPs, ranged between 9 and 18 months for the diploma and certificate and over 18 months for a university degree. These findings indicate that FNPs are a heterogeneous group of adult learners with vast experience and expertise (see 5.4.1.1).

The number of years in practice did not demonstrate any statistical correlation with the tested variables. However, leadership was influenced by the preparation of FNPs. There was some evidence (P=0.051) that diploma FNPs are more likely to be prepared for leadership than certificate FNPs. Because there was only one FNP with a university degree, no comparison could be made in this respect.

6.2.2 Motivating factors

The response rate in this survey was above average, indicating a definite interest in CE. The FNPs involved in the study were grateful that someone showed an interest in looking into their needs and issues. The respondents were motivated to attend CE for their professional development and to keep abreast of developments in their field (see 5.4.1.2).

Since this study was guided by the principles of the adult learning theory discussed in chapter1, adult learning principles would be incorporated in the teaching/learning situation. Facilitators of adult learners should take cognisance that FNPs as adult learners bring their own experiences, needs, confidence, fears, self-perception and physiological conditions to the learning environment (see 5.4.1.3).

6.2.3 Preferred teaching/learning Methods

The participants in this study preferred a variety of teaching/learning methods. The most preferred learning methods were workshops and discussions.

Two respondents gave learning packages a high rating since they could not attend workshops due to their clinic work and other commitments. Sherperd (1995:69), in his study on training needs, found that distance learning in nursing was not identified by other groups of practitioners as a preferred single style. One of the reasons for this was, he found, that many of the respondents had not experienced this type of learning and therefore could not judge its worth. This could be equally true of the respondents in this study.

As adults, FNPs are the best judges of their learning needs; they were thus able to diagnose their own learning needs and decide on how these needs can be met. It is the researchers' opinion that distance learning was not popular with FNPs because of their previous encounter with traditional methods that involved a structured classroom learning approach. In addition, distance learning is a new approach for learners and educators in Swaziland (see 5.4.1.3).

Family nurse practitioners are a heterogeneous group of adult learners educated at post-basic level, working in a variety of health care settings. For FNPs to attend CE offerings, the foremost requirement is better staffing in their work settings. In addition, they should receive advance notification of courses. Retirement, deployment and promotion of FNPs in the PHC services have created a need for continuous training of FNPs.

Objective 2: To assess and examine the perceptions of FNPs, nurse managers and educators of the FNPs' role, their CE needs and the issues relevant to their current and future professional development.

Objective 3: To identify nurse managers' and nurse educators' perceptions of FNPs' developmental issues and learning needs.

6.2.4 Roles and CE needs

The findings from both the focus groups and the survey demonstrate that FNPs, nurse managers and nurse educators are of the same opinion about the role of the FNP. The FNP is seen as a clinical practitioner, educator, leader, manager and researcher. Responses from FNPs, managers and educators in this study clearly identify the deficiencies in the training for the role of the FNP. However, in the focus group, respondents felt FNPs were expected to function as "jacks-of-all-trades", and that some of the roles and functions of FNPs were neglected, such as those of research and education. The focus groups saw the FNP as a PHC practitioner. The role was more associated with PHC elements. The results have implications for the need for CE on issues related to the educational gaps and needs of FNPs (see 4.7 and 5.4.1.4).

These results suggest that the majority of respondents identified all the constructs (see table 5.4) as being part of the role or functions of the FNP. However, some respondents did not think this was the case. Possible reasons for this thinking could be:

1. The respondents may not be practising in that role.
2. The role of the FNP was not clarified or emphasised during pre-service training.

3. The scope of practice has not delineated the role of the FNP.

4. The FNP job description is not specific as to role.

5. The organisational structure does not clearly show the position of the FNP.

Nurse managers and educators did not identify problems with preparedness for clinical practice. This finding is an indication that FNPs were perceived as well prepared to assess, diagnose and manage their clients' health problems. On the other hand, some FNPs felt inadequately prepared for this role because of the absence of updates on knowledge and skills (see 4.7.1.1 and 5.4.1.5).

The findings from the focus groups, FNPs, and nurse managers and educators identified inadequacies in the preparation for the teaching/education role of FNP practice. These findings have curriculum implications, so that FNPs are adequately prepared to teach and supervise students, clients and other health care workers (see 4.7.2 and 5.4.1.5).

The data analysis showed that respondents over the age of 46 were more likely than other groups to feel prepared for the leadership and management role. Work experience was thus associated with adequacy in leadership and management. Nurse managers and educators, on the other hand, identified limitations in FNPs' preparedness for this role of the FNP. Note that the focus groups did not discuss leadership and management (see 4.7.4 and 5.4.1.5).

In all three assessments (focus groups, FNPs and nurse managers and educators), health education appeared as a very strong component of FNPs' role and functions. There was agreement that health education was directed at patients (see 4.7.2.1 and 5.4.1.5).

Although counselling was seen as a role of FNPs, it appeared that they were not adequately prepared for this role. In addition, FNPs, nurse managers and educators, and focus groups all identified counselling skills as lacking among FNPs. Providers of CE programmes are thus challenged to provide opportunities for these nurses to acquire counselling skills in order to interact therapeutically with clients (see 4.7.2.2 and 5.4.1.5).

Family nurse practitioners, nurse managers and educators agreed that the training of FNPs did not adequately prepare them for the research role. The results from the focus groups also indicated that research skills were lacking (see 4.7.3 and 5.4.1.5).

Family nurse practitioners, nurse managers and educators felt FNPs were adequately prepared for the collaboration function (see 4.7.1.4 and 5.4.1.5). These respondents also felt FNPs were adequately prepared to deal with referrals. However, it was felt that FNPs lacked guidelines on how to refer their clients to other health care providers (see 4.10.1.3 and 5.4.1.5).

Family nurse practitioners felt they were adequately prepared for home visiting but indicated that hospital assignments did not provide for home visiting. In the clinics, they felt they needed skills in community-based care, and some felt they were too busy with clinic work to carry out home visits (see 4.7.1.5 and 5.4.1.5).

The FNPs felt advocacy was an expected function of the FNP, but they were not asked about preparedness for this. Nurse managers and educators were not asked about the advocacy function, nor was it discussed in the focus groups (see 5.4.1.5).

6.2.5 Need for structured Continuing Education

The need for structured CE was clearly identified as important by all participants. One of the most encouraging aspects was the endorsement of the need for CE by both the focus groups and participants in the survey. Respondents felt that the nursing department of the university should present a structured CE programme and that the necessary resources, such as staff and budget, should be made available (see 4.9.1 and 5.4.1.8).

The respondents to topics and items relating to objectives 2 and 3 identified no relationships between role/function and preparedness in the training of FNPs. There is a need for a formal, structured, systematic CE programme that will address the areas that were found

lacking. Respondents were in accord with regard to inadequacies in training on leadership and management, teaching, research, counselling and communication.

Objective 4: To identify the content of a CE programme for FNPs and select an appropriate mode of teaching.

6.2.6 Content

The findings of the focus groups as well as the survey indicate that the current programme is in urgent need of upgrading and updating to meet the identified learning needs of FNPs. Clearly, the FNPs who responded to the study wanted educational inputs in a variety of content areas associated with their role. Clinical practice skills, research skills, education skills, management and leadership skills, counselling and negotiation skills were among the content areas they felt should be dealt with in CE programmes. Other areas that needed special and priority attention were counselling, HIV/AIDS, tuberculosis, legal aspects of nursing practice, emergency care, communication and home-based care (see 4.9.4 and 5.4.1.9 and Table 5.8).

6.2.7 Mode of teaching

The most preferred learning methods were case studies, role-play, demonstrations, and lecture/discussions. Participants who could not be relieved from work expressed a preference for distance learning or learning packages and modules (see 5.4.1.3).

The data from this survey suggest that FNPs need to be updated and upgraded on content relating to functions that should be part of their role. The nurse educators should be well versed in the specific needs of FNPs and should apply adult learning principles in their teaching. The educators may not be comfortable or familiar with how to go about teaching and preparing learning materials. Strategies such as hands–on experience (practical), immediate feedback, non-threatening environment, learner planning and evaluation should be

incorporated in teaching adults. The educators should take into account the learning needs of the FNPs identified in the study so that these are included in the curriculum.

6.3 Barriers and enabling factors

Objective 5: To identify the barriers and enabling factors in the practice and education of FNPs.

6.3.1 Enabling factors

The analysis of data obtained from both the survey and the focus group interviews showed similar findings regarding enabling factors. These findings were grouped into themes as follows:

- FNPs have expertise in their work using both medical and nursing skills.
- They collaborate and share information with colleagues.
- They ease the work of the medical doctor in outpatient departments and know when to refer.
- They are accessible to their clients, offering twenty-four hour service.
- They can do follow-ups for their clients.
- They have confidence in their work.

(See 4.8.2 and 5.4.1.10.)

6.3.2 Barriers and constraints

The FNPs', nurse managers' and nurse educators' responses, together with responses from the focus groups, identified several barriers to role development and effective practice. Due to lack of correlation between theory and practice, nurse managers and medical doctors have at present a limited knowledge of the exact content and idea behind the FNP programme and concept, thus there is lack of support and recognition for the role.

The treatment protocols in the clinics for use by FNPs for the management of common health problems are outdated. This problem is compounded by minimal or non-

existent clinic supervision, lack of standards of practice for FNPs and lack of CE to update nurse practitioners on current practice.

Other barriers identified were shortage of staff, and lack of legislation to enable FNPs to perform clinical activities that are within the expanded role. These findings are similar to those of Sullivan in her study on barriers to role development (Hupcey 1993:182), which included legal issues, lack of space, facilities and resistance from other health care providers. In Sullivan's study, nurse practitioners stated that the presence or absence of support from either co-workers or superiors (physicians, nurse practitioners, nurse administrators and other staff members) was the overwhelming factor influencing nurse practitioner performance. Briggs (1990:32) gives some suggestions on how the nurse practitioner's role can be promoted:

1. Publish articles in consumer magazines to enlighten the public.
2. Encourage nurses to become more involved in politics.
3. Promote the participation of nurse practitioner speakers at medical conventions.
4. Encourage physicians who are supportive of nurse practitioners to be active in enlightening other physicians.

The notion that there is a shift away from nursing to medicine must be replaced with an understanding that the nurse practitioner is applying nursing theory to traditional nursing care, enhanced by additional skills to **complement**, not to replace, a holistic approach to nursing (see 4.10 and 5.4.1.11).

Enabling factors and barriers were identified. Enabling factors identified were those that could facilitate an effective CE programme and improved services, such as a budget for a structured CE programme, improved working conditions and increased staffing levels. Barriers identified were deterrents in the provision of quality PHC, and included lack of resources and insufficient legal documentation for practising as FNPs.

There is a need to develop and implement set guidelines for standards of care that are responsive to the needs of the people of Swaziland to minimise the barriers and constraints identified by the study. In addition, employers should revisit the conditions of service of FNPs. There is definitely a need for a legal scope of practice for FNPs that defines the expanded role.

6.3 A profile of the FNP in Swaziland

The following profile is based on the data analysis (see chapters 4 and 5) and the findings of this study (see 6.2).

Table 6.1 A profile of the FNP in Swaziland

Characteristics	- Diversity
	- Independent and autonomous
	- Self-directed
	- Experienced
	- Expert
	- Concerned with problem solving
Roles	- Clinical practitioner
	- Educator
	- Researcher
	- Leader and manager
Needs	- Structured continuing education
	- Supervision and support
	- Career development
	- Advanced training
	- Legislation of role
	- Recognition
	- Role definition
	- Advanced practice knowledge and skills
Enabling factors	- Policy
	- Budget for continuing education
	- Increased staffing
	- Learner needs addressed
	- Good conditions of service
Barriers/frustrations	- No structured continuing education
	- Inadequate resources
	- Lack of supervision and support
	- Lack of recognition
	- Lack of legal protection
	- Poor conditions of service
	- Role conflict
Expectations	- Clients
	- Co-workers
	- Employer

Education and training institutions would need to address the problems and issues reflected in this current profile (see table 6.1) of the FNP in Swaziland to enable future FNPs to execute their duties efficiently and effectively. This profile will be used to plan, implement and evaluate future CE programmes for FNPs.

6.5 Limitations of the study

- The response rate was acceptable for surveys, but the findings cannot be generalised to other populations.
- Reliability – the instrument was developed by the researcher; it was used for the first time in this study; and it was not based on any assessment tools that have been recommended.
- Validity – reliance on a self-administered questionnaire may have reduced the validity of the data.
- The researcher's experience in dealing with unclear responses influenced the grouping of the themes.
- There is a need for replication of the study using larger samples, for example using participants from Botswana and Lesotho who have a similar programme.
- Another limitation was that it would have clarified many issues if clients (whose care we are talking about) and doctors (whose role is involved) were included in the study so that their perception of the FNP concept could be elicited.
- The qualitative research study (focus groups) used subjective human experience in the collection of data. There was some potential for interviewer bias due to the similarity between the researcher and the participants.

6.6 Recommendations

6.6.1 Recommendations with regard to clinical practice

1. The FNPs should be fully utilised in under-served areas such as clinics and health centres, and should be introduced in hospitals to work in emergency care units and medical and surgical units. The needs and role (clearly defined) should be confirmed by means of a needs assessment, and proper guidelines, job description and standards of practice should be developed (see 4.9.4, 4.11 and 5.4.1.10).
2. Legislation of the role should be a priority. Legislators must be made aware of the problems FNPs face when giving care and must write laws validating the expanded role of the FNPs. There should be negotiation with the regulatory bodies to ensure autonomy within the FNP scope of practice, diagnosing and prescribing privileges. The present Nurses and Midwives Act should be amended (see 4.10.2, and 5.4.2.12).
3. FNPs' conditions of service should be improved and incentives should be awarded for the extra qualification. The qualifications of the FNP should be recognised and rewarded by appropriate salaries or promotions (see 4.9.3 and 5.4.2.12).
4. The FNP should be provided with adequate resources (staff, equipment, supplies, drugs and transport) to execute her duties effectively (see 4.10.1.1 and 5.4.2.12).
5. FNPs should be employed according to their qualifications. The employer should develop precise guidelines not only for those FNPs working in clinics, but also for those working in hospitals, to ensure that they are utilised according to their qualifications (see 5.4.2.12).

6.6.2 Recommendations with regard to education

6. There should be a debate on what is appropriately included in the FNP role. The goals and activities of the FNP programme should be developed through appropriate informative activity. This should take place in multi-disciplinary settings (see 4.10).

7. Management knowledge and skills should be emphasised in the preparation of FNPs because they are deployed to supervise in health centres and clinics, and to make decisions for running health services and client care (see 4.7.4 and 5.4.1.10).

8. In designing a FNP curriculum, attention should be paid to the changing role of FNPs as autonomous health care professionals capable of assessing, planning, managing, supervising, teaching and researching in their areas of practice (see 4.7, 5.4.1.10 and Table 5.18).

9. In addition to running CE courses for these nurses, the University of Swaziland should also institute a degree programme for FNPs, and should train more FNPs since a shortage of these nurses has been identified. The present diploma FNP programme should be upgraded to the level of a first degree. Higher education for these nurses will introduce better analytical and negotiation skills into the profession and could thus lead to further recognition of the nursing profession (see 4.9.4 and 5.4.2.2).

10. There should be partnership between service and education. This is important so that the nurse educators prepare FNPs who are able to provide the care that is needed by clients and wanted by the service organisation, as well as meeting the needs of the learners. This will also increase awareness among nurses, doctors, administrators and other health care workers of the goals and activities of the FNP programme. The role of the FNP will become recognised and known (see 4.9.5).

11. The research suggests that FNPs should be involved in the planning, implementation and evaluation of CE programmes (see 7.2.3.1).

12. Representatives from all groups associated with CE should be involved in planning a policy statement so as to ensure that everyone involved in approving, implementing, using, financing and sustaining the system agrees upon the goals and functions of CE programmes (see 7.2.3.1).

6.6.3 Recommendations with regard to future research

1. There should be comprehensive evaluation of the FNP programme so as to measure the impact of the programme on quality health care. Evaluation should be done to measure the impact of the programme on the service as well as on FNPs.
2. A need assessment of the nurse educators teaching in the FNP programme should be carried out to identify their CE needs. This will help to define the relationship between the preparedness of educators and the deficiencies in the FNP programme.
3. Research should be done to find out how many FNPs are needed for current and future practice.

The findings of this study challenge the University of Swaziland, its Faculty of Health Sciences, other nurse training institutions, the MOH&SW and professional nurses associations to create a system of CE for nurses. The information generated by this study, although limited to FNPs, may be beneficial to other nurses and health care professionals in beginning the process of understanding, designing and developing systematic, structured CE programmes.

6.7 Final Comments

An outstanding strength of the study was the willingness of the respondents to participate. The use of a triangulation approach enabled extensive data collection, which led to comprehensive analysis. From this study, the characteristics of the FNPs emerged. Roles and functions of the FNPs were examined and could be summed up as clinical practitioner, educator, manager, leader and researcher. The needs, enabling factors, barriers and expectations of the FNPs were identified. These can be used to assess, plan, implement and evaluate CE programmes of FNPs and to improve their working conditions and the care they give their patients.

The findings have confirmed the need for a structured CE programme for FNPs. The analysis has shown that for the programme to be successfully implemented and meaningful to the FNPs, their needs have to be addressed. The major stakeholders have to be involved in the planning of CE programmes. It was also strongly suggested that there should be financial commitment to the programmes so that they can be sustained. The data reveal a need for the curriculum content of FNP education to be related to the role and functions of FNPs, common health problems, emerging health problems and current developments in health care. This education should be provided through experiential learning approaches. Enabling factors and barriers, although perceived as issues that are peripheral and auxiliary to the curriculum content, have a strong bearing on programme planning, implementation and evaluation and should therefore be addressed.

6.8 Conclusion

In this chapter the summary of findings, conclusions, limitations and recommendations were discussed. In chapter 7, a model of a CE programme for FNPs is presented.

Characteristics of such a CE system should be the following:

- It is integrated with the health and education systems of Swaziland.
- A department is established with allocation of funds and properly accredited personnel.
- It is fully co-ordinated by nurses or health professionals with advanced degrees in health or nursing who are able to assess, plan implement and evaluate CE programmes.
- It provides relevant programmes based on needs assessment at national, regional and local levels.
- It is planned in such a way as to maintain, extend and improve competence and performance and therefore improve the quality of care.

CHAPTER 7

A FRAMEWORK FOR A CONTINUING EDUCATION PROGRAMME FOR FAMILY NURSE PRACTITIONERS

7.1 Introduction

The main aim of this study was to develop a framework for a continuing education (CE) programme for the Family Nurse Practitioner (FNP) in Swaziland. FNPs are in the frontline of the battle to create an environment for quality, primary health care (PHC). According to the research participants, FNPs work under the most difficult conditions and are sometimes not well prepared or supported for the tasks that they must undertake (see 4.10.1). The training of FNPs must prepare them to be able to execute the functions identified as part of their role. There has been a shift from total dependence on medical doctors for health care to a more autonomous position for FNPs, but this requires new knowledge, skills, attitudes and behaviours.

The rapid social and economic changes that took place during the latter part of the twentieth century have placed added burdens on many social institutions. These institutions have increased in sheer size and have expanded considerably in diversity, while at the same time their goals have been constantly shifting. Educational institutions are a case in point, where a gap is perceived between what they do and what they ought to do. Educators everywhere feel the pressure to improve their organisations through better planning, monitoring and control. Meanwhile, the public demands that health institutions become more responsive to social and economic goals, and alternatives to these institutions are being proposed . Major efforts to cope with these relatively recent demands and problems have created the need for a number of quantitative and qualitative techniques on the one hand and control and monitoring on the other.

Continuing education is an important instrument for meeting the changes and demands in the health care delivery system.

This chapter focuses on the realisation of the last objective of this study, namely to design a framework (figure 7.1) for a CE programme for FNPs.

The following framework for a CE programme for FNPs in Swaziland illustrates a systematic approach to a CE programme, as mentioned in 2.3.6. Five phases are mentioned namely assessment, planning implementation monitoring and evaluation. This study covered the analysis/needs assessment phase. All the steps in this framework will, however, be described briefly to guide planners to ascertain that thorough consideration is given to all aspects of a continuing programme.

7.2 Framework for CE for FNPs

This study aims at designing a framework for a CE programme for FNPs in Swaziland. According to Puetz (1987:21). regardless of the structure of the organisation, the process of providing CE in nursing involves assessing learning needs, planning, implementing, monitoring and evaluating the programme. These steps will be used in describing the CE framework for FNPs in Swaziland. Because there is no clear policy statement for CE for health professionals in Swaziland it is important that this is reflected in a CE programme.

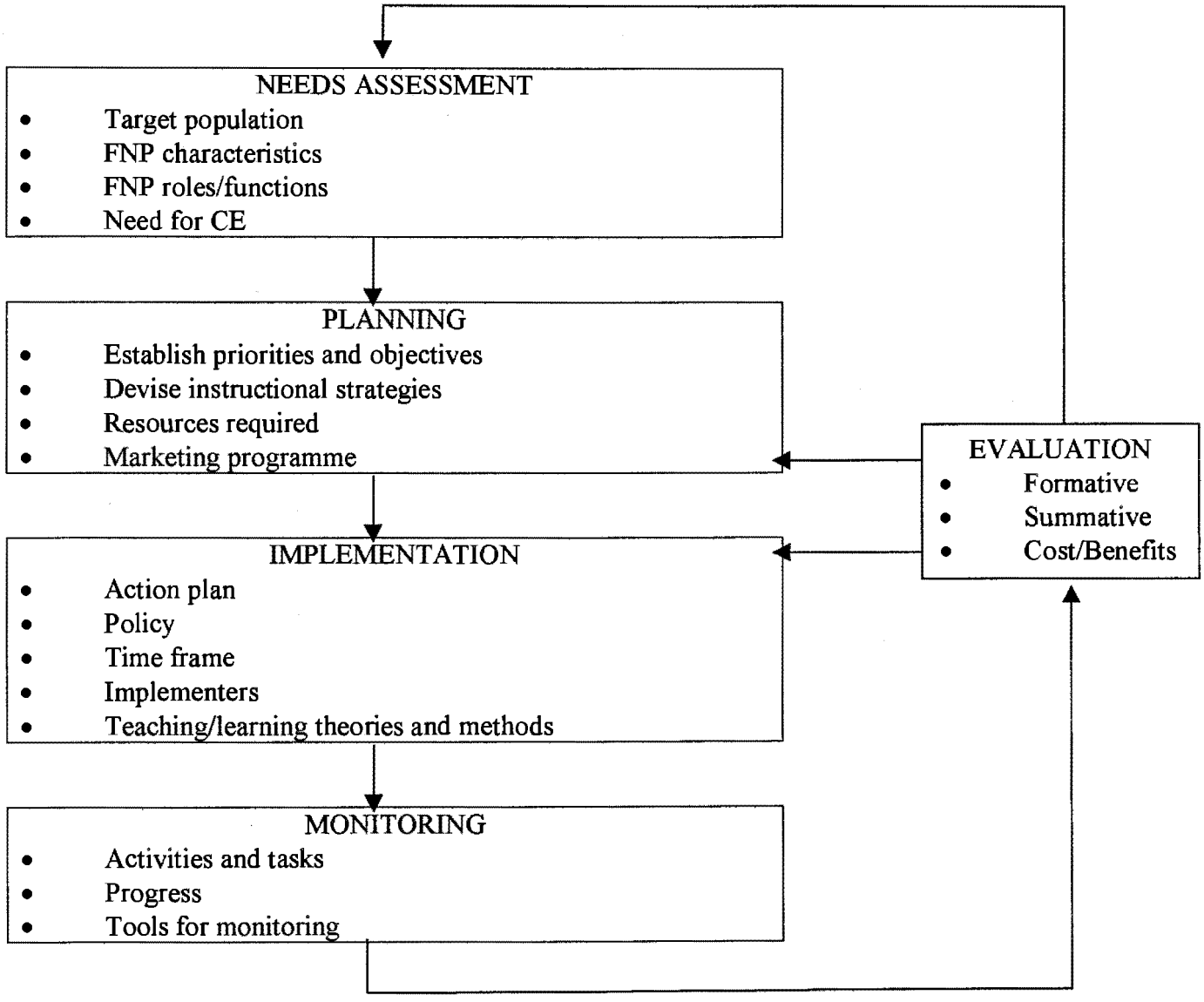

Figure 7.1. Proposed framework for CE programme for FNPs in Swaziland based on systems approach (Puetz 1987:21)

7.2.1 Needs assessment

Needs assessment is described as the initial step in the CE planning process – determining where to go (Abruzzese 1996:188; Cooper 1983:33; Puetz 1987:21). According to Cooper (1983:33), a learning need is defined as a discrepancy between what individuals know and can do and what they need to know and do to achieve a higher level of performance.

Learners should not be trained for tasks they will not be allowed to do or will not be able to do for lack of resources. By using needs assessment and other methods of analysis, one reduces the risk of having inappropriate programmes; designing courses that are irrelevant or wasting funds and time by undertaking costly programmes which may be of no use to the learners and their clients.

The focus of CE programme planning rests upon the definition and process of identifying learning needs. The assessment of CE activities is based on needs identified by FNPs themselves, nurse managers, nurse educators and on the problems faced by the communities they work in. For CE to meet its purpose of maintaining and improving the FNPs' competencies, learning must be built upon what they need to know in order to practice competently. Needs assessment is a powerful means of accomplishing that purpose (Puetz 1987:54). Based on identified learning needs, specific learning objectives can be formulated.

Needs assessment should be carried out to identify what learners expect to learn before involving them in an education programme. Also, what they already know will be used to address what knowledge, skills and attitudes they still need to learn. Failure to assess these needs accurately can result in developing a programme that might be potentially irrelevant for learners and the organisation (Abruzzese 1996:188). For this study a needs assessment was done using focus group interviews with FNPs, nurse managers, nurse educators and MOH&SW nurse executives (see chapter 4). In addition, a survey of FNPs, nurse managers and nurse educators was carried out (see chapter 5). A needs assessment will help decision-makers as well as educators to identify what kind of training is necessary.

7.2.1.1 Characteristics of target population

The target population are FNPs who are described as nurses who, having taken post-basic coursescovering clinical practice, education, research, management and leadership, function in an expanded role that includes services and functions previously considered to be exclusive to medical practitioners. FNPs have a wide range of practical experience in nursing and function mostly where there is no doctor. They are adult learners and therefore adult learning theory and principles are helpful in the development of teaching/learning strategies. The FNPs are motivated to learn, as shown by the high response rate to the questionnaire and identification of learning needs. Variables significantly affecting motivation for participating in CE programmes include professional and self-development, relevant and interesting topics, and keeping abreast of continuing changes in clients' needs.

7.2.1.2 The role of the FNP

The role of the FNP can be described as follows:

1. Actual role – what they are doing now, that is clinical practice, health education, counselling, collaborating, management and leadership.
2. Potential role – the FNP can be involved in other roles that may not be designated as actual roles of the FNP. This may include acting as a consultant, community leader, adult educator, programme designer, policy formulator and adviser to local leaders.

7.2.1.3 The need for CE

The need to continually reorient FNPs arises from a desire to ensure that they are well suited to meet emerging health challenges, scientific discoveries, technological innovations, health sector reforms and standards of nursing education and practice. These changes have resulted in nurses, including FNPs, seeking enrolment in CE and academic programmes. If FNPs

are to remain relevant, as well as continue to provide quality, accessible and acceptable service in spite of prevailing challenges, they have to engage in CE, which is one of the main ways to ensure that the quality of work done by FNPs is maintained and improved.

We are living in a fast-changing world. To be modern nurses, FNPs must be knowledgeable about modern technology (eg computers) and should have skills in public relations. Economic and political changes affect clients and communities, and the psychology of interpersonal relations provides a way of understanding the impact of all this on the lives of the people the nurses serve. FNPs therefore need to be up-to-date in changes that are taking place and on emerging new diseases. They need skills to deal with families who are unable to cope when a family member has been diagnosed as suffering from an incurable disease. FNPs need to be prepared for their daily encounters with people, material and circumstances, and they have to be able to deal with unforeseen circumstances, like helping someone give birth in a tree (as was the case during the floods in Mozambique in early 2000).

7.2.1.4 Training requirements as identified in the needs assessment

Opportunities for experiential learning should be utilised, as indicated in the needs assessment. A variety of preferred teaching methods was identified by the respondents, and it is interesting to note that the strategies indicated by the FNPs facilitate active participation and experiential learning - case studies, role plays, lectures and discussions, group discussions and return demonstrations. These methods should be given preference over others as being particularly effective with adult learners such as these.

The FNPs, nurse managers and nurse educators who participate in this study provided an index of the requisite training for the FNP status and role. By looking at the role and needs of FNPs, areas of training can be prioritised from most to least important to ensure that provision

for an educational programme can be ultimately be rationalised. FNP training needs were dominated by a range of FNP role activities, which implied that FNPs' main requirement was for courses that would update and upgrade their knowledge and skills (tables 5.3, 5.7, 5.8). Several areas of skills that need to be strengthened are clinical practice, teaching with counselling, research, leadership/management with problem solving and communication. These particular areas are parting of the FNP generic curriculum content. Other areas that were identified are legal aspects of nursing practice and HIV/AIDS information. There is a need to design content that will focus on the identified needs as proposed by the research participants in this study.

(1) Clinical practice skills

Table 7.1 Proposed areas of clinical practice skills

TOPICS	TIME FRAME
* Health assessment	4 hours
* Communication skills	4 hours
* Physical assessment	6 hours
* Diagnostic skills	4 hours
*Management of common health problems	2 hours
- Sexually transmitted diseases/infections	4 hours
- HIV/AIDS	4 hours
- Tuberculosis	4 hours
- Respiratory infections	4 hours
- Diarrhoeal diseases	4 hours
* Pharmacology	4 hours
* Legal aspects of nursing practice	4 hours

For the clinical practice role, FNPs need to be updated on trends in the assessment, diagnosis and management of common and emerging health problems, in the context of PHC. Some of the major and urgent challenges that confront FNPs today are the advent of the AIDS epidemic and the re-emergence of the tuberculosis epidemic. Both these health problems require proficient diagnostic and case management skills as well as new approaches. The introduction of syndromic management of sexually transmitted diseases is one such new approach. In the

teaching of the FNPs, emphasis should be placed on the development of problem-solving and decision-making skills.

Documentation skills should also be developed in order to develop a systematic way of synthesising and applying the physical, psychosocial and environmental factors that influence the health of the client.

(2) Teaching skills

Table 7.2 Proposed areas of teaching/education skills

TOPICS	TIME FRAME
*Role and responsibilities of educator	2 hours
*Adult learning principles	4 hours
*Staff education	4 hours
*Preceptorship	4 hours
*Patient education	4 hours
*Counselling	4 hours
*Teaching methods	4 hours
*Programme design	4 hours

Although the education role was identified as important, FNPs have not had any CE on the topics listed in table 7.2. The FNPs who participate in this study felt they need to have skills to deal with teaching students in the clinical area, as well as patients and families, colleagues and subordinates. FNPs also felt they were lacking in counselling skills. With the advent of HIV/AIDS FNPs felt helpless on how to deal with afflicted clients and family members. A CE programme should concentrate on presenting these topics by means of experiential methods.

(3) Research skills

Table 7.3 Proposed areas of research skills for CE

TOPICS	TIME FRAME
*Meaning and use of research	2 hours
*Review of mechanism and procedure for research protocol approval	2 hours
*Research process	6 hours
*Compare qualitative and quantitative methods	2 hours
*Critique of nursing research	2 hours
*Ethical considerations	2 hours
*Proposal/programme writing	4 hours
*Needs assessment	2 hours

The needs assessment revealed that research skills were necessary components of the FNP role. The FNPs indicated that they needed to be taught the basis of research because some of them were of the opinion that this was not taught in their course. FNPs need to be familiar with both qualitative and quantitative research methods because they have to know which method would best suit a study they want to undertake. Critiquing nursing research was also considered important to enable FNPs to use research findings for their practice.

Although ethical considerations in nursing research were not identified in the findings, this topic is considered an important element of the content to be taught to FNPs. Proposal writing was also identified by the FNPs as important because as leaders and managers in their work settings they are sometimes required to come up with proposals or programmes for their departments.

(4) Leadership and management skills

Table 7.4 Proposed areas of leadership and management skills for CE

TOPICS	TIME FRAME
Management theories	3 hours
Communication theories	2 hours
Team leadership	2 hours
Situational leadership	4 hours
Cost management/budgeting	3 hours
Supervision	2 hours
Motivation	2 hours
Conflict management	2 hours
Total quality management	2 hours
Case management	2 hours
Health policy	2 hours
Power and politics	2 hours

Formal education in leadership behaviours and skills is paramount to developing FNPs as effective leaders. Effective leadership is essential to the survival of health care facilities. Cartier (1995:276) citing Durham and Fisher (1990) contends that effective leaders are characterised by their competencies in administrative, educational and clinical expertise, meshed with an understanding of leadership principles. Negotiation skills, strong value systems, creativity, vision, risk-taking, adaptability and excellent communication skills have all been identified as characteristics of effective leaders.

Because FNPs are placed in charge of clinics and health centres, they must be trained to cope with these responsibilities. According to Cartier (1995:279), content and objectives for educational activities should be based on input from clinical nurse managers, experienced charge nurses, and a literature review. Implementation of a course should allow staff scheduling flexibility and provide the content in the most effective way. Evaluation of the course should be ongoing, through written course evaluation, clinical nurse manager feedback, and determination of perceived leadership behaviour changes in nurses who have completed the course.

The needs assessment for this study confirmed the need for CE leadership and management courses for FNPs. In this study 54% of the FNPs revealed that they were not adequately prepared for management and leadership in their training. FNPs, especially those who work by themselves in the more remote clinics need to know how to plan, organise, direct, control and co-ordinate their resources. The clinic system is extensive and therefore it is difficult to obtain supervision through other components of the health care system. The FNP has to rely on his or her own skills to manage a clinic and supervise other health workers, such as nursing assistants and rural health motivators.

Adams (1991:16) has noted that nurses, like many other professionals, frequently have little educational preparation to support their management roles. Their education mainly prepares them to be clinical practitioners. This lack of management training for FNPs is unfortunate given the authority, responsibility and accountability that they are expected to assume. Adams (1991:18) describes a 12-hour CE course, "survival skills for nurse managers" to assist them in increasing their managerial effectiveness by an in-depth exploration and. application of theories of organisation, management, leadership, communication, mentoring, personnel development and evaluation

7.2.2 Planning

The suggested steps in the process of designing a programme are discussed in this section. The steps are planning, implementation, monitoring and evaluation and should be regarded as necessary tools by providers of CE programmes.

Programme planning is a systematic process of making explicit, prior to implementation, the specific combination of inputs, processes and outcomes that those responsible for the programme wish to realise. Planning is making implementation and evaluation decisions before

they are done. Planning for CE is an ongoing process. Planning should take place at local, regional and national levels.

Three criteria should be kept in mind during planning of CE programmes:

- meeting objectives
- achieving fairness and meeting the needs of the FNPs serving the population
- cost effectiveness

These criteria should be determined according to what resources satisfy the clients' population's needs, and acceptability to those target groups that can affect implementation and at the same time represent value for money.

Planners should pay more attention to the health workers', in this case FNPs', deficiencies and needs in relation to the health issues of special relevance to the people they serve. Programme plans should be realistic. They should be based on current epidemiological and management data, and on the learning needs of FNPs. Plans must be implementable given the level of resources.

An important component of planning is who to include in the process. The planning of a CE programme should be done by a group, not by an individual. It is important that key stakeholders be involved in the planning process. Representatives from all groups associated with CE should be involved in the planning of CE programmes. The MOH&SW, MOE, Ministry of Labour, Human Resources Development Unit, University of Swaziland, health training institutions, professional associations, regulatory bodies of nursing and practice agencies where FNPs are employed should all be included in the planning process. The inclusion of clinically-based nurses on the planning committee helps to ensure that the content is relevant to practice.

The level of the FNPs' development and characteristics should be taken into consideration when planning a CE programme. Nurse educators are aware of the differences between past and present educational content, and these factors should also be taken into account when planning CE programmes. According to Puetz (1987:58), CE activities are designed for adult learners, so the focus is on learners rather than on the teachers or planners. The CE planning process must consider these heterogeneous groups of individuals.

7.2.2.1 Establishment of priorities and objectives

In establishing priorities and objectives it is important to consider the interests of the stakeholders: the learner, the patient or client, the organisation, the manager and the educator. Those who plan CE programmes should sit with the stakeholders and "negotiate interests to construct educational programme" (Cervero in an interview with Waddell 1996:185).

Priorities can also be assessed on the basis of deficiencies in the FNPs' performance, technical feasibility and availability of resources. Because of the multiple learning needs that have to be met through CE, consideration should be given to setting specific criteria for deciding which programmes have priority. Programme planning decisions made on the basis of established criteria are more rational and acceptable to those affected by them (Puetz 1987:58).

Setting of educational objectives can be done by getting the learners to define learning outcomes from identified needs. Well-defined objectives provide useful guidelines to learners. Formulating learning objectives is a process in which the needs of the students, of the institution, of the teacher and society are taken into account (Knowles & Associates 1984:84).

In addition, some rough estimates of cost must be made at this stage to ensure that time is not wasted on formulating plans that cannot be implemented. There is no point in training these nurses on procedures that they cannot perform for lack of equipment and other resources. It is

also important to obtain consensus on the relative priority of each identified need, and select educational needs which will be addressed first. This approach will be utilised in the development of CE in Swaziland.

7.2.2.2 Devising instructional strategies

An instructional strategy is a systematised plan for achieving an educational objective. According to Knowles (1980:48) the teaching/learning transaction is the mutual responsibility of learners, particularly adult learners, and teachers. The teacher/educator serves as a resource person or facilitator. To each learning experience, the adult learner brings a unique set of life experiences and educational needs. Andragogy states that adults learn best when there is respect for what the learners already know, when the learners see how they can use their new knowledge and skills immediately, and when what they are learning is directly related to their own life experiences (Centre for Disease Control 1994:2). It must be taken into account that each learner comes to the programme with different experiences, which influence learning. Due to the many roles that the FNPs assume, educational activities should be designed in various delivery modes. Educational methods should be identified that facilitate and support the learning process. A number of experiential techniques may be used, such as group discussion, simulation exercises, problem solving activities, case method and laboratory methods (Knowles & Associates 1984:57). The learning style of the learner should be accommodated and challenged by offering a variety of methods for acquiring new competencies.

According to O'Connor (1986:17-18), planners of CE programmes need to develop check points to ensure that their design is based on adult learning principles. It should be rooted in learners' needs and should address relevant objectives. They should also ensure that implementation is in accordance with adult learning principles. She further urges educators to

develop and test innovative approaches to evaluation that are in keeping with the principles, but not at the expense of the reliability and/or validity of the evaluation process. A CE programme must therefore provide FNPs with educational opportunities to increase their competencies, must enable them to meet the requirements of their role in a changing society, and must set alternatives as well as offer opportunities to meet their own goals. According to Mast and Van Ata (Herrick, Jenkins & Carlson 1998:75), the principles of adult learning serve as guidelines for planning strategies for educating adult learners. Adhering to these principles will enable educators to enhance learners' critical skills, assist in recognising the value of past experiences, and their broaden vision for the future. The planning represented by a systems approach implies an analysis of how its components interact with each other and requires co-ordination of the total efforts of planners.

7.2.2.3 Resources required

The goals of CE programmes cannot be met if adequate resources to implement them are not available (Puetz 1987:60). Resources include personnel, space, equipment, material, time and funds. The kind of CE programme that is planned would depend on the existence of efficient resource allocation mechanisms, whether central or local, and on a management system capable of implementation; therefore, project funds must be budgeted. There is a need for a special budget to cater for the training of FNPs as specialists in health care services. The government should assist the Department of Nursing by pledging funds that would be used to provide for the essential resources.

(1) Teaching staff

If the goal of CE for FNPs is to be achieved, there has to be collaboration between the providers of CE programmes. The training institutions, non-governmental organisations, the

University of Swaziland and the MOH&SW should make available teaching personnel who are experienced practitioners and have the proper credentials to teach in a CE programme for FNPs.

The ANA Council of FNPs and clinicians (1975:5) has recommended that since the acquisition of new knowledge and skills is intended to enhance professional practice, the appropriate nursing faculty should assume major responsibility for the development, implementation and co-ordination of the programme. Input from members of other disciplines, such as physicians, should be mutually determined. An inter-disciplinary approach should be used and should provide for the input of the learner and the consumer of services. Experiential and educational requirements are therefore necessary, especially for the nursing educators.

(2) Facilities

Several different types of facilities are necessary for a successful CE programme. Both clinical and classroom facilities should be adequate to cater for the appropriate implementation of the programme. Facilities may include office space for the administrative, teaching, and clerical staff, with appropriate furniture, files and equipment. Easily available and accessible meeting rooms for committees and planning groups are another requirement (Cooper 1983:44). Clinical facilities may include equipment and supplies, laboratories, hospitals, doctors' rooms and workshops.

(3) Budget

A budget has been defined as a concrete, precise picture of a particular enterprise in monetary terms (Cooper 1983:45). Resource requirements have to be calculated in the process of developing a budget. A budget has two aspects: the capital budget and the operational budget. The operational budget includes personnel and support expenses including salaries and

consumable supplies. The capital budget includes the cost of major equipment. Capital budgets supplement a department's operational budget.

The programme's operational and capital budgets are based on the programme's objectives and activities for both the short and the long term. The African Medical and Research Foundation (1983:134) has outlined the components of a CE programme budget for national and regional planners:

- costs of administration, that is initial capital outlay for equipment and recurrent costs of administration
- costs for train-the-trainer course
- costs of the baseline survey (needs assessment)
- costs of each course
- costs of evaluation

7.2.2.4 Marketing and advertising the programme

Marketing is the activity that brings products or services to the attention of consumers (Abruzzese 1996:142). Marketing is an essential consideration if a CE programme is to be successful. The use of mass media and mailing can be used to advertise CE programmes. Advertisements should be clear and present the facts and highlights of the programme. When the providers of CE programmes develops marketing strategies for getting nurses to attend the programmes, they are also promoting the image of their organisation and that of the nursing profession as a whole.

The CE planner not only markets courses to the consumers, but is also involved in recruiting staff to teach the courses. In order to entice teaching staff, monetary and other

incentives should be offered as rewards for teaching in the programmes. A fee can be established by the organisation, or a fee can be a negotiated by the programme planner or coordinator.

7.2.3 Implementation

Implementation of the CE programme will require input from different people. In planning, we looked at the need for the programme and the needs of the learners, the objectives, the strategies and resources. The plan tells us what the learners need to learn, implementation tells us how this is accomplished. An implementation plan is a structured summary of roles taken during the training with the given resources to achieve the outcome objectives specified in the programme plan.

The importance of an implementation plan, according to CDC guide (1994:53) is that it:

- Provides a concrete statement of actions the organisation intends to take to achieve the stated objectives.
- Serves as a basis for ensuring, through monitoring and feedback, that the activities are being conducted as planned, and when adjustments are needed.
- Helps in developing the budget and justifies requests for funds.
- Facilitates collaboration at several administrative levels with other departments that may be called upon to provide their time, staff, materials and other resources.

Implementation is guided by both practical and theoretical considerations such as:

1. The pertinent information on the type of education and level of learners the education is being planned for.
2. The objectives that need to be achieved and types of activities to be performed.
3. The time frame within which the activities will be performed.

4. The principal actors of implementers who will carry out the responsibilities for implementation.
5. The resources that will be required to implement the activities in the plan estimate budget.
6. Methods or learning theories to adopt for each activity.

These factors will be applied in the implementation of the proposed CE programme in Swaziland.

7.2.3.1 Developing or revising a CE Policy Statement

The MOH&SW and the University of Swaziland Faculty of Health Sciences do not have a clear CE policy statement for health care workers. According to the Centre of Disease Control Guide (1994:5), a critical first step for today's policy makers and programme managers is to recommend a departure from unsystematic activities, unplanned and periodic programmes to a regional or countrywide CE education system. The policy statement helps ensure that everyone involved in approving, implementing, using, financing and sustaining the system agrees upon the goals and functions of CE programmes. Representatives from all groups associated with CE should be involved in planning a policy statement. A policy is an organisational point of view. The MOH&SW, Ministry of Education, Human Resource Development Unit, University of Swaziland, health training institutions, professional associations and regulatory bodies for nursing should be involved in the development of a policy statement for CE. Participatory policy formulation should involve all the above-mentioned stakeholders. Those who are affected by the policy should decide on policy. In this case the FNPs can advise policy makers as to their need for attend CE and the structure to be established.

An organisation should decide on its philosophy, from which emanates its mission, which manifests in its policies. According to Puetz (1987:58), both the institution's (practitioners') and the providers' (educators') philosophies should be defined explicitly and should guide CE policies and practices.

In reviewing the beliefs related to CE for nurses, it is important that the principles of adult learning are taken into consideration. These principles have been described in chapter 2, and include relevant, timely, self-directed, self-paced, active, and experiential learning.

Other elements to consider, according to Chalmers and Kristjanson (1987:130), are:

- CE courses in nursing should build on the knowledge, skills and experience of the nurses.
- Nurses should participate in the planning of programmes and identification of needs.
- CE courses should be relevant to practice issues, reflect current trends and developments in nursing practice, and be taught by academically prepared health professionals.
- CE programmes for nurses should be developed with the overall goals of the profession in mind, as well as the specific objectives of the nurse.

According to the African Medical and Research Foundation (1983:12), an effective CE programme should meet the following criteria:

- It should be **comprehensive** in its coverage of health personnel; that is, it should be available to all health workers at all levels.
- It should be **based on a survey of needs**, so that it is relevant to the tasks that the health worker performs and the problems he faces in his daily work.
- It should have planned **continuity** throughout the health worker's career. One or two unrelated refresher courses offered sporadically are not a CE programme.

- It should be **co-ordinated** with the health care system as a whole to permit sharing of resources and to minimise overlap between the efforts of different agencies.
- It should be a regular part of the routine activities of the regional health team.

  It should include the consumers (the health workers) in the planning and evaluation phases. That is, the curriculum should take into account what the health workers themselves want to learn.

7.2.4 Monitoring

Monitoring is the process of systematically collecting and using information on programme implementation to ensure that activities and tasks are being carried out as planned. Monitoring can also be used to identify operational problems that need attention. The information gathered can be used to measure the progress of the programme activity and to modify activities as necessary. Commonly used methods for monitoring include observation of nurses, review of records, discussions with nurses, other health workers and clients. An effective monitoring system includes skilled personnel, quality data and results that can be used to improve the CE programme.

7.2.5 Evaluation

The litmus of a good plan is whether the trained health workers, the allocated resources, and the introduced new activities and strategies lead to improvement in the health of the nation. Evaluation is undertaken primarily to assess the worth or value of educational programmes and processes. Puetz (1987:253) suggests that information obtained from an evaluation can be used in making decisions about future operations, setting administrative priorities, and determining programme directions. Although Puetz acknowledges the immense value of information from evaluation studies, she cautions that conducting evaluations uses resources, people, time and

money that may be in short supply. She advises that decisions about the depth and scope of evaluation efforts have to be made in the context of realistic assessment of available resources and constraints. As a minimum, evaluation of individual educational activities (conference, workshops and seminars) should be conducted by every continuing or staff development educator.

An evaluation model can provide a framework for an evaluation study. Puetz (1987:258) viewed the evaluation model as a standard against which a programme is measured or a theory applied to determine the extent to which the proposal is actually practised. Abruzzese (1996: 245-246) has developed an evaluation model that is hierarchical, with simple to complex levels of evaluation. The first level is process evaluation, commonly called the happiness index, which is a required part of all educational programmes. The second level is content evaluation, which is a measurement occurring immediately after the affective, cognitive or psychomotor-skills learning experiences. The third level is outcome evaluation, which is a measurement of changes in performance on clinical units. The fourth level is impact evaluation, which is the operational result in the organisation, such as a reduction in cost or an increase in the quality of patient care. Total programme evaluations encompass and summarise all other types of evaluation (as in an annual report).

7.3 Conclusion

This chapter culminated in the realisation of the main aim of this study, namely to present a framework for a CE programme for FNPs in Swaziland. The framework for the proposed areas of a CE programme, based on the CE needs of the FNPs, was presented.

REFERENCES

Abruzzese, R.S. 1992. *Nursing staff development: strategies for success.* St. Louis: Mosby.

Abruzzese, R.S. 1996. *Nursing staff development: strategies for success.* St. Louis: Mosby.

Adams, D. 1991. Management needs of head nurses and supervisors: designing a continuing education course. *Journal of Continuing Education in Nursing,* 22(1):16-20.

African Medical and Research Foundation (AMREF). 1983. *Continuing education for health workers: planning district programmes.* Nairobi: AMREF.

Albarran, J.W. & Whittle, C. 1997. An analysis of professional, specialist and advanced nursing practice in critical care. *Nurse Education Today,* 17:72-79.

Al-Ma'aitah, R. & Momani, M. 1999. Assessment of nurses' continuing needs in Jordan. *Journal of Continuing Education in Nursing,* 30(4):176-181.

Almquist, G. 1990. Developing an educational needs assessment. *Journal of Nursing Staff Development,* (6):246-249.

American Nurses Association. 1975. *Council on continuing education: standards for continuing education in nursing.* Kansas City: The Association.

American Nurses Association. 1976. *The scope of nursing practice-description of practice: nurse practitioners, clinicians, clinical nurse specialist.* Kansas City: The Association.

American Nurses Association. 1994. *Standards for nursing professional development: continuing education and staff development.* Washington D.C: American nurses' publishing.

Anderson, J. & Kimber, K. 1991. Meeting the continuing education needs of nurses in rural setting. *Journal of Continuing Education in Nursing,* 22(1):29-34.

Arndt, & Underwood, 1990. Learning style theory and patient education. *Journal of Continuing Education in Nursing,* 21(1):28-31.

Atkin, K. & Lunt, N. 1996. Negotiating the role of practice nurse and in general practice. *Journal of Advanced Nursing,* 24(3):498-505.

Bagnall, D.L., Schemmel, M.E. & Hansen, M.C. 1995. Mandatory in-service offerings: implementation of an all-day method. *Journal of Continuing Education in Nursing,* 26(2):73-77.

Barnes, D., Eribes, C., Juarbe, T., Nelson, M., Proctor, S., Sawyer, L. & Meleis, A.I. 1995. Primary health care: a confusion of philosophies. *Nursing Outlook,* 43(7):7-16.

Barribell, L., While, W. & Norman, J. 1992. Continuing professional education for qualified nurses: A review of literature. *Journal of Advanced Nursing,* 17:1129-1140.

Basch, C. 1987. Focus group interview: an under utilised research technique for improving theory and practice in health education. *Health Education Quarterly,* 14(4):411-448.

Bayntun-Lees, D. 1993. Setting the scene for experiential learning. *Nursing Standard,* 7(36):28-30.

Bazillio, J. 1989. *Report on the co-ordination of in-service training at the Ministry of Health and Social Welfare.* Mbabane: Government printer.

Bell, E.A. 1986. Needs assessment in continuing education: designing a system that works. *Journal of Continuing Education in Nursing,* 6(4):112-114.

Bertrand, J.T., Brown, J.E. & Ward. V.M. 1992. Techniques in analysing focus group data. *Evaluation Review,* 16(2):198-209.

Betz, C.L. 1984. Methods utilised in nursing continuing education programmes. *Journal of Continuing Education in Nursing,* 15(2):39-44.

Beukes M. 1992. A South African perspective on distance teaching. *Nursing RSA Verpleging,* 7(7):34-36.

Beukes, M. 1993. Excellence in clinical nursing. *Nursing RSA Verpleging,* 8(5):7-10.

Bevis, O.E. 1973. *Curriculum building in nursing: a process.* St. Louis: Mosby.

Bousfield, C. 1997. A phenomenological investigation into the role of the clinical nurse specialist. *Journal of Advanced Nursing,* 25(2):245-256.

Bowman, B., Wolkerheim, B.J., O'Donnell, D., LeBeck, M. & Scheneider, K. 1985. Needs assessment: an information processing model. *Journal of Continuing Education in Nursing,* 16(6)200-204.

Briggs, N.A. 1990. The nurse practitioner: an expanded role within nursing. *NSNA/Imprint,* 37(1):31-33.

Brink, H.I.L. 1991. Quantitative versus qualitative research. *Nursing RSA Verpleging,* 6(1):14-18.

Brink, P.J. & Wood, M.J. 1989. *Advance design in nursing research.* London: Sage Publications.

Brooks, E.L., Fletcher, K. & Watilstedt, A. 1998. Focus group interview: assessment of continuing education needs of the advanced practice nurse. *Journal of Continuing Education in Nursing,* 29(1):29-31.

Burnard, P. 1992. Student nurses' perceptions of experiential learning. *Nurse Education Today,* 12(3):163-173.

Burnard, P. 1995. *Learning human skills: an experiential and reflective guide for nurses,* 3rd edition. Oxford: Butterworth-Heinemann.

Byers, Y. & Wilcox, J. 1991. Focus groups: a qualitative opportunity for researchers. *Journal of Business Communication,* 28(1):63-78.

Carey, M. 1994. The group effect in focus groups: planning, implementing and interpreting focus group research. In *Critical issues in qualitative research methods,* edited by J. Morse. London: Sage publishers.

Cartier, T.L. 1995. Development and implementation of a leadership skills course for the charge nurse. *Journal of Continuing Education in Nursing,* 26(6):276-279.

Centre for Disease Control. 1994. *Continuing education systems: a guide for policy makers and programme managers.* Atlanta: United States Agency for International Development.

Chabeli, M.M. 1995. *Guidelines for professional nurses as clinical learning facilitators.* Unpublished doctoral thesis: Rand Afrikaans University, Johannesburg.

Chalmers, H. & Kristjanson, L. 1987. Who should control continuing education for nursing? *Journal of Continuing Education in Nursing,* 18(4):128-132.

Clifford, C., Carnwell, R. & Harkin, L. 1997. *Research methodology in nursing.* London: Churchill Livingstone.

Cooper S. S. 1983. *The practice of continuing education in nursing.* Rockville: Aspen.

Coutts, L.C. & Hardy, L.K. 1985. *Teaching for health: the nurse as health educator.* London: Churchill Livingstone.

Cranton, P. 1989. *Planning instruction for adult learners.* Toronto: Wall & Thompson.

Denzin, N.K. & Lincoln, Y.S. 1994. *Handbook for qualitative research.* London: Sage Publications.

DeSilets, L.D. 1995. Assessing registered nurses' reasons for participating in continuing education. *Journal of Continuing Education in Nursing,* 26(5):202-208.

Dolphin, P. & Holtclaw, B.J. 1983. *Continuing education in nursing: strategies for lifelong learning.* Reston: Prentice Hall.

Donaldson, N.E. 1987. The phenomenological method: qualitatively advancing nursing science. In *Nursing science methods: a reader,* edited by S.R. Gortner. San Francisco: University of California.

Dowd, S.B. 1996. *Teaching in the health-related professions.* Durham: Carolina Academic Press.

Duminy, P.A., Steyn, P.D.G., Dreyer, H.J., Vos, A.J. & Peter, V.M. 1995. *Education for the student teacher: teacher training series.* Cape Town: CTP Book Printers.

English National Board for Nursing, Midwifery and Health Visiting. 1991. Framework for continuing professional education for nurses, midwives, and health visitors. *Guide to implementation.* London: English National Board.

Farley J. 1987. Does continuing nursing education make a difference? *Journal of Continuing Education in Nursing,* 16(6):184-187.

Farley, J.K. & Fay, P. 1988. A system for assessing the learning needs of registered nurses. *Journal of Continuing Education in Nursing,* 19(1):13-16.

Fawcett, J. & Downs, F.S. 1992. *The relationship of theory and research.* 2nd edition. Philadelphia: F.A Davis.

Ford, L.C. 1979. A nurse for all settings: the nurse practitioner. *Nursing Outlook,* August:516-521.

Ford, L.C. 1991. *Advanced nursing practice: future of the nurse practitioner, charting nursing's future.* New York: Lippincott.

Ford, L.C. & Silver, H.K. 1967. The expanded role of the nurse in child care. *Nursing Outlook,* 15(8):43-45.

Ford, P. & Walsh, M. 1994. *New rituals for old: nursing through the looking glass.* Oxford: Butterworth-Heinemann.

Fowkes, W.C. & Hunn, V.K. 1973. *Clinical assessment for the nurse practitioner.* Saint Louis: Mosby.

Geolot, D.H. 1987. Nurse practitioner education: observation from a national perspective. *Nursing Outlook,* 35(3):132-135.

Government of Swaziland. 1973-1977. *Second national development plan.* Mbabane: Government Printer.

Government of Swaziland. 1978-1983. *Third national development plan: five-year development plan.* Mbabane: Government Printer.

Government of Swaziland, Ministry of Health & Social Welfare. 1983. *National health policy.* Mbabane: Government Printer.

Government of Swaziland. 1994-1998. *Five-year development plan.* Mbabane: Government Printer.

Government of Swaziland. 1995. *Economic review commission.* Mbabane: Government Printer.

Government of Swaziland. 1996/97. *National AIDS programme annual report.* Mbabane: Government Printer.

Government of Swaziland. 1997. *Health statistical report.* Mbabane: Government Printer.

Government of Swaziland. 1998. *Draft Swaziland national health and social welfare policy.* Mbabane: Government Printer.

Hamric, A.B., Spross, J.A. & Hanson, C.M. 1996. *Advanced nursing practice: an integrative approach.* 1st edition. Philadelphia: W.B. Saunders.

Hawkins, J.B.W. & Thibodeau, J.A. 1983. *The nurse practitioner: current practice issues.* New York: Tiresias Press.

Henderson, M.S. 1982. *Nursing education.* London: Churchill Livingstone.

Hendricks, M.M. 1983. Needs assessment: sense or nonsense? *Journal of Continuing Education in Nursing,* 14(5)13.

Hergenhahn, 1976. *Introduction to theory of learning.* Englewood Cliffs, NJ: Prentice-Hall.

Herrick, C.A., Jenkins, T.B. & Carlson, J.H. 1998. Using self-directed learning modules. *Journal of Staff Development,* 14(2):73-80.

Hewlett, P.O. & Eichelberger, L.W. 1996. The case against mandatory continuing education. *Journal of Continuing Education in Nursing,* 27(4):176-181.

Hicks, C. & Hennessy, D. 1997. The use of a customised training needs analysis tool for nurse practitioner development. *Journal of Advanced Nursing,* 26(2): 389-98.

Hilgard, E.R. & Bower, G.H. 1965. *Theories of learning.* New York: Appleton.

Horner, B. 1995. *Handbook of staff development.* Melbourne: Churchhill Livingstone.

Hupcey, J.E. 1993. Factors and work settings that may influence nurse practitioners practice. *Nursing Outlook,* 41(4):181-185.

International Council of Nurses' statement on continuing education. 1981. *International Nursing Review,* 32:163.

Jarvis, P. & Gibson, S. 1997. *The teacher practitioner and mentor in nursing, midwifery, health visiting and the social services.* Cheltenham: Thornes.

Jazwiec, R.M. 1991. Learning needs assessment Part II: Methods. *Journal of nursing staff development.* 7(2):138-142.

Jensen, B.S. 1984. *An evaluation of clinic nurses job performance and assessment of the community health project.* Mbabane: Government Printer.

Jowett, N. & Thompson, D. 1989. *Comprehensive coronary care.* London: Scutari Press.

Kamfer, L. 1989. Focus groups in organisational research. *Journal of Industrial Psychology,* 15(1):7-12.

Kaufman, G. 1996. Nurse practitioners in general practice: an expanding role. *Nursing Standard,* 11(8):44-47.

Kersaitis, C. 1997. Attitudes and participation of registered nurses in continuing professional education in New South Wales, Australia. *Journal of Continuing Education in Nursing,* 28(3):135-139.

Kingry, M.J., Tiedje, L.B. & Friedman, L.L. 1990. Focus groups: a research technique for nursing. *Nursing Research,* 39(2):124-125.

Knowles, M. & Associates. 1984. *Andragogy in action.* San Francisco: Jossey-Bass.

Knowles, M.S. 1973, *The adult learner: a neglected species.* Houston: Gulf.

Knowles, M.S. 1980. *The modern practice of adult education: andragogy versus peadagogy.* Chicago: Follett.

Knowles, M.S.1986. *The adult learner: A neglected species.* 3rd edition. Houston: Gulf.

Knowles, M.S. 1990. *The adult learner: a neglected species.* 4th edition. Houston: Gulf.

Kolb, D. 1984. *Experiential learning.* Engelwood Cliffs, NJ: Prentice-Hall.

Koyama, M., Holzemer, W.L., Kaharu, C., Watanabe, M., Yoshii, Y. & Otawa, K. 1996. Assessment of a continuing education evaluation framework. *TheJjournal of Continuing Education in Nursing,* 27(3):115-119.

Kristjanson, L.J. & Scanlan, J.M. 1989. Assessment of continuing education needs: a literature review. *Journal of Continuing Education in Nursing, 20: 118-123.*

Lanara, V.A. 1994. Continuing education in Greece. *Journal of Continuing Education in Nursing,* 25(2):88-89.

Lewis, M.A. 1980. Managing nurse practitioners in ambulatory care: what are the issues? *Journal of Nursing Administration.* July:11-17.

Lovell, R.B. 1980. *Adult learning.* New York: Wiley.

Lovemore, F.C.H. & Van Schoor, A. 1996. A focus group investigation of the teaching process in a department of business management. *Progressio,* 18(2):39-48.

Maglacas, A.M. 1985. *The challenge for nursing education.* Geneva: WHO.

Maglacas, A.M. 1991. *Nurse practitioners: working for change in primary health care nursing.* Kent: Kings Fund Centre

Maglacas, A.M., Ulin, P.R. & Sheps, C.G. 1987. *Health manpower for primary health care: the experience of the nurse practitioner.* Chapel Hill: University of North Caroline.

Mashaba, T.G. & Brink, H.I. 1994. *Nursing education: an international perspective.* Cape Town: Juta.

Mazibuko, R., McKenzie, A. & Schneider, H. 1989. Rural experiences. *Nursing RSA Verpleging,* 4(11):39-41.

McDiarmid, S. 1998. Continuing nursing education: what resources do bedside nurses use? *Journal of Continuing Education in Nursing,* 29(6):267-273.

McDowell, H.M. 1984. Family nurse practitioner. *International Nursing Review,* 1(63):177-180.

McGee, P. 1996. The research role of the advanced nurse practitioner: the role and riteria of the advanced nurse practitioner. *British Journal of Nursing,* 5(5):288-292.

McGill, I. & Weil, S.W. 1989. *Making sense of experiential learning: diversity in theory and practice.* Milton Keynes: Open University Press.

McGuire, S.L., Gerber, D.E. & Clemen-Stone, S. 1996. Meeting the diverse needs of clients in the community: effective use of the referral process. *Nursing Outlook,* 44(5):218-221.

McKenna, G. 1995. Learning theories made easy: behaviourism. *Nursing Standard,* 9(29): 29-31.

McKenna, G. 1995. Learning Theories made easy: cognitivism. *Nursing Standard,* 9(30): 25-28.

McKenna, G. 1995. Learning theories made easy: humanism. *Nursing Standard,* 9(29): 29-31.

Meade E. M, Burger S & Ninksic E. 1985. Contrasts for continuing nursing education. *Journal of Continuing Education in Nursing,* 16(4):121-131.

Medical Service Corporation International. 1991. *Swaziland primary health care project: end of project evaluation.* Mbabane: U.S agency for International Development.

Mellish, J.M. & Brink, H. 1990, *Teaching the practice of nursing: a text in nursing didactics.* Durban: Butterworth .

Meng, A. & Morris, D. 1995. Continuing education for advanced nurse practitioners: preparing nurse-midwives as clinical preceptors. *Journal of Continuing Education in Nursing,* 26(4):180-184.

Merriam, S.B. & Caffarela, R.S. 1991. *Learning in adulthood.* San Francisco: Jossey Bass.

Merritt, S.L. 1990. *Kolb's model of experiential learning: critique and recent research.* Paper delivered at a symposium on nursing research in California.

Ministry of Health & Social Welfare. 1996. *Health sector study.* Mbabane: Government Printer.

Mussallem, H.K. 1981. Continuing education: an essential to nursing strategy and networks in primary health care. *A commonwealth lectureship in West Africa and the Mediterranean.* London: Pall Mall.

Mwamwenda, T.S. 1993. *Educational psychology: an African perspective.* Durban: Butterworth.

Ngcongco, Ndiki V. and Stark, R.D. 1987. Development of a family nurse practitioner programme in Botswana. *International Nursing Review,* 33(1):9-14.

Nolan, M. Owens, R.G. & Nolan, J. 1995. Continuing professional education: identifying the characteristics of an effective system. *Journal of Advanced Nursing,* 21:551-560.

Nyamathi, A. & Schuler, P. 1990. Focus group interview: a research technique, for informal nursing practice. *Journal of Advanced Nursing,* 15:1281-1288.

O'Connor, A.B. 1986. *Nursing staff development and continuing education.* Boston: Little Brown.

Ogier, M. 1998. *Reading research.* London: Bailliere Tindall.

Olivier, S.K. 1984. The effects of continuing education on the clinical behaviour of nurses. *Journal of Continuing Education in Nursing,* 15(4):130-134.

Ormrod, J.E. 1990. *Human learning: theories, principles and educational application.* New York: Merrill.

Pellefier, D., Donoghue, J., Duffield, C., Adams, A. & Brown, D. 1998. Why undertake higher degrees in nursing? *Journal of Nursing Education,* 37(9):422-425.

Pickergill, F. 1995. A natural extension. *Nursing Times,* 91(30):24-27.

Polit, D.F. & Hungler, B.P. 1993. *Nursing research: principles and methods.* Philadelphia: Lippincott.

Puetz, B.E. 1987. *Contemporary strategies for continuing education in nursing.* Rockville: Aspen.

Pulsford, D. 1993. The resultant participant in experiential learning. *Nurse Education Today,* 13(2):139-144.

Quinn, F.M. 1988. *The principles and practice of nurse education.* 2nd edition. London: Chapman & Hall.

Quinn, F.M. 1992. *The principles and practice of nurse education.* London: Chapman and Hall.

Quinn, F.M. 1995. *The principles and practice of nurse education.* 3rd edition. London: Chapman & Hall.

Rath, D., Boblin-Cummings, S., Baumann, A., Parrott, E. & Parsons, M. 1996. Individualised enhancement programmes for nurses that promote competency. *Journal of Continuing Education in Nursing,* 27(1):12-26.

Raudonis, B.M. 1987. Adult education: its implications for Baccalaureate nursing education. *Journal of Nursing Education,* 26(4):164-166.

Raveh, M. 1995. Configuration of occupational therapy, professionalism and experiential learning. *Occupational Therapy International,* 2(1):65-78.

Reid, U. 1982. Basic nursing education for primary health care in the Caribbean. *International Nursing Review,* 33(1):9-14.

Reid, U.V. 1995. Nursing education trends in the Caribbean. *International Nursing Review,* 42(3):77-81.

Robbins, S.P. 1996. *Training in interpersonal skills: tips for managing people at work.* Engelwood Cliffs, NJ: Prentice-Hall.

Rolfe, G. & Fulbrook, P. 1998. *Advanced nursing practice.* Oxford: Butterworth-Heinemann.

Rolfe, G. & Phillips, L.M. 1997. The development and evaluation of the role of an advanced nurse practitioner in dementia – an action research project. *International Journal of Nursing Studies,* 34(2):119-127.

Romaine-Davis, A. 1997. *Advanced practice nurses: education, roles, trends.* Sudbury: Jones & Bartlett.

Schlosser, S.P., Jones, J.T. & Whatley, J.H. 1993. Continuing education needs of hospital-based nurses in Alabama. *Journal of Continuing Education in Nursing,* 24(3):135-140.

Schoenly, L. 1994. Teaching in the affective domain. *Journal of continuing education in nursing,* 25(5):209-212.

Searle, C., Grybowski, J.A. & Minaar, P.C. 1992. *Feasibility study for the establishment of a Faculty of Health Sciences at the University of Swaziland.* Mbabane: Government Printers.

Sevier, R. 1989. Conducting focus group research. *Journal of College Admissions,* Winter, 4-9.

Sheaffer, C.M., Phillips, C.Y., Donlevy, J.A. & Pietruch, B.L. 1998. Continuing education as a facilitator of change: implementing a new nursing delivery model. *Journal of Continuing Education in Nursing,* 29(1):35-39.

Sherperd, J.C. 1995. Findings of a training needs analysis for qualified nurse practitioners. *Journal of Advanced Nursing,* 22(1):66-71.

Sherwood, G. 1996. Nurse administrators' perceptions of the impact of continuing nursing education in underserved areas. *Journal of Continuing Education in Nursing,* 27(3):124-130.

Staab, S., Granneman, S. & Page-Reahr, T. 1996. Examining competency based orientation implementation. *Journal of Nursing Staff Development,* 12(3):139.

Stanford, D.D. 1987. *Phenomenological inquiry in the study of nursing: a reader*, edited by S. R Gortner. San Francisco: University of California.

Stark, R. 1987. Development of a family nurse practitioner programme in Botswana. *International Nursing Review,* 33(1):9-14.

Stewart, D.W & Shamdasani, P.N. 1990. *Focus groups: theory and practice.* Newbury Park: Sage.

Steyn, P.J.N. 1998. *The feasibility of using distance education for the training of health care professionals in Swaziland.* Mbabane: WHO.

Strehler, A. 1992. Problems, causes and solutions in continuing education, *Nursing RSA Verpleging,* 7(11/12): 21-24.

Swaziland Institute of Health Sciences. 1987. *Bulletin.* Mbabane: Government Printer.

Swaziland Institute of Health Sciences. 1994. *Curriculum for family nurse practitioners.* Mbabane: Government Printer.

The Council of Ontario Universities Programmes in Nursing (COUPON). 1998. *Ontario primary health care nurse practitioners' programme.* Ontario: COUPON.

Torn, A. & McNichol, E. 1998. A qualitative study utilising focus group to explore the role and concept of the nurse practitioner. *Journal of Advanced Nursing,* 27:1202-1211.

Trautman, D. & Watson, J.E. 1995. Implementing continued clinical competency evaluation in the emergency department. *Journal of Nursing Staff Development,* 11(1):41-47.

Treece, E.W. & Treece, J.N. 1986. *Elements of research in nursing.* St. Louis: Mosby.

Turner P. 1993. Continuing nursing education: why don't nurses go? why don't they use what they learn? *Nursing Connections,* 6(2):5-12.

Turner, P. 1991. Benefits and costs of continuing nursing education: an analytical survey. *Journal of Continuing Education in Nursing,* 22(3):104-108.

University of Swaziland, Faculty of Health Sciences. 1997. *Faculty handbook.* Manzini: University Printers.

Uys, H.H.M. & Basson, A.A. 1991. *Research methodology in nursing.* Pretoria: Kagiso Tertiary.

Uys, H.H.M. & Basson, A.A. 1995. *Research methodology in nursing.* Pretoria: Kagiso Tertiary.

Van Hoozer, H.L., Bratton, B.D., Ostmoe, P.M., Weinholtz, D., Craft, M.J., Albanese, M.A. & Gjerde, C.L. 1987. *The teaching process: theory and practice in nursing.* Appleton: Century Crofts.

Vancott, M.L, Lengacher, C.A., Heinemann, D., Mabe, P., Swymer, S. & Bistritz, D. 1997. The use of focus groups to assist in the design and implementation of a new nursing practice model. *Journal of Nursing Staff Development,* 13(2):83-87.

Wadell, D. 1991. The effects of continuing education on nursing practice: a meta-analysis. *Journal of Continuing Education in Nursing,* 22(3):113-118.

Wadell, D.L. 1992. The effects of continuing education on nursing practice: a meta-analysis. *Journal of Continuing Education in Nursing,* 23(4):164.

Wadell, D.L. 1996. Planning Continuing Nursing Education: an interview with Cervero. *Journal of Continuing Education in Nursing,* 23(4):182-187.

Warmuth, J.F. 1987. In search of the impact of continuing education. *Journal of Continuing Education in Nursing,* 18(1):4-7.

Wilk, J. 1986. From continuous education to continuous learning: moving toward accountability. *journal of Continuing Education in Nursing,* 17(1):16-18.

Wilkie, D. 1987. *Hermeneutic research: method congruent with the nursing perspective: a reader,* edited by S.R Gortner. San Francisco: University of California.

Woods, N.F. & Cantazo, M. 1988. *Nursing research: theory and practice.* St. Louis: Mosui.

World Health Organisation. 1997. *Nursing practice around the world.* Geneva: WHO.

World Health Organisation. 1978. *Primary health care: a joint report by the director general of the WHO and executive director of the United Nations Children's Fund.* Geneva: WHO publishers.

World Health Organisation. 1985. *A guide to curriculum review for basic nursing education: orientation to primary health care.* Geneva: WHO publishers.

Yergen, L.H. 1984. *Developing health manpower for Africa's smallest nation: a report.* Swaziland Health Manpower Project: AID/AFR-C-1396.

Yuen, F. 1991. Continuing nursing education: some issues. *Journal of Advanced Nursing,* 16:1233-1237.

ANNEXURE A

FOCUS GROUP DISCUSSION GUIDE

4.5 Discussion guide for focus group interview

The following questions were formulated and used to facilitate the focus group discussions, as described earlier.

1. Who are family nurse practitioners?
2. What is the role of family nurse practitioners?
3. Do you think the training they receive prepares them for this role?
4. How do family nurse practitioners perceive their level of competence in their expanded role?
5. What knowledge and skills do you think they need in order to fulfil this role?
6. In what practice setting should family nurse practitioners work?
7. What types of health problems are often managed by family nurse practitioners?
8. What are the consumers' perceptions of the family nurse practitioner role in the work setting?
9. What are the achievements of family nurse practitioners?
10. What are the barriers of their practice?
11. What are the needs of family nurse practitioners?
12. What is the relationship of the family nurse practitioner with the health workers, including doctors?

ANNEXURE B

LETTERS OF PERMISSION TO CONDUCT THE RESEARCH

SWAZILAND **GOVERNMENT**

Ministry Of Health & Social Welfare
P. O. Box 5
Mbabane

15 March, 1999

Murmly D. Mathunjwa
University of Swaziland
Faculty of Health Sciences
Box 369
Mbabane

Re: Permission to conduct research on Continuing Education Programme for Family Nurse Practitioners in Swaziland

Permission is hereby granted to you to undertake the above mentioned study to be conducted in clinics, health centres and hospitals where family nurse practitioners are employed and practising.

You are requested to submit a report at the completion of the study

Wishing you the best in your endeavour

Nelisiwe Sikhosana
For: Principal Secretary

MINISTRY OF HEALTH
PRINCIPAL SECRETARY
1999 -03- 15
P.O. BOX 5 MBABANE

University of Swaziland
Faculty of Health Sciences
P. O. Box 369
MBABANE

8 March 1999

The Principal Secretary
Ministry of Health & Social Welfare
P. O. Box 5
MBABANE

Dear Sir

Re: Request for permission to conduct research on family nurse practitioners in Swaziland

I am a doctoral nursing student with the University of South Africa in Pretoria. In partial fulfilment of the programme, I am required to complete a doctoral thesis in which I will need nurses as my subjects.

I wish to request permission to conduct the research study in the clinics, hospitals and health centres where family nurse practitioners are employed and practising. My study will take between April and June 1999. My research topic is **A Continuing Education Programme for Family Nurse Practitioners in Swaziland.** A need assessment is a necessary first step in designing an effective continuing education programme.

The study will involve family nurse practitioners, nurse managers and nurse educators. Confidentiality will be observed at all costs.

Your co-operation in the matter is greatly appreciated.

Yours faithfully

Murmly D. Mathunjwa **(student)**

ANNEXURE C

COVERING LETTER AND QUESTIONNAIRE FOR THE

FAMILY NURSE PRACTITIONERS

University of Swaziland
Faculty of Health Sciences
P. O. Box 369
MBABANE
Swaziland

19 March 1999

Dear Colleague

I am currently undertaking a survey for my doctoral degree to identify the continuing education needs of family nurse practitioners in Swaziland. Unfortunately there appears too little information of the needs and role of family nurse practitioner in the provision of health care.

Participation in this study is voluntary. You as a key person in the rendering of quality nursing care are therefore requested to please complete the attached questionnaire as fully as possible. It is estimated that not more than 45 minutes will be needed to complete the questionnaire.

All information given will be treated with the strictest of confidence. Your co-operation will contribute significantly to the study. The results will be used to develop a continuing education framework for family nurse practitioners.

I will pick up the completed questionnaire a week from the date of receipt.

Thanking you in anticipation for giving up your valuable time to complete this questionnaire and making my research possible.

Yours sincerely

Mumly D. Mathunjwa

QUESTIONNAIRE

Objective of the study:
An investigation into the educational/learning needs of family nurse practitioners (FNPs) in Swaziland so that an educational programme can be designed based on the needs identified.

All information will be treated as strictly confidential.

Instruction:
Please answer all questions.
Answer each question objectively as it applies to your experience or situation.

QUESTIONNAIRE FOR THE FAMILY NURSE PRACTITIONER

For official use only

SECTION A: Demographic Data — 0 0 1
Please check one response to each item that reflects your experience or situation. ☐ ☐ ☐
1 2 3

1. Gender:
   - Male ☐ 0 ☐
   - Female ☐ 1 4

2. Age:
   - Below 26 years ☐ 1
   - 26 years – 35 years ☐ 2
   - 36 years – 45 years ☐ 3
   - 46 years – 55 years ☐ 4 ☐
   - Above 55 years ☐ 5 5

3. Level of education completed as family nurse practitioner:
   - Certificate ☐ 1
   - Diploma ☐ 2
   - Degree ☐ 3 ☐
   - *Other*: specify ☐ 4 6

4. Number of years in practice as family nurse practitioner:
   - 0 – 5 years ☐ 1
   - 6 – 10 years ☐ 2 ☐
   - Over 10 years ☐ 3 7

Instruction: Tick only one for question 5 – 8.

5. Length of training as a family nurse practitioner:

Under 9 months	☐ 1	
9 months – 12 months	☐ 2	
13 months – 18 months	☐ 3	
19 months 24 months	☐ 4	☐
Other: specify	☐ 5	8

6. In what setting do you currently practice as a family nurse practitioner?

Clinical	☐ 1	
Health Centre	☐ 2	
Public Health Unit	☐ 3	
Physician's clinic	☐ 4	
Own clinic	☐ 5	
Hospital Outpatients Department	☐ 6	
Hospital Ward	☐ 7	
Nursing Education Institution	☐ 8	☐
Other: specify	☐ 9	9

7. What is the ownership status of the institution in which you work?

Private/Non-governmental	☐ 1	
Government/Public	☐ 2	
Mission	☐ 3	
Industry	☐ 4	
Own	☐ 5	☐
Other: specify	☐ 6	10

8. Current employment position (designation):
Tick only one that you spend more time in.

Staff-Nurse	☐ 1	
Sister	☐ 2	
Matron	☐ 3	
Programme Manager	☐ 4	
Educator	☐ 5	
Researcher	☐ 6	
Clinical Supervisor	☐ 7	☐
Other: specify	☐ 8	11

9. What do you consider to be the function of the family nurse practitioner?

Clinical practice	Yes	☐	No	☐	☐ 12
Education	Yes	☐	No	☐	☐ 13
Leadership	Yes	☐	No	☐	☐ 14
Management	Yes	☐	No	☐	☐ 15
Health education	Yes	☐	No	☐	☐ 16
Counselling	Yes	☐	No	☐	☐ 17
Research	Yes	☐	No	☐	☐ 18
Collaborating	Yes	☐	No	☐	☐ 19
Referral	Yes	☐	No	☐	☐ 20
Home visiting	Yes	☐	No	☐	☐ 21
Advocacy	Yes	☐	No	☐	☐ 22
Other: specify	Yes	☐	No	☐	☐ 23

10. Were you adequately prepared for the function of clinical practice?

Yes ☐ No ☐ ☐ 24

If no, what knowledge and skills do you think you need in order to fulfil this function?

.....

.....

.....

11. Were you adequately prepared for the function of health education?

Yes ☐ No ☐ ☐ 25

If no, what knowledge and skills do you think you need in order to fulfil this function?

.....

.....

.....

12. Were you adequately prepared for the function of counselling?

Yes ☐ No ☐ ☐
26

If no, what knowledge and skills do you think you need in order to fulfil this function?

.....
.....
.....

13. Were you adequately prepared for the leadership function?

Yes ☐ No ☐ ☐
27

If no, what knowledge and skills do you think you need in order to fulfil this role?

.....
.....
.....

14. Were you adequately prepared for the management function?

Yes ☐ No ☐ ☐
28

If no, what knowledge and skills do you think you need in order to fulfil this function?

.....
.....
.....

15. Were you adequately prepared for the research function?

Yes ☐ No ☐ ☐
29

If no, what knowledge and skills do you think you need in order to fulfil this function?

.....
.....
.....

16. Were you adequately prepared for the research function?

Yes ☐ No ☐ ☐
30

If no, what knowledge and skills do you think you need in order to fulfil this function?

.....
.....
.....

17. Were you adequately prepared for the collaboration function?

Yes ☐ No ☐ ☐ 31

If no, what knowledge and skills do you think you need in order to fulfil this function?

.....
.....
.....

18. Were you adequately prepared for the education/teaching function (i.e. teaching students and auxiliaries)?

Yes ☐ No ☐ ☐ 32

If no, what knowledge and skills do you think you need in order to fulfil this function?

.....
.....
.....

19. Were you adequately prepared for the home visiting function?

Yes ☐ No ☐ ☐ 33

If no, what knowledge and skills do you think you need in order to fulfil this function?

.....
.....
.....

20. Do you consider that your family nurse practitioner education is relevant to your current work place?

Yes ☐ No ☐ ☐ 34

Explain/Comment:

.....
.....

21. Rate the common health problems you encounter in your health setting. Using the rating scale below:

Key: **4 – very common**
3 - common
2 – some what common
1 – not common

	1 2 3 4	
Respiratory infections	☐ ☐ ☐ ☐ 1	☐ 35
Diarrhoeal infections	☐ ☐ ☐ ☐ 2	☐ 36
Tuberculosis	☐ ☐ ☐ ☐ 3	☐ 37
Hypertension	☐ ☐ ☐ ☐ 4	☐ 38
Diabetes mellitus	☐ ☐ ☐ ☐ 5	☐ 39
Sexually transmitted infections	☐ ☐ ☐ ☐ 6	☐ 40
Nutritional diseases	☐ ☐ ☐ ☐ 7	☐ 41
Maternal health	☐ ☐ ☐ ☐ 8	☐ 42
Child health	☐ ☐ ☐ ☐ 9	☐ 43
Family planning	☐ ☐ ☐ ☐ 10	☐ 44
Malaria	☐ ☐ ☐ ☐ 11	☐ 45
Mental health	☐ ☐ ☐ ☐ 12	☐ 46
HIV/AIDS	☐ ☐ ☐ ☐ 13	☐ 47
Skin diseases	☐ ☐ ☐ ☐ 14	☐ 48
Other: specify	☐ ☐ ☐ ☐ 15	☐ 49

22. As a family nurse practitioner identify your successes or achievements.
Use the above rating scale (1 being the lowest and 4 being the highest).

	1 2 3 4	
Professional growth	☐ ☐ ☐ ☐ 1	☐ 50
Self satisfaction	☐ ☐ ☐ ☐ 2	☐ 51
Promotion	☐ ☐ ☐ ☐ 3	☐ 52
Better salary	☐ ☐ ☐ ☐ 4	☐ 53
Greater collaboration with others	☐ ☐ ☐ ☐ 5	☐

		54
Better knowledge and skills	☐ ☐ ☐ ☐ 6	☐ 55
Confidence in my work	☐ ☐ ☐ ☐ 7	☐ 56
Recognition	☐ ☐ ☐ ☐ 8	☐ 57
Respect from colleagues	☐ ☐ ☐ ☐ 9	☐ 58
Other: specify	☐ ☐ ☐ ☐ 10	☐ 59

23. As a family nurse practitioner identify your motivations for attending a continuing education programme. **Use the rating scale of 1-4 (1 being the lowest and 4 being the highest).**

	1 2 3 4	
Professional self-development	☐ ☐ ☐ ☐ 1	☐ 60
Personal self-development	☐ ☐ ☐ ☐ 2	☐ 61
Relevant topic	☐ ☐ ☐ ☐ 3	☐ 62
Interesting topic	☐ ☐ ☐ ☐ 4	☐ 63
Keeping abreast of continuing changes in client needs	☐ ☐ ☐ ☐ 5	☐ 64
Relief from routine work	☐ ☐ ☐ ☐ 6	☐ 65
Compliance with employer or supervisor	☐ ☐ ☐ ☐ 7	☐ 66
To earn credit	☐ ☐ ☐ ☐ 8	☐ 67
Other: specify	☐ ☐ ☐ ☐ 9	☐ 68

24. Have you attended any continuing education programme the past 6 months?

Yes ☐ No ☐ ☐ 69

If no, when last did you attend one?

12 months – 7 months back	☐ 1	
24 months – 13 months back	☐ 2	
More than 2 years back	☐ 3	☐
Other: specify	☐ 4	70

If yes, what was the content/topic area? Check what applies:

Management of diarrhoeal diseases	☐ 1	☐ 71
Management of respiratory infections	☐ 2	☐ 72
Immunisation	☐ 3	☐ 73
Family planning	☐ 4	☐ 74
HIV/AIDS	☐ 5	☐ 75
Tuberculosis	☐ 6	☐ 76
Management of common ailments	☐ 7	☐ 77
Management of Malaria	☐ 8	☐ 78
Leadership	☐ 9	☐ 79
Management	☐ 10	☐ 80
Health systems research	☐ 11	☐ 81
Health education	☐ 12	☐ 82
Counselling	☐ 13	☐ 83
Health promotion	☐ 14	☐ 84
Disease prevention	☐ 15	☐ 85
Rehabilitation	☐ 16	☐ 86
Mental health	☐ 17	☐ 87
Other: specify	☐ 18	☐ 88

25. As a family nurse practitioner identify problems or frustration in your work setting from the givenl list below: **Use the rating scale 1-4 (1 being the lowest and 4 being the highest).**

	1 2 3 4	
Inadequate equipment	☐ ☐ ☐ ☐ 1	☐ 89
Inadequate supplies	☐ ☐ ☐ ☐ 2	☐ 90
Insufficient drugs	☐ ☐ ☐ ☐ 3	☐ 91
Shortage of staff	☐ ☐ ☐ ☐ 4	☐ 92
Lack of support from employer or supervisor	☐ ☐ ☐ ☐ 5	☐ 93
Lack of continuing education offerings	☐ ☐ ☐ ☐ 6	☐ 94
Lack of recognition	☐ ☐ ☐ ☐ 7	☐ 95
Lack of promotion	☐ ☐ ☐ ☐ 8	☐ 95
Overworked	☐ ☐ ☐ ☐ 9	☐ 97
Inadequate salary	☐ ☐ ☐ ☐ 10	☐ 98
Lack of security in work setting	☐ ☐ ☐ ☐ 11	☐ 99
Other: specify	☐ ☐ ☐ ☐ 12	☐ 100

26. Indicate additional provisions you would like to be made within your work setting to maximise your attendance to continuing education:

	1 2 3 4	
Increased staffing levels	☐ ☐ ☐ ☐ 1	☐ 101
Advanced notification of course	☐ ☐ ☐ ☐ 2	☐ 102
Relatedness of topic to individual need	☐ ☐ ☐ ☐ 3	☐ 103
Involvement of learners in needs identification	☐ ☐ ☐ ☐ 4	☐ 104
Budget for continuing education	☐ ☐ ☐ 5	☐ 105
Other: specify	☐ ☐ ☐ ☐ 6	☐ 106

27. Give any other points you wish to make concerning your needs that were not covered in this questionnaire. .....
.....

SECTION B

1. If you were to attend/choose a continuing education programme in relation to your work, identify in order of importance. **Using the scale provided below (1being the lowest and 4 being the highest).**

Key: **4 – very important**
3 - important
2 – some what important
1 – least important

	1 2 3 4	
Physical assessment	☐ ☐ ☐ ☐ 1	☐ 107
Diagnosing of common health problems	☐ ☐ ☐ ☐ 2	☐ 108
Management of common health problems	☐ ☐ ☐ ☐ 3	☐ 109
Pharmacology	☐ ☐ ☐ ☐ 4	☐ 110
Safe motherhood initiatives	☐ ☐ ☐ ☐ 5	☐ 111
Community health nursing	☐ ☐ ☐ ☐ 6	☐ 112
Environmental health	☐ ☐ ☐ ☐ 7	☐ 113
Community based care	☐ ☐ ☐ ☐ 8	☐ 114
Epidemiology	☐ ☐ ☐ ☐ 9	☐ 115
Biostatistics	☐ ☐ ☐ ☐ 10	☐ 116
Patient teaching	☐ ☐ ☐ ☐ 11	☐ 117
Clinical teaching	☐ ☐ ☐ ☐ 12	☐ 118
Mental health nursing	☐ ☐ ☐ ☐ 13	☐ 119
Leadership	☐ ☐ ☐ ☐ 14	☐ 120
Management	☐ ☐ ☐ ☐ 15	☐ 121
Professionalism	☐ ☐ ☐ ☐ 16	☐ 122
Emergency care	☐ ☐ ☐ ☐ 17	☐

Disaster management	☐ ☐ ☐ ☐ 18	123 ☐
Sexually transmitted infections	☐ ☐ ☐ ☐ 19	124 ☐
Communication	☐ ☐ ☐ ☐ 20	125 ☐
Clinical laboratory skills	☐ ☐ ☐ ☐ 20	126 ☐
Other: specify	☐ ☐ ☐ ☐ 22	127 ☐
		128

2. Identify additional knowledge/skills you need in continuing education. **Rate using the scale above (1 being the lowest and 4 being the highest).**

	1 2 3 4	
Clinical practice skills	☐ ☐ ☐ ☐ 1	☐ 129
Teaching skills	☐ ☐ ☐ ☐ 2	☐ 130
Learning skills	☐ ☐ ☐ ☐ 3	☐ 131
Patient teaching skills	☐ ☐ ☐ ☐ 4	☐ 132
Counselling skills	☐ ☐ ☐ ☐ 5	☐ 133
Health education skills	☐ ☐ ☐ ☐ 6	☐ 134
Leadership skills	☐ ☐ ☐ ☐ 7	☐ 135
Management skills	☐ ☐ ☐ ☐ 8	☐ 136
Referral skills	☐ ☐ ☐ ☐ 9	☐ 137
Collaboration skills	☐ ☐ ☐ ☐ 10	☐ 138
Research skills	☐ ☐ ☐ ☐ 11	☐ 139
Problem solving skills	☐ ☐ ☐ ☐ 12	☐ 140
Case management skills	☐ ☐ ☐ ☐ 13	☐ 141
Other: specify	☐ ☐ ☐ ☐ 14	☐ 142

3. Place a number against the form of continuing education you prefer most in order of preference, where 1 = the activity you find most valuable through 11 = the activity you find least valuable. Use all the numbers.

N.B: Each number from 1-11 must be used only once.

Lecture	☐	☐ 143
Discuss	☐	☐ 144
Workshop	☐	☐ 145
Case studies (problem-solving)	☐	☐ 146
Case histories	☐	☐ 147
Simulation	☐	☐ 148
Learning packages	☐	☐ 149
Demonstrations	☐	☐ 150
Panel discussions with experts	☐	☐ 151
Role play	☐	☐ 152
Reading on my own	☐	☐ 153

4. Do you think there is need for a formal structured continuing education programme for family nurse practitioners?

Yes ☐ No ☐ ☐ 154

Explain/comment: .....
.....
.....

5. Choose the interval between which you think you should attend continuing education to improve your work. Tick (√) only one.

Once in 1 month	☐	
Once in 3 month	☐	
Once in 6 month	☐	
Once in 9 month	☐	
Once in 12 month	☐	
Once in 18 months	☐	
Once in 24 month	☐	
Once in 60 months	☐	
Not of all	☐	☐
Other: specify	☐	155

6. Continuing education in nursing means different things to different people. Rate the importance of each of the following statements using the following scale, by placing ranking number in the corresponding box:

4 – very important
3 – important
2 – some what important
1 – least important

	Ranking 1 2 3 4	
Update my knowledge and skills in a not too demanding way	☐ ☐ ☐ ☐	☐ 156
Meet colleagues	☐ ☐ ☐ ☐	☐ 157
Learn new knowledge and skills	☐ ☐ ☐ ☐	☐ 158
Identify my learning needs	☐ ☐ ☐ ☐	☐ 159
Offering to meet learning needs	☐ ☐ ☐ ☐	☐ 160
Learning new skills	☐ ☐ ☐ ☐	☐ 161
Learn neglected skills	☐ ☐ ☐ ☐	☐ 162
Earn credit	☐ ☐ ☐ ☐	☐ 163
Other: (explain)	☐ ☐ ☐ ☐	☐ 164

7. Do you have any other ideas, comments or suggestions, which could make continuing education more meaningful in order to meet your needs?

Comments: .....
.....
.....
.....
.....

THANK YOU FOR YOUR ASSISTANCE AND CO-OPERATION

ANNEXURE D

COVERING LETTER AND QUESTIONNAIRE FOR

NURSE EDUCATORS AND NURSE MANAGERS

University of Swaziland
Faculty of Health Sciences
P. O. Box 369
MBABANE
Swaziland

19 March 1999

Dear Colleague

I am currently undertaking a survey for my doctoral degree to identify the continuing education needs of family nurse practitioners in Swaziland. Unfortunately there appears too little information of the needs and role of family nurse practitioner in the provision of health care.

Participation in this study is voluntary. You as a key person in the rendering of quality nursing care are therefore requested to please complete the attached questionnaire as fully as possible. It is estimated that not more than 45 minutes will be needed to complete the questionnaire.

All information given will be treated with the strictest of confidence. Your co-operation will contribute significantly to the study. The results will be used to develop a continuing education framework for family nurse practitioners.

I will pick up the completed questionnaire a week from the date of receipt.

Thanking you in anticipation for giving up your valuable time to complete this questionnaire and making my research possible.

Yours sincerely

Murmly D. Mathunjwa

QUESTIONNAIRE

Objective of the study:
An investigation into the education/learning needs of family nurse practitioners (FNPs) in Swaziland so that an education programme can be designed based on the needs identified.

All information will be treated as strictly confidential.

Instruction:
Please answer all questions.
Answer each question objectively as it applies to your experience or situation.

QUESTIONNAIRE FOR NURSE EDUCATORS AND NURSE MANAGERS

For official use only
0 0 1
□□□
1 2 3

1. What is a family nurse practitioner (FNP)?
   .....
   .....
   .....

2. What do you consider as the function of the family nurse practitioner?

Clinical practice function	Yes	□	No	□			□ 4
Health education function	Yes	□	No	□			□ 5
Counselling function	Yes	□	No	□			□ 6
Leadership function	Yes	□	No	□			□ 7
Management function	Yes	□	No	□			□ 8
Collaboration function	Yes	□	No	□			□ 9
Referral function	Yes	□	No	□			□ 10
Research function	Yes	□	No	□			□ 11
Student and auxiliary teaching function			Yes	□	No	□	□ 12

3. Did their training prepare them for the function of:

Clinical practice	Yes	☐	No	☐	☐ 10
Health education	Yes	☐	No	☐	☐ 11
Counselling	Yes	☐	No	☐	☐ 12
Leadership	Yes	☐	No	☐	☐ 13
Management	Yes	☐	No	☐	☐ 14
Collaboration	Yes	☐	No	☐	☐ 15
Referral	Yes	☐	No	☐	☐ 16
Research	Yes	☐	No	☐	☐ 17
Student and auxiliary teaching	Yes	☐	No	☐	☐ 18

If no, what knowledge and skills do you think they need in order to fulfil this function?

.....

.....

4. Do you think there is need for a formal structured continuing/in-service education programme?

Yes ☐ No ☐ ☐ 18

If yes, describe: .....

.....

If no, what are the reasons for not having one?

No budget	☐ 1
Not a priority	☐ 2
Overtaken by other events	☐ 3
	☐ 20
Not mandatory for registration/licensing	☐ 4
There is no need nurses learned everything at college	☐ 5
Other: specify	

5. If you were to plan a continuing education programme for family nurse practitioners what considerations would you take into account to make it effective? Rate on a scale of 1-4.

4 – very important
3 – important
2 – some what important
1 – least important

	1	2	3	4	
Involvement of learners in needs assessment	☐	☐	☐	☐	☐ 21
Involvement of learners in the planning	☐	☐	☐	☐	☐ 22
Involvement of stakeholders in the plan	☐	☐	☐	☐	☐ 23
Relevance of topics to meet needs (practice related)	☐	☐	☐	☐	☐ 24
Preferred learning strategies	☐	☐	☐	☐	☐ 25
Preferred times of attendance	☐	☐	☐	☐	☐ 26
Advanced notification of course	☐	☐	☐	☐	☐ 27
Marketing the programme	☐	☐	☐	☐	☐ 28
Other: specify	☐	☐	☐	☐	☐ 29

6. How often do you think family nurse practitioners should attend continuing education offerings?.....
.....
.....

7. When conducting a continuing education programme, what methods of presentation would you prefer?

4 – very important
3 - important
2 – some what important
1 – least important

	Ranking 1	2	3	4	
Teacher-centred lectures	☐	☐	☐	☐	☐ 30
Group work	☐	☐	☐	☐	☐ 31
Learner-centred lectures	☐	☐	☐	☐	☐ 32
Role play	☐	☐	☐	☐	☐ 33
Case studies (problem solving)	☐	☐	☐	☐	☐ 34
Case histories	☐	☐	☐	☐	☐ 35
Distance learning	☐	☐	☐	☐	☐ 36
Simulations	☐	☐	☐	☐	☐ 37
Demonstrations	☐	☐	☐	☐	☐ 38
Other: specify	☐	☐	☐	☐	☐ 39

8. How is current practice related to the family nurse practitioner training (preparation)?
.....
.....

9. For what types of health problems do family nurse practitioners most frequently provide care? .....
.....

10. What do you identify as motivators for family nurse practitioners? .....
.....
.....

11. What do you identify as family nurse practitioners strengths or successes? .....
.....
.....

12. What do identify as family nurse practitioners problems or frustrations? .....
.....
.....

13. How is the relationship between the family nurse practitioner and the medical doctor regarded as: *Tick what is appropriate.*

Helpful	☐ 1
Collaborative	☐ 2
Threatening to doctor by FNP	☐ 3
Threatening to FNP by doctor	☐ 4
Neither help nor hinder	☐ 5
Other: specify	☐ 6

14. Indicate the relationship of the family nurse practitioner to other nurses by ticking appropriately as given.

Helpful	☐ 1
Collegial	☐ 2
Threat	☐ 3
Neither help nor hinder	☐ 4
Other: specify	☐ 5

15. Do you have any other ideas, comment or suggestions, which could help in identifying the needs of family nurse practitioner so that a programme of continuing education could be designed that will meet these needs and those of clients as a whole? .....
.....
.....
.....
.....