CLINICAL TEACHING BY REGISTERED NURSES

BY

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DECLARATION

I declare that ***CLINICAL TEACHING BY REGISTERED NURSES*** is my own work and that all the sources that I have used have been indicated and acknowledged by means of complete references and that this work has not been submitted for any other degree at other institution.

W.N. Mochaki

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MOCHAKI NARE WILLIAM **2001-11-30**

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ABSTRACT

CLINICAL TEACHING BY REGISTERED NURSES

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The purpose of this quantitative, descriptive study was to describe how registered nurses utilise teachable moments to enhance students' learning in the clinical setting. The research questions were: *What are the problems faced by registered nurses when they teach students in the clinical setting?* and *How do registered nurses utilise teachable moments to teach students?* A pilot study was conducted in the clinical setting involving the respondents who had similar characteristics than the population. The sample consisted of 45 registered nurses who provided direct patient care in the clinical setting. A self-administered, structured questionnaire was used to collect data. Data analysis was done by using descriptive statistical tests. The findings brought to light strengths and weaknesses with regard to the utilisation of teachable moments by registered nurses, and problems faced by registered nurses with regard to clinical accompaniment in general. Recommendations to improve clinical accompaniment by registered nurses through effective utilisation of teachable moments were made. Further research was recommended to explore some problematic areas that emerged from this study.

KEY CONCEPTS

Nursing education; Clinical accompaniment; Teachable moments; Registered nurse; Clinical setting; Student; Teaching; Function

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CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Registered nurses are expected to provide high quality nursing care by focusing on areas such as client care, administration, research and teaching. They have the responsibility of teaching students to provide health care of the highest possible standard. Education is recognised as an integral part of nursing and health care in general. The educational role of the registered nurse has been formally acknowledged in South Africa and is regarded as one of the competencies of the registered nurse (South Africa 1984: 2).

The registered nurse is a clinician, motivator and facilitator of client care. The registered nurse is expected to provide learning opportunities for the student to practise and master clinical nursing skills, and those skills which facilitate the development of sound interpersonal relationships. Students should be equipped with specific competencies that will enable them to meet performance challenges such as ensuring quality service and proficiency in service areas. Clinical education in nursing is central to the development and socialisation of students in the nursing profession. It provides opportunities for interaction in the environment of clients and other health professionals (Cruickshank, Bradbury & Himsworth 1998: 12; Mellish, Brink & Paton 1998: 209; South African Nursing Council (SANC) 1994 par. 2.1.2).

According to Nicklin and Kenworthy (2000: 75), all registered nurses have explicit teaching and supervisory functions as a part of their nursing role. The teaching role of the registered nurse is fulfilled by means of clinical accompaniment of students in the clinical setting. In this study, clinical accompaniment refers to planned and deliberate interventions by registered nurses, in the learning activities of student nurses in order to meet clinical learning needs (refer to par. 1.5.4). Registered nurses should extend and deepen the knowledge and the skills of student nurses who are allocated to gain practical

experience in the clinical setting. Registered nurses should supervise students and help them to achieve their learning objectives. Clinical supervision is an enabling relationship between nurses in which nurses are accountable in assisting one another to practise to the best of their abilities. Supervision of students by the registered nurse is an exchange process between practising professionals who enable students to develop professional skills. This also helps to safeguard the standards of care and delivery of care. Clinical accompaniment sustains and develops safe and accountable practice (Butterworth, Bishop & Carson 1996: 129; Gumbi & Muller 1996: 39).

One clinical teaching strategy that registered nurses could utilise is the teachable moment. Registered nurses should recognise and use teachable moments to enhance the success of student accompaniment. Registered nurses could begin to utilise teachable moments when there is, for instance, an immediate reaction to an event or a current concern of a student. Learning is more effective when new knowledge is gained through personal experiences. If students' abilities are respected, they are likely to feel more secure in developing personal perceptions and experiences that will support professional practice (Wagner & Ash 1998: 279).

Clinical accompaniment could be a challenging exercise for registered nurses. According to Twinn and Davies (1996: 178), registered nurses face challenges related to clinical accompaniment such as facilitation of learning, supervision of clinical practice and assessment of practice. Their study revealed that a commitment by registered nurses to the process of facilitation of student learning is very important. It is thus evident from the literature that this commitment could lead to acquisition by students of relevant knowledge for providing adequate nursing care to clients.

Various problems are evident with regard to clinical accompaniment of students in the clinical setting. The problems are discussed in paragraph 1.2, and will only be briefly mentioned here. From a student perspective, registered nurses seem to be unable to attend to students' learning needs due to a heavy workload and resultant time constraints. Students often practise without adequate clinical accompaniment by registered nurses.

The position of these students, who are allocated to the clinical settings, is often not recognised, and they often function without the necessary supervision or guidance. The interpersonal climate is often not conducive to student learning. Furthermore, students complain about a lack of congruence between what they learn in the classroom and what they experience in the clinical settings. From the perspective of registered nurses, time constraints and a lack of adequate teaching skills may impact negatively on their ability to provide effective clinical accompaniment to students.

The researcher undertook a study that was aimed at exploring and describing the utilisation of teachable moments by registered nurses in the Northern Province of South Africa, and at identifying problems that influence their ability to fulfil their clinical accompaniment role. Effective utilisation of teachable moments is dependent upon good clinical accompaniment. This research is consistent with a recommendation by Chabeli (1998: 43), namely that the teaching component of the registered nurse's role should be investigated to develop reflective methods of teaching in the clinical setting.

1.2 RESEARCH PROBLEM

1.2.1 The source of the research problem

The Programme Leading to Registration as a Nurse (General, Psychiatry, Community) and Midwife entails classroom and clinical teaching (SANC 1988 par.2.8 as amended). Clinical teaching is divided into structured clinical teaching by tutors and clinical accompaniment by registered nurses. Students gain clinical experience by working as part of a multidisciplinary health team. By means of clinical accompaniment, registered nurses fulfil their responsibility of participating in the education of student nurses while students are allocated to their clinical units (South Africa 1978, par.1.4).

The researcher is currently a tutor at a nursing college in the Northern Province. The research problem originated from the observations made by the researcher in the clinical setting, namely that registered nurses do not use learning opportunities in the clinical

setting optimally to fulfil their clinical accompaniment function. Registered nurses seemed to concentrate more on client care than on the learning needs of student nurses. During clinical meetings, especially after practical examinations, tutors and registered nurses remarked that students' clinical performance was unsatisfactory. Most students did not perform with the required knowledge-based competence expected of them. Students' clinical workbooks and documents did not show evidence that registered nurses in the clinical settings were optimally involved in clinical accompaniment or in the use of teachable moments to teach students.

The researcher's observations are supported by the literature. According to the study conducted by Khoza and Ehlers (1998: 73), registered nurses are expected, upon completion of training, to be competent in areas such as teaching both clients and fellow nurses. The results of this study revealed poor clinical accompaniment as manifested by a lack of clinical teaching and a lack of continuous supervision of students by registered nurses.

Clinical accompaniment is vital and irreplaceable. It should be done correctly so that the learning objectives of students are attained. Mantey and Kramer (in Titchen & Binnie 1995: 333) support the view that registered nurses should participate in the clinical accompaniment of student nurses. The researchers recommended that registered nurses should create a learning environment for students and that they should assist student nurses in developing practical knowledge from their experiences. Ewan and White (1991:124) stated that clinical accompaniment reduces students' anxiety about functioning in clinical settings without the necessary direction. It also provides students with opportunities for decision-making and creativity.

Inadequate clinical accompaniment could have negative consequences for the clinical setting where students participate in health care delivery, and for the nursing college where students obtain their theoretical knowledge. It would also lead to inadequate correlation between theory and practice. Furthermore, a lack of correlation between theory and practice could lead to a lack of harmony between registered nurses in the

clinical settings and tutors from the nursing college. Poor clinical accompaniment could also be responsible for student attrition (Rhead 1995: 373; Tlakula & Uys 1993: 29). A study by Tlakula and Uys (1993: 29) brought to light that, in South Africa, poor clinical training was responsible for 39% of students withdrawing from the Programme Leading to Registration as a Nurse (General, Psychiatry, Community) and Midwife. Lowan (1990), in Khoza (1996: 44), identified various long-term implications of poor clinical accompaniment of students. Their study found that newly qualified registered nurses performed poorly on aspects such as planning for and teaching of students in the clinical setting. The newly qualified registered nurses could not competently formulate clearly defined learning objectives for their students in the clinical setting. This means that registered nurses who experience poor clinical accompaniment themselves in turn become poor mentors to students working under their guidance.

The situations discussed above highlighted the need for research on clinical accompaniment of students by registered nurses in the Northern Province of South Africa. This study was specifically concerned with the utilisation of teachable moments by registered nurses in the clinical setting where students from the Northern Province College of Nursing do their practica. The rationale for the study was that registered nurses should use teachable moments effectively to enhance student learning in the clinical setting. Registered nurses should identify potential teachable moments in everyday practice and turn them into learning experiences for students. This would contribute towards effective clinical accompaniment without placing unnecessary demands on the time of registered nurses. In order to contribute towards effective utilisation of teachable moments through research, it is necessary to identify problem areas in a specific educational setting and to make recommendations, based on research findings, on how to overcome the identified problems.

1.2.2 Research problem and background to the problem

The above discussions indicate that clinical accompaniment by registered nurses is problematic. It appears that registered nurses do not optimally engage in clinical

accompaniment of students in the clinical settings. Previous studies highlighted possible reasons for inadequate clinical accompaniment by registered nurses.

Personnel shortages may result in inadequate clinical accompaniment. When shortages occur, additional pressure for productivity is placed on registered nurses. This makes it difficult to find time for involvement in student teaching. According to the research by Bowman (1995: 45), some registered nurses believe that they cannot provide adequate accompaniment to students because there are too many demands on their time, they have a high patient care workload and a lack of suitable numbers of qualified staff. They are therefore not able to teach and supervise students in the way they would like to. The report by the American Health Care Association on staffing shortages of nursing personnel in nursing services in long term care, which was released in January 2001, underscores the fact that nursing shortages is an international issue (Tanner 2001: 99). Runciman (1983), in Wannenburg (1992: 11), found that registered nurses lacked time for teaching students and that they were uncertain of what to teach and how to teach it. This study also brought to light that some registered nurses spend as little as 5% of their time with students and that formal teaching comprises 1% of the total time registered nurses spend on teaching students. They also found that registered nurses regard clinical accompaniment of students as having a lower priority than patient care. This is supported by a study by Wannenburg (1992: 11), which also found that registered nurses viewed clinical accompaniment as coming after client care. According to Bowman (1995: 45), these problems that hamper effective clinical accompaniment need urgent solutions if registered nurses are to provide the services expected from them and which are legally demanded in terms of their scope of practice. One strategy to enhance the effectiveness of clinical accompaniment could be the utilisation of teachable moments as this teaching strategy allows for turning everyday practice into learning situations. This would not necessarily place additional time demands on registered nurses.

Other problems that impact negatively upon clinical accompaniment, include the fact that the student status of nursing students is ignored and that the learning dimension of students' training is not taken seriously by registered nurses. These problems are

highlighted by various studies. A study by McCrea, Thompson, Carswell and Whittington (1994: 98) revealed that 83% of students felt that they were regarded as workers, a pair of hands, in the clinical setting. The students stated that, due to staff shortages, there is insufficient time available for registered nurses to teach students. Sometimes students are left doing procedures on clients without registered nurses supervising them, because the registered nurses need to give more attention to client care (Kappeli 1993: 209; McCrea et al. 1994: 100; Twinn & Davies 1996: 180). Other related factors could be a lack of interest, experience and a general lack of preparation for their teaching role on the part of registered nurses (Brewer & Kovner 2001: 20; Lathlean & Vaughan 1994:17; Manzini 1998: 177)

The study by McCrea et al (1994: 98), revealed a lack of adequate clinical accompaniment of students, irrespective of whether nursing shortages occurred or not in this research setting. This study indicated that, that even though registered nurses were willing to do clinical accompaniment, they were not prepared for their teaching role. This is supported by Runciman (1983) in Wannenburg (1992: 11), who found that registered nurses lacked confidence and had difficulties in assessing the learning needs and performance of students.

Another important problematic aspect is the registered nurses-student relationship, which often fails to support the establishment of a climate that is conducive to learning. Rhead (1995: 373) conducted a study to investigate stress amongst students in clinical settings. The results indicated the presence of high stress levels related to a lack of opportunities for students to talk openly with registered nurses about problems that they encountered in the clinical settings. The students reported that they did not share feelings and experiences with registered nurses and that there was little direction in what was expected of them. The establishment of a therapeutic learning environment becomes a real challenge; registered nurses need to listen and be open to students. This could set students free to talk openly without fear, especially those who are still inexperienced in the complex field of nursing. Student learning is more likely to take place in the clinical settings in which registered nurses emphasise students' learning and emotional needs, and

where students become part of the health team. It is also imperative that registered nurses prioritise the teaching and training of students (Nash, Stoch & Hamper 1994: 290; Matthews & Whelan 1993: 215).

The issue of a lack of congruency between theory and practice was supported by a study by Conco (1998: 51), which indicated that students complained that teaching in the classroom did not correlate with what they learnt in clinical practice. The research also revealed that the clinical setting did not reflect a learning environment for them. Some students felt that they were not adequately equipped to face clinical practice after the completion of their training. A study by Koen and De Villiers (1997: 25) reported that 60% of second year students and 62% of third year students at a South African nursing college stated that their experiences in the clinical setting were not congruent with what they had learned in the classroom setting at nursing college. According to Nicklin and Kenworthy (2000: 53), nursing education has a long history of providing practical experience for its students which is neither directly related to the theoretical teaching nor motivated by educational factors. In recent years the statutory bodies have required the presence of concurrent theory and practice as a fundamental prerequisite for the approval of a course. Therefore skills-based programmes should have associated and supportive theoretical background.

Integrating teaching and practice has two effects. It ensures that education is relevant. Secondly, it brings quality nursing practice to the health care system. Effective clinical accompaniment by registered nurses would assist students in developing critical thinking and problem solving skills. It is directed at assistance and support extended to students by registered nurses with the aim of developing a competent nurse practitioner. Once students graduate they should ideally have achieved the role of caregivers, advisors, educators, leaders and researchers (Kappeli 1993: 209; McCrea et al. 1994: 100; Mogale 2000: 77; Twinn & Davies 1996: 180).

The researcher undertook this research to establish how teachable moments are utilised by registered nurses, and the problems that they face with regard to clinical accompaniment. It is evident that the utilisation of teachable moments could contribute towards effective clinical accompaniment without placing too much of a demand on the time of registered nurses, as everyday practice is used for teaching purposes. Turning everyday experiences into teaching opportunities also has the potential to enhance theory-practice integration. However, this demands commitment and skill on the part of the registered nurse.

1.2.3 Statement of the research problem

Registered nurses do not seem to take clinical accompaniment seriously and do not regard it as forming an integral part of their overall clinical activities. Various problems impact negatively on providing effective clinical accompaniment in clinical settings. This influences the utilisation by registered nurses of teachable moments as a clinical teaching strategy. Xulu (1998: 16) studied the registered nurses' accompaniment role in KwaZulu-Natal's hospitals. The study revealed that registered nurses used various strategies and that the utilisation of teachable moments is a valuable teaching strategy in the clinical setting. These findings, together with the problems that hamper effective clinical accompaniment, highlight the need to investigate how registered nurses use teachable moments in the clinical setting in the Northern Province of South Africa. These findings could provide more data on how registered nurses perform clinical accompaniment by using teachable moments. Furthermore, the researcher could gain insight into the problems facing registered nurses that influence their clinical accompaniment in general, and which would, in turn, impact upon their utilisation of teachable moments in the clinical setting.

The problem statement for this study is:

How are teachable moments utilised by registered nurses in the Northern Province of South Africa for the purpose of clinical accompaniment of students for the Programme Leading to Registration as a Nurse (General, Psychiatric, Community) and Midwife.

1.3 SIGNIFICANCE OF THE STUDY

The study emphasised that clinical accompaniment is an important responsibility of registered nurses. It may contribute towards improving understanding of the current situation with regard to clinical accompaniment in general, and specifically the utilisation of teachable moments in the clinical settings in the Northern Province. Problems identified with regard to the utilisation of teachable moments formed the basis for recommendations for designing necessary strategies to address these problems or shortcomings in order to improve clinical accompaniment.

The view that clinical accompaniment is an integral part of nursing science could be re-emphasised to the health authorities in the Northern Province. This study is specifically focused on the use of teachable moments as a clinical teaching strategy. This may contribute to a situation where registered nurses are perceived by students as role models. Improved clinical accompaniment by registered nurses would assist students in developing and acquiring professional skills that would ultimately improve quality client care. Clinical accompaniment allows students to sustain and develop safe, accountable practice (Butterworth, Bishop & Carson 1996: 129).

1.4 AIMS OF THE STUDY

1.4.1 The purpose of the study

The purpose of a study refers to the manner in which the researcher is seeking to solve the problem or the state of knowledge on the topic (Polit & Hungler 1995: 50). The purpose of this study was to investigate the utilisation of teachable moments by registered

nurses in the clinical settings, during clinical accompaniment of students who are enrolled for the Diploma for Registration as a Nurse (General, Psychiatry, Community) and Midwife. The study is aimed at identifying problematic areas with regard to the utilisation of teachable moments for the purpose of clinical accompaniment of students and making recommendations that could contribute to improved clinical accompaniment of students.

1.4.2 The research questions

A research question is defined as a concise, interrogative statement that consists of one or more variables. The question form has the advantage of simplicity and directedness. The questions invite answers and help the researcher to focus on the type of data to be collected (Burns & Grove 1993: 212; Polit & Hungler 1995: 51). The following research questions were formulated for this study, namely:

What problems do registered nurses experience with regard to fulfilling their clinical accompaniment function?

How do registered nurses utilise teachable moments in the clinical setting?

1.5 DEFINITION OF TERMS

1.5.1 Registered nurse

Registered nurse is a nurse with a certificate of competence (Pocket Oxford Dictionary 1992: 761). It is a person who is registered as a nurse under section 16 of the Nursing Act no 50 of 1978, as amended (South Africa 1997b, sec.16). For the purpose of this study, registered nurse refers to a person who is registered as a nurse under section 16 of the Nursing Act no 50 of 1978, as amended, who comes into daily contact with students in the clinical setting.

1.5.2 Teaching

Teaching is defined as giving systematic information to a person (The Oxford English Reference Dictionary 1996: 1479). Teaching is a relationship in which someone (the teacher) conveys knowledge (about something) to an individual or group of learners (the students). Teaching is about learning something and is structured around what is to be taught or learned, that is the content (Flynn 1997: 1).

For the purpose of this study the concept teaching refers to clinical accompaniment performed by a registered nurse aimed at guiding and assisting student nurses in learning the art and science of nursing. Registered nurses have a teaching function that they fulfil through clinical accompaniment.

1.5.3 Function

The concept function is defined as the ability to perform groups of tasks or physical care activities (Lewis & Bernstein 1996: 215). The concept also means planning for nursing care, determining the appropriate care, and preparing and supporting those who are entrusted with patient care. The setting of standards of care, clinical audits and the efficient management and organisation of resources are included (Muir, Prophit & Clark 1991: 29).

For the purpose of this study, function involves all nursing care activities performed by registered nurses to render quality patient care within the scope of their practice. Included are activities such as teaching of subordinates, providing direct and indirect patient care, undertaking research and administering patient care.

1.5.4 Clinical accompaniment

The word accompaniment is derived from the word accompany, which means *to go with, escort, attend* (Kotze 1998: 10;The Oxford English Reference Dictionary 1996: 9).

Clinical accompaniment is defined as encompassing the conscious and purposeful guidance and support of students according to their unique needs, by creating learning opportunities that make it possible for them to grow from passivity to involvement, to become independent, critical thinking practitioners (South Africa 1988 Par. 2.9.9).

For the purpose of this study, clinical accompaniment is referred to as planned and deliberate interventions by registered nurses in the learning activities of the student nurse in order to meet clinical learning needs. It includes activities such as bedside teaching, student support, supervision of students' learning and evaluation of the client care they provide.

1.5.5 Clinical setting

Clinical is defined as a place or occasion for giving special medical treatment or advice (The Oxford English Reference Dictionary 1996: 273). The concept involves direct observation of the client (Gaberson & Oermann 1999: 2).

Setting is defined as the immediate surroundings. It is the surroundings of any object regarded as its framework, the environment of a thing (The Oxford English Reference Dictionary 1996: 1326).

For the purpose of this study clinical setting refers to an environment in which a registered nurse and student are involved in client care and where learning opportunities present themselves. It is a place where students learn to apply theoretical knowledge to real clinical problems or to meet clients' needs under the guidance of a registered nurse.

1.5.6 Student

A *student* is person who is studying at a university or the actual place of higher education (The Oxford English Reference Dictionary 1996: 1434). A student is the person who studies at some institution of tertiary education in order to prepare for an occupation or

for further studies. In terms of nursing science, a student learns to nurse a client (Mellish & Brink 1990: 66).

For the purpose of this study, a student is a person registered as a student nurse under section 23 of the Nursing Act no 50 of 1978, as amended (South Africa 1997b, sec.23). It is a person who is enrolled at the Northern Province College of Nursing as a student nurse in the Programme Leading to Registration as a Nurse (General, Psychiatry, Community) and Midwife (R425).

1.5.7 Teachable moments

Teachable moments can be defined as moments during nursing care when something occurs to make immediate intervention desirable, and which can be used to give knowledge to those involved in specific caring incidents (Mellish & Brink 1990: 156).

For the purpose of this study, a teachable moment is any moment in everyday practice which a registered nurse can use to teach the student the art and science of nursing in the clinical setting to which students are allocated for practical learning.

1.6 THE THEORETICAL FOUNDATIONS OF THE STUDY

1.6.1 The theoretical framework

Nursing research and theory are interdependent and inseparable. Theoretical frameworks guide and help the researcher to formulate ideas for research (Brink 1996: 66). This study was based on theory, specifically Peplau's Theory of Interpersonal Relations in Nursing.

According to Peplau's Theory of Interpersonal Relations in Nursing, nursing is viewed as a maturing force and an educative instrument. The theory deals with the interactions between the nurse and the client in need of care, which leads to human growth of those involved. It makes provision for development towards maturity and self-actualisation

through meeting a hierarchy of human needs. Nursing activity is conceptualised as a process of moving the client towards a more productive mode of interpersonal functioning. Nursing is rendered in a structured or unstructured enabling environment. The theory is applicable in the registered nurse-student relationship as clinical accompaniment is an interactive process aimed at the enhancement of learning and the professional and personal development of students. Interpersonal relationships occur when registered nurses and students use client care activities for teaching purposes.

Nursing is a goal-directed process between nurses and clients. Nursing is described as helping clients gain intellectual and interpersonal competencies beyond those that they have at the point of illness. This is also applicable to clinical accompaniment. Accompaniment by registered nurses is an interpersonal, goal-oriented process where the learning needs of students are catered for (Fitzpatrick & Whall 1989: 51). Registered nurses and students have a common goal to provide quality nursing care to clients while registered nurses accompany students with the purpose of fostering professional socialisation.

According to Peplau, a person has biological, physiological and interpersonal characteristics. Both registered nurses and students are seen as such. The environment comprises external factors essential to human development. These include the presence of adults, a secure environment, status of the family and a healthy prenatal environment (Fitzpatrick & Whall 1989: 54). Within the context of clinical accompaniment, students develop towards a higher level of maturity as a result of interactions with, amongst others, registered nurses (Fitzpatrick & Whall 1989: 52). The clinical setting in which accompaniment occurs is characterised by the presence of professionally mature persons (registered nurses) who accompany students towards increased levels of professional maturity. It is very important that clinical accompaniment of students occurs in a secure, safe environment.

The concept of health implies a forward movement of personality and other ongoing human processes in the direction of creative, constructive, and productive personal and

community living (Fitzpatrick & Whall 1989: 64). The concept could be applied to clinical accompaniment as students should be guided towards personal, social and professional role fulfilment. In the clinical settings students should learn various scientific aspects of client care. They are also guided towards becoming creative and constructive future health care professionals.

Peplau's Theory encompasses four central concepts, namely interpersonal process, nurse, client and anxiety (Fitzpatrick & Whall 1989: 56). Applied to clinical accompaniment, the concepts anxiety and communication are seen as the key elements relevant to registered nurse-student interpersonal relationships in the teaching situation. Teaching is based on good communication in a secure learning environment that is free of influences that could cause frustration, conflict and anxiety (George 1990: 53).

The theory has been discussed in full in Chapter 2.

1.6.2 Meta-theoretical assumptions

Assumptions are the basic principles that are accepted in faith, and assumed to be true, without proof or verification (Polit & Hungler 1995: 10).

For the purpose of this study the following assumptions were formulated:

1.6.2.1 Assumptions about nursing education

The assumptions about nursing education were as follows:

- The role of registered nurses has a teaching dimension.
- The teaching role of registered nurses is fulfilled through clinical accompaniment of students.
- Nursing practice presents learning opportunities that can be utilised as teachable moments to enhance students' learning.

1.6.2.2 Assumption about nursing

The assumption about nursing was as follows:

- Nursing is a practice-oriented profession in which interaction occurs between the clients, registered nurses and students.

1.6.2.3 Assumptions about research

The assumptions about research were as follows:

- The research participants would be able to read and understand the questionnaires.
- This study would yield information needed to answer the research questions.
- This study would make a meaningful contribution towards the body of knowledge on nursing.

1.7 THE SCOPE AND LIMITATIONS OF THE STUDY

According to Burns and Grove (1993: 46), the limitations of a study are the restrictions that may decrease the generalisability of the findings. The limitations of this study were that it was focused on registered nurses employed at government hospitals to which the students, who are enrolled for the four-year basic course, are allocated for their clinical practica. This study concentrated on the hospitals where students from Sovenga Campus do their clinical practica, and not on other clinical settings such as clinics. This was done because of restrictions placed on the researcher by the Health Authority as a prerequisite for giving consent to do the research (refer to 3.7.2).

This study has excluded the area and unit managers, top nurse managers, registered nurses on leave and those on night duty. The community health centres, clinics and district health centres were also excluded due to the fact that in most instances the tutors

from the nursing college perform the clinical accompaniment of students in those settings. The tutors from the nursing college were excluded from this study as well because they do not provide direct client care.

1.8 THE ORGANISATION OF THE CHAPTERS OF THE DISSERTATION

This section of the dissertation illustrates the arrangement of the chapters of the dissertation.

Table 1.1 Structure of the dissertation

CHAPTER	CHAPTER TITLE	OVERVIEW
1	Orientation to the study	The chapter comprises an orientation to the study with emphasis on the identified problem, its background and its significance. The aims of the study, definitions of the terms, the theoretical foundation of the study and the limitations of the study are discussed.
2	Literature review	This chapter is structured according to the theory that was chosen to guide this research. Peplau's theory is outlined. Teaching and learning in the clinical setting, and the role of registered nurses are discussed. Teaching and learning as interpersonal process is also discussed, including the concept accompaniment and its projected outcomes.
3	Research design and method.	Included in this chapter are the objectives of the empirical research, the research design and method, and the data collection instrument and method. The ethical considerations, and reliability and validity are discussed.
4	Research results	This chapter comprises the research results.
5	Conclusions and recommendations	This chapter deals with the conclusions and recommendations of the research.

1.9 CONCLUSION

This study was aimed at exploring and describing the utilisation of teachable moments by registered nurses during clinical accompaniment of students. The significance of the study lies in the identification of problems associated with the utilisation of teachable moments in the clinical settings and the development of recommendations for effective use thereof. The theoretical foundation of the study is Peplau's Theory of Interpersonal Relations in Nursing.

The following chapter provides a detailed discussion of the relevant literature. The concepts clinical accompaniment and teachable moments as well as Peplau's theory are discussed.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter an extensive exposition of Peplau's Theory of Interpersonal Relations in Nursing is provided. An overview of the theory is given, specifically Peplau's views on aspects such as nursing, health, the individual and the environment. The relevance of the theory to this study is discussed. The application of the theory to nursing education is explained, especially with regard to clinical accompaniment. Other aspects that are covered include clinical accompaniment, teachable moments, teaching and learning as interpersonal processes and projected outcomes of effective clinical accompaniment.

2.2 PEPLAU'S THEORY OF INTERPERSONAL RELATIONS IN NURSING

An overview of the theory was given in Chapter 1 (refer to par. 1.6.1). The focus of the theory is the interpersonal process, which is highly relevant to teaching and learning encounters. Here, an overview of the four major concepts of the meta-paradigm of nursing within the framework of Peplau's theory will be given.

2.2.1 Peplau's views on the four concepts of the meta-paradigm of nursing

The four major concepts of the meta-paradigm of nursing are nursing, the individual, the environment and health.

2.2.1.1 Nursing

Nursing is regarded as a self-regulated social and scientific force. It is a science and an art, and attends to both the basic and the applied dimensions of knowledge. The primary purpose of nursing is the application of scientific principles, especially human

developmental principles, to facilitate and maintain human health and development. The nurse makes clinical judgements, through the use of cognitive skills, which are based on scientific knowledge. Nurses' insights are gained through experiences in clinical settings, and the application of theory and principles from related sciences. Nursing is therapeutic in that it is considered a healing art whereby individuals who are sick or in need of health care are assisted. Nurses and clients are involved in a human relationship that is characterised by professional closeness and respect for one another (George 1990: 44; Peplau 1952: 7).

Nursing has its own independent area of practice. This independence is exercised within the context of being part of a collaborative health team (Fitzpatrick & Whall 1989: 51). Nurses participate in delineating the roles that they fulfil in relation to other individuals (such as clients) and other multi-disciplinary team members. Education and practice as well as close and continuous contact with clients, families and communities make it possible for nurses to state their functions on the basis of some logical rationale and to coordinate their functions with those of others when planning and executing those functions (Peplau 1952: 7).

Peplau's interpersonal process (refer to par. 2.4.2) is similar to the nursing process. The therapeutic interpersonal process is a human relationship between an individual who is sick or in need of health services, and nurses who are specially educated to recognise and respond to the need for help. A human relationship is one in which two persons come to know each other. The interpersonal process is therapeutic in the sense that it is characterised by a problem solving approach in which nurses and clients find solutions to health problems in a cooperative manner. Through application of the interpersonal process, persons who are different but who share a common goal, namely to meet the client's needs, learn to understand and respect each other. The common goal provides incentives for the therapeutic process (George 1990: 44).

The interpersonal process comprises four phases, namely orientation, identification, exploitation and resolution. The orientation phase entails a needs assessment through an

investigative interview. Identification of needs is done collaboratively. This also applies to subsequent decision-making on the most appropriate course of action to address the identified needs of clients. During this phase, a therapeutic relationship between nurses and clients is established. During the identification phase clients respond selectively to people who can meet their needs. They could assume an independent, an interdependent or a dependent role. Perceptions and expectations of both parties are clarified and the therapeutic relationship becomes more intense. The exploitation phase involves the utilisation of resources that are available in the helping environment. This may lead to a sense of control over the situation. Nurses assume a facilitative role that changes according to fluctuating levels of dependency on the part of the clients. The last phase is the resolution phase. It entails assessment of the extent to which clients' needs are met and whether the therapeutic relationship could be terminated (George 1995: 51). The interpersonal process is discussed in detail in paragraph 2.4.2.

The interpersonal process is also educative in nature. Therapeutic interactions between nurses and clients provide opportunities for both these groups of individuals to learn and grow. Learning occurs when an individual selects stimuli in an environment and develops fully as a result of reactions to these stimuli (George 1990: 44). Nursing offers the opportunity to learn and acquire experiences while engaged the interpersonal process. As the nurse guides the client, he/she develops personally and professionally. The type of person the nurse becomes finally directly influences the therapeutic interpersonal process. Nursing is therefore viewed as a maturing force and an educative instrument (Fitzpatrick & Whall 1989: 50; George 1990: 44, 51, 53).

2.2.1.2 Health

Health is conceptualised as the forward movement of personality and other ongoing human processes in the direction of creative, constructive, productive, personal and community living (George 1990: 44). It is described as a process in which the individual has the opportunity to grow and acquire knowledge in an area that contributes to personal and community living. The ability to grow is promoted through interpersonal encounters

(George 1995: 56; Mellish et al. 1998: 17). The illness that an individual experiences could lead to growth if the main variables in nursing situations, namely needs, frustration, conflict and anxiety are dealt with. The nurse's interventions are aimed at building and maintaining a trusting and goal-directed relationship that reduces the client's anxiety (Fitzpatrick & Whall 1989: 55).

Health and illness can be placed on a continuum. An individual's degree of health is related to the degree of anxiety that he/she experiences. Anxiety is regarded as a source of energy produced as a result of stress. Anxiety is expressed subjectively or through behaviour manifestations. Experiences of anxiety could result in the transfer of human energy into either health promoting or debilitating behaviours. Health is related to the individual's ability to transform energy caused by stress into productive, asymptomatic behaviour. Healthy behaviours are those that facilitate the fulfilment of human needs, self-awareness and meaningful integration of life's experiences, including illness. Peplau suggested that unmet needs lead to the build-up of tension. When this tension is relieved, energy is directed towards more mature goals (Fitzpatrick & Whall 1989: 54).

Through nurses' interventions, clients develop certain skills such as communication and self-awareness. The client is able to develop and grow as a participant in the interpersonal process (Fitzpatrick & Whall 1989: 55). Communication as a basic concept is regarded as important in the person's environment because it allows the person to clarify how he/she perceives reality (Fitzpatrick & Whall 1989: 55; O'Toole & Welt 1989: 367).

2.2.1.3 The individual

An individual is a unique biological-psychological-spiritual-sociological structure. The individual is a developing self-system composed of biochemical, physiological and interpersonal characteristics. Each individual possesses a different cultural background with preconceived ideas that could influence the perception of any given situation. Thus, when a nurse and the client identify a problem, they approach it from different backgrounds (Fitzpatrick & Whall 1989: 58).

The individual lives in an unstable environment. The individual has two goals, namely self-maintenance and the continuation of the species. All activities are based on interpersonal relationships, which are directed towards the attainment of human needs. Human needs are arranged in hierarchical order (Fitzpatrick & Whall 1989: 58).

The individual finds his/her own way of reducing tension created by unmet needs (George 1995: 56). In the clinical setting the nurses interact with clients in a variety of ways to build a trusting relationship that helps to reduce tension. The interpersonal relationship is a vehicle by which the client is helped to develop ways of coping with tension. This is achieved by recognising, clarifying and defining existing problems (George 1995: 53).

The individual is enabled to grow when he interacts with significant others. The mature person is able to attain his/her own needs by integrating experiences. An individual's behaviour is largely influenced by past experiences, the present situation and future expectations of goals (Fitzpatrick & Whall 1989: 52; George 1990: 50). Sulivan's theory contributes to an understanding of the nature of experiences. According to this theory, experience occurs in three modes, prototaxic, parataxic and syntaxic. Prototaxic modes refer to the experience of an infant. Parataxic modes refer to the relationship between the present and the past experiences. It is important for the nurses to understand the parataxic and prototaxic modes because they are often adopted by the clients when they are faced with certain demanding situations. The person at the syntaxic level is able to recognise the uniqueness of a given situation and its relationship to the past and the future (O'Toole & Welt 1989: 53).

2.2.1.4 The environment

Peplau did not directly define environment. She did, however, maintain that nurses should consider the broader living environment of the client and take into account cultural and social factors that influence nurse-client interactions (George 1995: 57).

The health care environment is viewed as being either structured or unstructured. The structured environment consists of pre-planned social and physical arrangements such as mealtimes, therapies and policies. The unstructured environment consists of interpersonal relationships (Fitzpatrick & Whall 1989: 54).

2.2.2 The relevance for this study of Peplau's Theory of Interpersonal Relations in Nursing

Peplau's theory could be applied to clinical accompaniment, as clinical accompaniment is an interpersonal process aimed at teaching and learning. This theory could be used to investigate and structure methods that registered nurses could use to guide students towards independence and higher levels of competence during encounters in the clinical setting (Fitzpatrick & Whall 1989: 61).

Clinical accompaniment entails a personal relationship between registered nurses and students. This theory emphasises the importance of communication and interviewing skills, which should be applied when registered nurses utilise teachable moments for the purpose of clinical accompaniment of students. Interpersonal communication skills are regarded as the basic requirement for involvement with other people. This also applies to teaching and learning in a clinical setting. The quality of the interaction between registered nurses and students is dependent upon the nurses' ability to use proper principles of communication and teaching skills (Quinn 1995: 418).

Registered nurses could conduct an investigative interview during the orientation phase of the interpersonal process (refer to 2.2.1.1 & 2.4.2) which would reveal students' intellectual abilities, learning preferences and learning objectives (Fitzpatrick & Whall 1989: 63). This could pave the way for teaching which is congruent with students' learning needs and expectations.

The theory stresses the importance of a climate that is conducive to learning. Factors that could contribute to anxiety and debilitating behaviours amongst learners should be minimised, while challenges that could lead to enhanced learning should be introduced. Registered nurses must help students to channel energy created by tension into a stimulus for learning.

As mentioned above (par. 2.2.1.4), the health care environment could be both structured and unstructured. This also applies to the learning environment. Teachable moments occur during unstructured, real life situations when client care activities are being carried out. It is important that teachable moments are optimised by imposing some structure which will enhance effective learning within the context of the learning needs of students. Teachable moments are therefore not utilised haphazardly during clinical accompaniment.

2.2.3 Application of Peplau's Theory of Interpersonal Relations to nursing education

Nursing education, including clinical accompaniment, is aimed at the personal and professional growth of those involved, through interpersonal relationships. Learning is regarded as an interpersonal process in which a more mature person assists learners to make sense of stimuli from the environment. This requires an interpersonal relationship between registered nurses (mature professionals) and students (who are guided towards higher levels of professional maturity).

After the learning experience, students are guided through a process of reflection on what was encountered and learnt. Students then conceptualise what was learnt.

Nursing education is based on the principles of adult learning, which means that andragogical principles are being applied. According to Knowles (1970: 38), andragogy is the art and science of helping adults learn. Peplau's theory is congruent with the principles of andragogy as outlined below.

According to Peplau's theory, an individual strives to function independently at an optimal health level, but may at times fluctuate between independence and dependence (George 1990:49). The first assumption of andragogy is that, as the person matures, his/her self-concept changes from one of a dependent personality to one of a self-directed human being. This provides direction to the teaching-learning interpersonal process in the form of guidance to students in becoming more self-directed and taking responsibility for their learning. Registered nurses must, however, allow students to adopt a dependent role temporarily, for instance when confronted with new situations or situations that are beyond their scope of practice in terms of their level of training.

An assumption of andragogy is that a person accumulates a growing reservoir of experiences that becomes an increasing resource for learning. Adult learners have previous experiences that they bring to the educational programme. These experiences assist them in learning and understanding some concepts (Knowles 1970: 44). Registered nurses should help students to tap their previous experiences to help them to gain insight into the learning material. Registered nurses should thus base their teaching on knowledge and experiences that could serve as a frame of reference for acquiring new knowledge. Peplau's theory maintains that an individual learns through personal experiences and by being exposed to stimuli in his or her environment. This is consistent with andragogy, which acknowledges that experience is a rich resource of learning. The quality and extent of learning depend on the quality and the extent of interactions between the learner and the environment, as well as the educative potency of the environment (Knowles 1970: 51). Clinical accompaniment is experience-based; registered nurses should ensure that students gain insight through clinical experience. Students come into contact with situations in their daily practice that present teachable moments. Registered nurses must utilise teachable moments to enhance the meaningfulness of the clinical experience.

According to andragogy, a person's readiness to learn is related to developmental tasks he/she inherited from social roles. Grouping adult learners could also facilitate learning

from the developmental tasks of their colleagues and it could also develop flexibility of choice (Knowles 1970: 46). Peplau's theory maintains that the interpersonal process is focussed on meeting human needs. It is important that, if teachable moments are to be captured for a specific student, teaching has to be congruent with the learning needs of the student, as reflected by his/her learning objectives and educational levels. It is also advisable to expose students to those who have gained more advanced levels of development.

According to Peplau's theory, the interpersonal process is focussed on identifying and addressing health problems. This is congruent with the andragogical assumption that an adult's perspectives are characterised by problem-centredness and immediate application of knowledge (Knowles 1970: 46). Teaching and learning in the clinical setting should therefore be problem-based.

Adult learners have an intrinsic motivation to learn. Motivation to learn is defined as those influences which give impetus by arousing, sustaining and directing the individual towards the attainment of goals (Jerling 1996: 119; Mellish et al 1998: 67; Wortman, Loftus & Marshall 1992: 354). Similarly, by utilising Peplau's theory, the registered nurse could create a challenging learning climate. Challenges should be posed to students by, for instance, giving them demanding assignments. These assignments should necessitate that students analyse the questions asked, think critically, seek alternative answers or solutions and come to appropriate conclusions. However, as stated in Peplau's theory, anxiety could impede learning and this should be avoided through proper guidance and support.

Peplau's theory supports the notion that nurses focus on the needs of clients. The identified needs would give direction regarding the type of intervention strategies that could be used to achieve the objectives or needs (Mohr & Naylor 1998: 210). It is during the orientation phase of the interpersonal process that registered nurses determine the learning needs, learning styles and latent learning abilities of students. The common goal for interactions between registered nurses and students is meeting students' learning

needs as reflected in their learning objectives. During clinical accompaniment, registered nurses should identify the learning objectives and associated learning needs of students. Clinical accompaniment must be planned in accordance with these learning objectives. Students should be encouraged systematically to achieve higher levels of learning. The knowledge, attitudes and skills that students need to acquire are the focus of clinical accompaniment (Van Der Horst & McDonald 1997: 121). Registered nurses should also consider the learning styles of students. According to Kolb (1984: 77-78), there are four learning styles used by students. The first learning style is the convergent style, which relies mainly on abstract conceptualisation and active experimentation. The strength of this approach lies in problem-solving, decision-making and practical application of ideas through hypothetical-deductive reasoning. Students using this style prefer situations that require problem solving or finding solutions to a question where there is a single correct answer, and working on technical tasks. These students would be able to analyse clients' needs or problems and engage in a decision-making process. The second learning style is called divergent learning. This learning style emphasises concrete experiences and reflective observations. The strengths of this learning style are imaginative ability and awareness of meaning and values. The students using this learning style are able to view concrete situations from different perspectives and to organise many relationships into meaningful gestalts. They are able to generate ideas and implications such as by braining-storming ideas. During clinical accompaniment these students would be found to be interacting more with clients. The third learning style is called assimilation and is characterised by abstract conceptualisation and reflective observation. The strength of this learning style is inductive reasoning and the capacity to create theoretical models. The students utilising this learning style are able to assimilate observations into an integrated explanation. During clinical accompaniment registered nurses would find these students more concerned with ideas and abstract concepts than with clients. The last learning style, namely accommodation, entails concrete experience and active experimentation. The greatest strength of this learning style is the actual process of carrying out plans and tasks, and getting involved in new experiences. Students using this category of learning style seek new learning opportunities, take risks and engage in actions. They are able to adapt to changing circumstances. They are ready to deal with

emergencies and are always alert to these. These students like to work according to a plan and if the task does not fit the plan, it is discarded. They prefer to solve problems in an intuitive, trial-and-error manner. These students are likely to rely heavily on registered nurses for information rather than using their analytic capacities (Kolb 1984: 78; Richardson & King 1998: 72).

Peplau's theory recognises the influence of perceptions and preconceived ideas on interpersonal relationships. Registered nurses and students bring certain expectations to the clinical setting. Differences in perceptions and preconceived ideas should be considered during clinical accompaniment of students. Similarly, students' expectations must be determined. According to O'Toole and Welt (1989: 17), students expect registered nurses to assist them in satisfying their learning needs and, in turn, registered nurses expect students to learn and attain set educational objectives. According to Coelho (1998: 182), expectations of registered nurses have a powerful effect on students' performance. Students who are constantly expected to perform well often do, whereas students who consistently receive negative feedback or messages often achieve much lower performances. This is called the 'self-fulfilling prophecy'. For this reason, students should be provided with supportive feedback.

Peplau's theory supports the idea that learning is an interpersonal process characterised by effective interaction between registered nurses and students. Similarly, clinical accompaniment involves interaction between registered nurses and students. During these interactions registered nurses are expected to facilitate the growth of students. Clinical accompaniment is aimed at helping students to acquire the clinical skills and professional competencies that would enable them to provide high quality client care. Students are given proper directions on how to perform certain nursing skills and procedures (Guilbert 1992: 3.19). This could help students to get used to how registered nurses do things. The interpersonal relationship between registered nurses and students should allow students to share their ideas with others. To facilitate this, registered nurses should ask students some friendly questions and find some common ground early on in each teaching-learning encounter (Ross 1999: 43).

Communication is an important concept in Peplau's theory, and is also of importance in clinical accompaniment. Good communication is essential for teaching and learning. Open and frequent communication between students and registered nurses is essential to facilitate students' learning. Sharing of information, engaging in dialogue and providing feedback all occur through communication. Registered nurses should open up clear communication channels to students. Students should be given sufficient time to think about issues and to answer questions. Potential problems could be dealt with more effectively if good communication already prevails between registered nurses and students (Coelho 1998: 182; Majumdar 1996: 46).

The interpersonal relationship occurs in a specific environment. This environment should be conducive to learning. Fransson (1977) in Cowman (1998: 901) maintains that anxiety-provoking situations could induce surface learning. Some situations in the clinical setting could produce anxiety in students. Registered nurses should identify students who are negatively affected by the environment. Such students could present with problems such as being poorly prepared for learning tasks, arriving late for work and presenting with emotional problems (Prinsloo, Vorster & Sibaya 1996: 208).

2.3 TEACHING AND LEARNING IN THE CLINICAL SETTING

Teaching and learning in the clinical setting occurs through clinical accompaniment. The nature of clinical accompaniment, the requirements for effective clinical accompaniment and the role of the registered nurse are discussed below.

2.3.1 The nature of and requirements for clinical accompaniment

Registered nurses render nursing care within a specified scope of practice (SANC 1988: 2, par.2). The functions of registered nurses entail client care, administration, teaching and research. Registered nurses, by virtue of their experience and clinical skills, are in a good position to teach students as part of their scope of practice (Regulation R. 2598,

1984, par 2, as amended). Registered nurses become involved in the teaching-learning process in the clinical setting in which students gain practical experience as part of a multidisciplinary health team. Students become the clients of registered nurses because they have learning deficits and needs that registered nurses should be able to meet (Searle 2000: 159; Searle & Pera 1995: 178; South Africa 1997b: sec.16).

The focus of this study is on the teaching function of registered nurses while practising in the clinical setting. The teaching function is performed, amongst others, through clinical accompaniment of students and utilisation of teachable moments. Clinical accompaniment offers students the opportunity to achieve their clinical learning objectives while working as part of the multidisciplinary health team. Clinical accompaniment is the heart of professional practice. Students are guided through the learning process while they are working on the achievement of clinical outcomes in the clinical setting (Brown 2000: 407; Van Aswegen 2000: 20).

Clinical accompaniment is the process by which registered nurses guide and support student nurses through learning activities that are planned to meet students' learning needs (South Africa 1988: 4, par.2.9.9). This process includes those activities that are directed towards enabling students to gain independence, accept responsibility and find meaning in a given situation (SANC 1992: 6, par.1). Learning opportunities that arise from everyday practice are utilised by registered nurses for the purpose of clinical accompaniment (Brown 2000: 407; Van Aswegen 2000: 20).

The aim of clinical accompaniment is to develop the professional growth of students towards independent and accountable practice and, ultimately, to high quality health care delivery. It is essential that students become proficient in caring for clients both physically and emotionally. Clinical accompaniment aims to bring about cognitive development and improved role performance in students. These aims can be achieved only if clinical accompaniment of students is managed successfully (Naude, Meyer & Van Niekerk 1999: 88).

Clinical accompaniment involves supervising, teaching and guiding students towards achieving learning objectives. Barber and Norman (1987) in Goorapah (1997: 173) identified supervision as consisting of four activities, namely education, support, management and development of self-awareness.

Effective clinical accompaniment depends on a clinical setting that supports a learning climate. Registered nurses should ensure that those entrusted to client care are well equipped to provide patient care and clinical accompaniment that bears evidence of high standards (Goorapah 1997: 173; Le-Mon 1999: 49; Mellish et al 1998: 209; Nicol & Glen 1999: 8).

Mellish et al (1998: 208) mentioned the principles that registered nurses should observe when engaged in clinical accompaniment. These principles are discussed by incorporating the works of other authors, including Butterworth and Fangier (1992: 12), Chabeli (1999: 24), Lowry (1999: 43) and Ewan & White (1996: 118). Clinical accompaniment should occur in appropriate and carefully selected clinical settings. According to Reilly and Oermann (1992: 126), the clinical setting should conform to certain criteria. There should be a range of learning opportunities for students. The client population should be appropriate to the learning objectives of students, and available in adequate numbers to ensure that students enjoy sufficient exposure for teaching and learning purposes. The registered nurses who provide clinical accompaniment should be clinically proficient. According to Butterworth and Fangier (1992: 12), registered nurses' clinical skills should be refined and improved throughout their professional lives. The nursing care rendered should be up-to-date with the latest developments in health care. The beliefs and value system of the clinical setting should be reflected in the care provided. The philosophy of the clinical setting should be compatible with the philosophy of the nursing college. According to Nahas and Yam (2001: 233), registered nurses face the challenge of correlating theory with practice and of using the best available resources and opportunities in the clinical setting. Students must be guided to apply factual content, which they learnt at college, to deal with clinical problems. They should have opportunities to take an active part in client care and learning activities, and should be

supported in this endeavour by registered nurses who are comfortable with their teaching role and responsibilities. This could be promoted by clinical teaching that is based on the students' learning objectives and their interests. This would enable them to translate theory into practice (Mellish, et al 1998: 207).

Clinical accompaniment is grounded in a deliberately fostered relationship of trust and acceptance between registered nurses and students. Support given during this time is an important tool because it empowers students to make important decisions (Wagner & Ash 1998: 278). Students should be given opportunities to disclose personal concerns. Open-ended questions could allow them freedom to talk about personal circumstances and how they cope with these. According to Chally (1992) in Wagner and Ash (1998: 278), students' self-concepts should be strengthened. They should be made to believe that they are capable of achieving their learning objectives. During an activity, registered nurses should praise students in order to motivate them. Students could, for example, compare past experiences with present ones to identify areas of personal growth. Positively viewed, self-concept could lead to development of high self-esteem in students, especially when registered nurses encourage them to learn and perform better (Edelman & Mandle 1998: 528; Mhlongo 1996: 29).

Peplau's theory provides a structure for outlining the roles of the registered nurse. These roles are important during clinical accompaniment and are therefore discussed in the next paragraph.

2.3.2 The roles of registered nurses, applied to clinical accompaniment

According to Peplau (George 1995: 51), there are some roles that registered nurses assume during interpersonal relationships. These roles also apply to teaching and learning in the clinical setting. These roles are those of teacher, resource person, leader and surrogate.

Registered nurses as teachers

According to Pepalu's interpersonal theory (George 1995: 51), a teacher is defined as the person who gives knowledge in reference to a need or an interest.

Various learning opportunities are available in clinical settings. Registered nurses should utilise such opportunities to serve the educational needs of students while they render care to clients (Olson 1998: 268). This is done through clinical accompaniment of students which is aimed at enabling students to achieve their learning objectives. According to the literature, many of these potential learning opportunities could be utilised by registered nurses through the exploitation of teachable moments.

Registered nurses lay a foundation which will support future learning. On arrival in a clinical setting students undergo an orientation programme to familiarise themselves with the new setting. It is essential that students be regarded as learners and not merely extra pairs of hands (Khoza 1996: 43; Quinn 1995: 183). Registered nurses should ensure that their teaching is directed at the development of students as adult learners on a personal and professional level. This should lead to cognitive, affective and psychomotor development of students in their attainment of the prescribed programme objectives (Brown 2000: 407; Van Aswegen 2000: 20). This would pave the way for establishing a climate for learning in the clinical setting, and identifying and making use of learning opportunities during clinical accompaniment. Specific outcomes to be achieved and the goals of the learning programme should be clear from the outset (Olivier 1998: 41; South Africa 1978: par.1.5; Stengelhofen 1993: 41).

Registered nurses as teachers promote active involvement of students in health care activities, based on students' learning needs. They acquaint themselves with students' learning objectives which should be achieved on a daily basis. This could give them a clear picture of the learning opportunities they should plan for students. Responsibilities that are in congruence with their level of training and learning objectives should be delegated to students (Nicklin & Kenworthy 2000: 55).

Registered nurses as teachers ensure that students learn through clinical involvement. Students are allowed to fulfil their responsibilities under the guidance of proficient registered nurses. This provides opportunities for registered nurses to act as role models for professional practice and skills performance. They should display the ability to lead and to establish good interpersonal relationships (Ewan & White 1991:49; Mellish & Wannenburg 1992: 186; Nahas & Yam 2001: 233).

Registered nurses as teachers are responsible for recognising and using learning opportunities that arise from daily practice. In this way teachable moments can be effectively created and used to guide students to develop knowledge and insight through their clinical experiences. This could be done by creating opportunities to apply theoretical knowledge to achieve the learning objectives. Students must be assisted in understanding the logic on which their activities are based (Nicklin & Kenworthy 2000: 55; Twinn & Davies 1996: 178; Wagner & Ash 1998: 279).

Registered nurses as teachers assist students in becoming independent. Students are guided through problem solving and decision-making. They are encouraged to use their initiative in finding solutions to problems and reaching conclusions on their own. They are assisted in applying analytical and creative thinking to interpret scientific data and to exercise independent judgment (Brown 2000: 407; Van Aswegen 2000: 20). Students are thus taught to be responsible, independent learners who engage in self-discovery: they are encouraged to seek answers to questions and to find information independently. This would help them to be accountable once they are qualified registered nurses (Khoza 1996: 43; Quinn 1995: 183). Registered nurses give guidance on where to find information that is needed to complete a learning task, and on how to apply the information appropriately. While applying knowledge, students are assisted in developing critical analytic skills. They are directed on how to capitalise on acquired knowledge, skills and processes in order to construct outcomes (Musinski 1999: 23; Olivier 1998: 40; Stengelhofen 1993: 41).

Registered nurses as teachers are regarded as the source of knowledge. They intervene on a continuous basis to confirm learners' progress and to give direction should it be required. It is their responsibility to identify knowledge that is inaccessible, or aspects that need to be explained to learners (Musinski 1999: 23; Olivier 1998: 40).

Registered nurses as teachers utilise appropriate learning strategies and teaching aids, and advise students on the methods that are likely to enhance effective learning. Clinical teaching is effected though personal discussions with students and the utilisation of clinical rounds. Students are encouraged to attend forums, seminars and special clinical activities on particular days. The demonstration method is used to teach practical skills. Teaching aids that are appropriate include charts, slides, tapes, models and graphic displays on notice boards. Available books, CD-ROM, the Internet and journal articles could be utilised as well (Matthews & Whelan 1993: 217).

Registered nurses as teachers establish a climate that is conducive to learning. This learning climate is discussed in paragraph 2.6. Registered nurses should be calm and have a sense of fairness. An enquiring atmosphere should be encouraged in the clinical setting. Learners' needs should be established at the outset, taking into consideration the phase and range statements. The knowledge, skills and processes to be demonstrated should also be identified.

Registered nurses as teachers are involved in assessment of learning. They should be cognisant of the assessment criteria and methods, and apply them appropriately (Olivier 1998: 41). Based on the assessment results, they provide feedback to students to guide future learning activities. There should also be opportunities for students to practise what they have learnt. Feedback is given to students in order for them to identify areas which need improvement. They should provide students with opportunities to practise the patient care activities under supervision (Evans 2000: 135).

Registered nurses as resource persons

According to Peplau (George 1995: 51), a resource person is someone with a background in the field of nursing who is able to face situations in the clinical setting with confidence.

As resource persons, registered nurses should be able to give answers to questions posed by students. This should be done within the context of the level of the students' training and their learning needs. Apart from sharing information with students, registered nurses act as resource persons by demonstrating their own knowledge-based skills in everyday practice (Fitpatrick & Whall 1996: 63; Mellish & Lock 1992: 315). In other words, registered nurses are role models for proficient practice.

Registered nurses as counsellors

As counsellors, registered nurses have an important role to play in interpersonal relationships. Peplau (George 1995: 51) describes a counsellor as a person who, through the use of certain skills and attitudes, aids another in recognising, facing, accepting and resolving problems that are interfering with that person's ability to live happily and to function effectively.

Students who function in the clinical setting are exposed to a stressful environment, which could lead to impairment of their development. Some problems experienced by students in the clinical settings could be attributed to a lack of clinical expertise and their resultant anxiety. Students may fear harming a client when they are faced with new responsibilities. When students do not finish tasks on time, they might start to panic and make mistakes. Students would like to have good interpersonal relations with clients, but when the opposite occurs, they might find the situation unbearable and be unable to cope with it. When students are not cared for, are isolated from other nursing personnel and are not supported emotionally, they could find the clinical setting is not conducive to the achievement of learning objectives (Matthews & Whelan 1993: 19; Wright 1998: 144).

It is the responsibility of registered nurses to understand the type of stressors that students are exposed to, and how these stressors affect students' performances. Registered nurses, in their capacity as counsellors, ensure that a good interpersonal atmosphere prevails and that they are available to assist students in overcoming stressful situations. Registered nurses should be sensitive to students' feelings. Students' coping abilities should be examined and enhanced, and they should be helped to deal effectively with any problems. Registered nurses should identify students who experience learning problems and design some intervention strategies (Matthews & Whelan 1993: 19; Wright 1998: 144).

The quality of counselling depends on the relationship registered nurses have with students. If the relationship is poor, the outcome of counselling might not be fruitful to students; in some cases, counselling may not even take place. Within the context of counselling students are taught unconditional acceptance of the client, self-awareness and emotional neutrality. Similarly the role of registered nurses as counsellors is characterised by acceptance of students as learners who need to be guided to professional maturity (Fitzpatrick & Whall 1996: 64; Goorapah 1997: 174).

Registered nurses as leaders

A leader is defined as the one who carries out the process of initiation and the maintenance of group goals through interaction (George 1995: 51).

Registered nurses as leaders are competent practitioners who command respect by virtue of their abilities. They are able to apply the organisational philosophy, objectives and mission by translating those principles into practical actions (Sergiovanni & Starrat 1993: 185; Stodeur, Vanderbergher & D'hoore 2000: 42).

The competencies of registered nurses are varied. Firstly, they must be expert clinicians who are able to apply scientific principles in practice. Their practice should show evidence of creativity and insight. Registered nurses are expected to be innovative and to

demonstrate the political skills to cope with conflicting requirements of multiple constituencies. Secondly, registered nurses require the skills to teach students in context. To do this, registered nurses should have a sound knowledge of clients' conditions. Thirdly, a leader has a broad vision and is able to think strategically. According to Sergiovanni & Starrat (1993: 186), leaders are able to think in the long term and to look beyond immediate problems. They are able to look beyond the organisation being served and to understand its realities. As leaders, registered nurses should read widely and influence staff members beyond the jurisdiction of the clinical setting (Badenhorst, Calitz, Schalkwyk,Van Wyk & Kruger 1996: 86; Chirwa 2000: 7; Stordeur et al 2000: 42; Tschudin 1999: 119).

Fischer, Boshoff and Ehlers (1999: 18) are of the opinion that effective learning requires management of the clinical setting. For instance, effective time management on the part of the leader could impact upon students' own abilities to manage their time. Students need guidance in estimating time frames for completion of functions or in achieving learning objectives, and in developing implementation schedules. Effective use of time entails aspects such as identifying priorities and meeting deadlines. This requires proper guidance by registered nurses.

A leader is available and approachable. Individuals should be able to approach true leaders without fear. Students need a leader who is available and consistent in his/her approach to situations. Registered nurses as leaders should display compassion and be receptive to the needs of students. Leaders should also be able to learn from others. This applies not only to learning facts, but also to learning from each other and with others (Booyens 1996: 174).

Leaders are able to adopt appropriate leadership styles. The leadership styles that registered nurses adopt would influence the learning process of students and the provision of client care. Trends in leadership style reflect a move from command and control type leadership to more transformational or facilitative styles. Such trends recognise that leadership styles are based on cultural determinants and the value systems of

organisations. Registered nurses, as facilitative leaders, facilitate the activities of the clinical setting so that the learning needs of students are met. This type of leadership promotes participation, emancipation that emphasises creative problem solving, flexibility and speed of response (Kitson 2000: 34).

Registered nurses as technical experts

A technical expert is defined by Peplau (1988: 22) as one who provides physical care by displaying clinical skills and who has the ability to operate, understand and manipulate equipment in this care. This is essential when certain procedures or skills are to be demonstrated to students. Such demonstrations should bear evidence of the ability to apply relevant theoretical concepts to clinical situations. Technical experts are expected to show a higher level of accountability to students' learning than those who are less expert (George 1995: 45; Gerber, Nel & Van Dyk 1998: 289).

Registered nurses as surrogates

A surrogate is one who takes the place of another (George 1995: 51). The clinical setting is an extension of the nursing college and registered nurses act as teachers and mentors while students work in the clinical setting. Registered nurses participate in student training by providing clinical accompaniment on behalf of the nursing college. As surrogates, registered nurses set limits for students so that they participate only to the extent that their levels of training allow (Peplau 1988: 58; Taylor 1994: 121).

As surrogates, registered nurses nurture activities such as being supportive and protective of students. They intervene in conflicting situations affecting interpersonal relationships and create conditions that support harmonious relationships in the clinical setting. When students experience problems, registered nurses should be available to assist them. Due to the unique nature of each student, solutions to problems will obviously differ from one student to the next (Fitzpatrick & Whall 1996: 64; George 1995: 45).

As surrogates, registered nurses will apply the ethical and legal principles of nursing during the clinical accompaniment of students. These aspects have the advantage of reducing the incidence of litigation brought against students because students will know how to function within legal and ethical limits in providing safe and ethically sound client care (Chabeli 1999: 27). Registered nurses are therefore also surrogates for patients.

2.4 TEACHING AND LEARNING AS AN INTERPERSONAL PROCESS

2.4.1 The interpersonal relationship

The interpersonal relationship has two dimensions in the context of clinical accompaniment, namely interaction between students and registered nurses and interaction among the students themselves.

Interaction between registered nurses and students

It is important that registered nurses interact both with groups of students as well as with individual students. Through interaction, ideas and knowledge are shared and students receive feedback on their behaviour. Challenges are posed to students (Orem 1995: 71). Registered nurses and students are equal partners, equally committed to the learning endeavour (Fassinger 1995: 88; Paterson 1998: 284; Reilly & Oermann 1992: 143). Registered nurses could use a variety of communication strategies to share ideas with students. This includes listening, open dialogue and seeking to understand. According to Reilly and Oermann (1992: 143), an important element in developing a positive relationship with students is the commitment, by registered nurses, to conducting clinical accompaniment in a caring manner. Relationships that are established in the clinical setting would depend on registered nurses being approachable, encouraging mutual respect, providing support and listening to students (Fassinger 1995: 88; Paterson 1998: 284; Reilly & Oermann 1992: 143).

The interpersonal relationships that registered nurses form with students should in the end empower students to take more responsibility for their own learning and to participate independently in nursing care. Student learning and teaching enables students to experience four types of power, namely:

- *Possibility:*

  Possibility means that students' comments and experiences are used as a basis to illustrate broad concepts and theories. Registered nurses encourage students to explore numerous possibilities in learning situations and when providing care to clients.

- *Affirmation:*

  This implies the creation of a supportive relationship and a non-threatening learning environment characterised by shared enthusiasm for the students' growth. This increases students' confidence in mutual evaluation and increases their self-esteem.

- *Inclusion*:

  A strong relationship between registered nurses and students engendered by creating teachable moments provides satisfaction stemming from shared goals, respect and visions. Teacher and students form a learning coalition in which power is shared.

- *Knowledge*:

  The use of a student-centred learning focus in all interactions assists students to draw on personal knowledge and experiences in the development of new knowledge (Wagner & Ash 1998: 280).

  According to Belenky, Clinchy, Goldberg and Tarule (1986) in Wagner & Ash (1998: 280), the recognition of the self as a creator of knowledge is an empowering process. Empowerment has three guiding principles, namely knowledge, status and access to decision-making. Knowledge is power and an increase of knowledge is an enviable step to empowerment. Status refers to the ability of students to view themselves and others with dignity and respect and to

exercise their craft with quiet confidence. Access to knowledge refers to the ability of students to actively acquire information and skills in participation in the use of that knowledge (Fischer et al 1999: 18; Mahat 1998: 14; Steyn 1998: 133; Wagner & Ash 1998: 280).

Interaction among students

Students should learn in groups where possible. Cooperative learning is an umbrella term for a variety of educational approaches involving the joint intellectual efforts of groups of individuals in searching for understanding, solutions or meanings, or in creating a product Smith and MacGregor in Bitzer (1994: 40). It is an instructional method which involves small groups of students working together while teachers act as facilitators. Cooperative learning stimulates peer interaction and is not merely group work by students. Students learn from each other. Through dialogue, students can discuss what they know and what they do not understand and make sense of what they have learnt. The success of one student stimulates others' success (Tshibalo & Schulze 2000: 230).

Van Der Horst and McDonald (1997: 128) mention that cooperative learning has two aims. Firstly, it aims to improve learner understanding and skills in the area being taught. Secondly, it aims to ensure that learners develop co-operative group skills.

For co-operative learning to succeed, various elements are required. There should be face-to face interactions. This means that learners are seated facing one another in order to finish the assigned learning activity. Students should develop positive interdependence and each learner should believe that every one of them will succeed within the group. This is referred to as sinking or swimming together. There should be individual accountability, that is, the responsibility rests on each individual and not on the group alone. Each learner should complete the assigned responsibilities (Daley, Gessner & Kuramoto 1999: 213; Massarweh 1999: 47; Paterson 1998: 284; Spouse & Redfern 2000: 162; Van Der Horst and McDonald 1997: 128). The question of how the learners succeed within the group is also important. Johnson and Johnson and Holubec (1996) in Van Der

Horst and McDonald (1997: 129) have identified some sets of skills that allow students to succeed within the group. Firstly, the learner should take an active part in the learning process. Secondly, the learner should strive towards the achievement of learning objectives. Thirdly, the learner should interact with other learners in a way that facilitates the development of positive self-esteem.

According to Malloch and Laeger (1997: 35), registered nurses should make use of the following strategies for cooperative learning to succeed. Firstly, they should be creative, motivated, and have the vision to strengthen students' understanding of the mutual benefits of building linkages. Secondly, registered nurses should establish small, diverse groups. Thirdly, registered nurses ought to create a structure to achieve mutual goals and establish a direction for piloting co-operative learning. Fourthly, registered nurses should state clear goals and ensure that teaching activities are focussed on these goals in order to enhance the attainment of learning objectives. Lastly, registered nurses should be willing to listen, learn, unlearn and relearn. In other words, registered nurses should be prepared to learn new practices and to try to initiate new developments in nursing.

According to Ulrich and Glendon (1999: 28), a variety of co-operative learning methods could be used. These methods are described below:

- *The think-pair-share method* entails that all students are organised into pairs. They are given a few minutes to think about a problem, and then share their ideas with their peers. At the end each pair of students has to report to the class on the solution they have reached.
- The r*oundtable* is another strategy in which students assigned to a group sit in a circle while a pad of paper is passed from one student to the next. Each student writes down a problem on the pad of paper and records possible responses to the problem. One person is called on to report to the group. This strategy prevents dominance by one person over another.
- Another strategy is called *pass-the-problem.* Students in turn write their ideas down on a sheet of paper. Once their ideas are written down the paper is passed to

the next group of students. New sets of ideas or solutions are added. Then students are required to clarify, prioritise and add more solutions or whatever the teacher proposes.

- *Jigsaw* is a strategy in which information on a variety of related concepts is presented. It provides opportunities for students to develop critical thinking, reflection, synthesis and reconstruction.
- *Inside-outside circle* is used for team building and for acquainting team members with each other. Students could remember important facts during, for example, the demonstration of a procedure. Academic controversy uses intellectual conflict as a basis for learning where students discuss the issue by looking at it from various perspectives.

Peplau's phases of the interpersonal process give an indication of the learning phases that students could be taken through during clinical accompaniment.

2.4.2 The phases of the interpersonal process

Peplau (George 1995: 51) identified four sequential phases of an interpersonal relationship, namely, the orientation, identification, exploitation and resolution phases. These phases could be utilised by registered nurses to ensure that clinical accompaniment occurs in a planned fashion.

2.4.2.1 The orientation phase

During this phase registered nurses and students come together as strangers. The students are regarded as the clients who are in need of professional assistance. Registered nurses can determine the needs of students by means of a needs assessment. It is important for registered nurses to collaborate with students in identifying their learning needs, learning styles and levels of dependency.

Learning needs can be identified by establishing which learning objectives have to be achieved. A focus on the learning objectives could direct the energy caused by anxiety into meaningful action. As a result of these, rapport is established between registered nurses and students (Alderman 2000: 18; Leddy & Pepper 1993: 166; Morrison & Burnhard 1997: 129). It is also important to ascertain the level of training of students and their past experience. The learning experiences that students are exposed to should be in line with and build upon their level of training and their previous experience.

Students' learning styles are established to enable the registered nurse to use appropriate teaching methods. According to Witkin and colleagues in Mellish et al (1998: 64), students could be classified as field dependent or field independent learners. Table 2.1 below gives an outline of the differences between these styles.

Table 2.1 Learning styles

FIELD DEPENDENT LEARNING	FIELD INDEPENDENT LEARNING
Needs structured material.	Imposes own structure
Might have difficulty in recognising already prepared material.	Can break down material and reorganise it.
Might need clear instructions on how to solve problems.	Likely to solve problems without specific guidelines.
Might need to learn mnemonics.	Might be helped with materials containing social information.
Are better at learning and retaining information they have learnt.	Might not be able to retain social information.
Are likely to work in careers such as psychiatric nursing science.	Are likely to work in science careers such as surgical nursing or mechanics.

There are some factors that would influence teaching and learning in the clinical setting, and these aspects must also be addressed in the orientation phase. Registered nurses and students enter the teaching-learning setting with certain attitudes and perspectives. These

attitudes emanate from their culture, race, values, educational background, past experiences and preconceived ideas. These factors might even affect the way in which students react to the clinical setting (George 1995: 47). The assessment interview should therefore also include an exploration of students' perceptions, fears and expectations.

If cultural differences are ignored, according to De Villiers and Tjale (2000: 21), personal conflicts, interpersonal conflicts and ineffective health care delivery may result. Registered nurses need to render culturally safe and congruent care. This also applies to teaching. During clinical accompaniment of students, registered nurses should ensure that the cultures of students are respected. This could pave the way for teaching students to exercise cultural sensitivity in health care. The assessment interview should therefore also focus on cultural aspects.

Fears and anxieties of students should be identified so that ways of dealing with them can be developed. Registered nurses and students need to agree on the type of professional support that is to be offered. Registered nurses should be prepared to listen to students. Linguistic aspects that registered nurses should consider include words that students use, the phrases chosen and metaphors they use to convey their feelings and their needs. Nonverbal communication should be noted as well (Alderman 2000: 18; Leddy & Pepper 1993: 166; Morrison & Burnhard 1997: 129).

Based on the assessment data, the most appropriate course of action is planned. Some students could make more learning demands than expected. Registered nurses would have to find the rationale behind that behaviour. The feelings and emotions of those students would need to be investigated. However, students should set realistic learning objectives in terms of their learning programme (Fitzpatrick & Whall 1996: 63; George 1995: 45).

Students should undergo a real orientation phase. Orientation could include aspects such as the physical layout of the clinical setting, lines of communication, mealtimes, duty roster, methods of reporting, the teaching programme, and the methods used to allocate

nursing personnel to client care. Policies, procedure manuals and other regulations such as the code of conduct should be outlined to students. Students must also be introduced to each registered nurse and his/her areas of expertise must be explained to them.

The process of orientation affects how students approach learning in the clinical setting. Orientation should, if possible, include all aspects that might affect the learning process of students and the attainment of learning objectives. Registered nurses should explain the scope of practice to students so that they know what to do and what not to do. Registered nurses should evaluate this orientation programme either by asking students questions or by giving them a questionnaire to complete. Students should be encouraged to feel free to talk about areas that need improvement. The provision of quality teaching by registered nurses is dependent on the learning outcomes to be achieved during the interpersonal relationship (Kember and Gow 1994: 59; Mellish & Lock 1992: 158).

2.4.2.2 The identification phase

During the identification phase the therapeutic relationship that has been established during the previous phase becomes more intense. During this phase students express the feelings and the experiences that are related to the clinical learning environment. Registered nurses should accept these expressions of feeling and respond appropriately (Fitzpatrick & Whall 1996: 63).

Students identify persons who could assist them in achieving their learning outcomes. Students might respond to each one selectively depending on the learning outcomes and the expertise of registered nurses. The role of students may take on three characteristics. Some students' participation may reflect interdependence with registered nurses and their peers. Others might be autonomous and independent role players. It is also possible that some students become passive and remain dependent on registered nurses (George 1995: 47).

Throughout this phase registered nurses and students continue to clarify their perceptions and expectations. George (1995: 53) believed, as stated earlier in the discussion on the orientation phase, that past experiences will have an impact on interpersonal relationships. The important point is that registered nurses should give moral support to students in their attempts to achieve the learning objectives. In this way students will develop a feeling of belonging and the ability to deal with problems they might encounter in the clinical setting. Thus students develop a positive attitude towards the learning process and become prepared to engage actively in it (George 1995: 47).

2.4.2.3 The exploitation phase

This is regarded as the working phase that could entail the utilisation of health services and daily health care activities for the purpose of learning. This phase is influenced by students' interests and their motivation to learn. Students will seek guidance from specific members of the health team depending on the nature of their learning needs. They thus develop a feeling of being in control of their own learning. Students might even become motivated to read and learn more (George 1995: 48; Paterson 1998: 284).

During the exploitation phase students make full use of interpersonal relationships. It is essential that registered nurses use the principles of communication, such as listening, clarifying, accepting and interpreting, effectively. However, the learning objectives could not be met by the sole efforts of registered nurses. Nursing is interpersonal in nature. This means that nursing care does not take place in isolation: students should interact with registered nurses and other members of the health team (Leddy & Pepper 1993: 167; Mellish & Paton 1999: 4).

2.4.2.4 The resolution phase

During this phase students are gradually freed from registered nurses as surrogates. Students should have achieved their learning objectives and realised future learning potentials (George 1995: 49).

The resolution phase might not be comfortable for either students or registered nurses. The relationship is terminated if the learning needs and any difficulties have been successfully dealt with. This termination could, however, be uncomfortable for registered nurses if they have not succeeded in helping students to achieve their learning objectives. As a result of this, there may be a re-planning of strategies to deal with students' learning demands (George 1995: 50).

The resolution phase is terminated once students return to the nursing college or move to another health care unit. The learning process will then be repeated to achieve further learning outcomes (George 1995: 50; Leddy & Pepper 1993: 165).

2.5 CLINICAL ACCOMPANIMENT THROUGH THE USE OF TEACHABLE MOMENTS

Clinical accompaniment can be done by utilising teachable moments. The nature of teachable moments as a form of experiential learning is discussed below.

2.5.1 The nature of teachable moments

The utilisation of teachable moments during clinical accompaniment is the specific focus of this study. The preceding discussion has provided a broad framework for clinical accompaniment. The discussions will subsequently focus on teachable moments.

Registered nurses fulfil their teaching role through the utilisation of, amongst other things, teachable moments. According to Mellish et al (1998: 140), teachable moments could be described as the moment during nursing care when something occurs to make immediate intervention desirable. A teachable moment occurs in the real life situation where nursing care is rendered. Any actions that registered nurses and other members of the health team take in the clinical setting could present learning opportunities and should be utilised to teach students in the clinical setting. The necessary tools that registered

nurses need for effective teaching are clinical expertise and some teaching skills. However, registered nurses might not notice some of these moments, allowing them to pass without being utilised for students teaching (Mellish et al 1998: 140; Netshandama-Funyifunyi 1997: 30; Zuckerman & Parker 1998: 1767).

2.5.2 Teachable moments and experiential learning

The utilisation of teachable moments occurs through the application of the principles of experiential learning. Experiential learning plays a central role in the development of professional competence and that emphasises the individual's responsibility to maintain and improve that level of competence. This competence should be integrated into the professional's everyday life activities. Experiential learning is work-based. It helps to establish a climate of trust, understanding and open communication amongst students (Dewar & Walker 1999: 1460; White, Kouzekanani, Olson & Amos 2000: 124). According to Kolb (1984: 68), experiential learning occurs in four stages, namely concrete experience, reflective observations, abstract conceptualisations and active experimentation.

2.5.2.1 The stage of concrete experiences

While engaging in client care students are engaging in concrete experiences. It is during this time that teachable moments may present themselves. Registered nurses observe students' behaviour and then intervene to turn problems or unique occurrences into learning experiences. Students' verbalisation of their encounters could become a stimulus for turning everyday experiences into teachable moments. Dewey (1938) in Ewan and White (1991: 30) says that it is not enough to include experiences only in learning. The most important aspect is the quality of the experience. There should be thorough planning for the experience. The chief problem of education based on previous experience is to select the kind of experiences that persist fruitfully and creatively in subsequent experiences. The experience should be continuous and should contribute towards the possibility of providing an experiential continuum.

This stage focuses on involvement in experiences and dealing with immediate human situations in a personal way. The emphasis is on the feelings of the individual as opposed to the thought processes. There is concern with the uniqueness and complexity of the present reality as opposed to theories and generalisations. This stage involves an intuitive and an artistic approach to learning in conjunction with a systematic, scientific approach to problem solving (Kolb 1984: 68; Potgieter 1999: 10).

2.5.2.2 The stage of reflective observation

According to Kolb (1984: 68), this stage is focused on an understanding of the meanings of ideas and situations by careful observation and impartial description of them. During this phase, there is an emphasis on reflection rather than action. Awareness that has developed in the previous stage is discussed by those involved. This allows for the opportunity of viewing the current experiences from different perspectives (Kolb 1984: 32).

Registered nurses provide students with opportunities to reflect on their daily experience of activities and to share the experiences with registered nurses or with their peers. The purpose of providing students with opportunities to engage in systematic reflection about experiences in the previous phase is to enable them to identify the significance of these experiences for learning (Wagner & Ash 1998: 278). Registered nurses should encourage students to discuss and to reflect upon their observations, their actions and the meanings that they have derived from these experiences. In other words, students are encouraged to identify and talk about what they have learnt, and to explore the breadth of their understanding of the variables in the clinical setting that they have encountered.

During the reflective observation phase the role of the registered nurse is to encourage students to verbalise their current feelings, thoughts and personal concerns by asking them open-ended questions. Open-ended questions give students the opportunity to talk about their personal circumstances and how they are coping. Students are given

opportunities to intuit the meaning of situations they have experienced. They are guided in viewing things from their own unique perspective and to appreciating others' points of view. Students are guided to rely on their thinking process and to arrive at sensible conclusions.

According to Burns and Bulman (2000: 11), learning through reflection is a laborious and deliberate process. It does not just occur, nor is it something that is done in one's head. Thoughts on actions need to be articulated either verbally or in writing. There is a need to analyse critically, interpret and compare perspectives. Learning through reflection is suitable for student nurses as they are adults who have a wealth of experience as well as the intellectual maturity to cope with autonomy, differing perspectives and shifting ideas (Brown 2000: 407; Van Aswegen 2000: 20).

Describing their experiences could lead to students understanding and ultimately assimilating their experiences. This will enable students to derive meanings from their personal experiences. Translating the experiences into language will allow students to better understand their experiences and eventually to move beyond them (Smith 2000: 131).

2.5.2.3 The stage of abstract conceptualisation

The third stage of experiential learning involves concept formation. Information that was generated in the previous stage is organised into a meaningful conceptual structure that is stored in the brain (Kolb 1984: 43).

This stage focuses on logic, ideas and concepts. According to Kolb (1984: 69), it emphasises thinking as opposed to feelings. It also entails a scientific approach to problem solving and building of general theories, as opposed to an intuitive understanding of unique specific areas. Concept formation requires precision, rigour and a disciplined analysis of ideas, including the aesthetic quality of a neat conceptual

system. Students should be assisted in synthesising evidence to support claims made about knowledge acquired (Dewar and Walker 1999: 1465).

During clinical accompaniment registered nurses ensure that students have the opportunity to form ideas and then conceptualise them. Students should be guided to express what they have learnt during the first two stages in precise statements constituting claims about knowledge.

2.5.2.4 The stage of active experimentation

The stage of active experimentation provides students with opportunities to apply the concepts that were formed during the previous stage to new situations. The concepts serve as a basis for problem solving and decision-making in these new situations (Kolb 1984: 27).

During this stage the focus is on actively influencing people and changing situations. The emphasis is on practical applications of concepts as opposed to reflective understanding: what works as opposed to absolute truth. Students would like to have an influence on their environment and to see the results thereof. There should be a balance between what students have learnt and the action taken (Kolb 1984: 69; Mellish et al 1998: 140).

The stage of active experimentation is applied during clinical accompaniment by providing students with opportunities to apply independently the concepts and insights that they have acquired in similar clinical situations.

2.6 THE LEARNING CLIMATE

The learning climate is one of the key factors that ensure that clinical learning and teaching is successful. Therefore the quality of the learning climate is very important (Nicklin & Kenworthy 2000: 144).

The effectiveness of clinical accompaniment is dependent upon a learning climate that is conducive to learning. This requires a supportive learning environment, the development of caring relationships with learners and the use of reflective teaching behaviours (Ienatsch 1999: 170). While registered nurses are responsible for establishing such a learning climate, it is the duty of nurse managers to ensure that the broader context in which they function also supports the establishment of a positive learning climate.

2.6.1 The organisational context

Organisational conditions should be supportive of registered nurses, enabling them to fulfil their clinical accompaniment functions optimally.

Registered nurses' feeling of job satisfaction has an effect on how they carry out their teaching role. A study done by Erasmus (1998: 52) highlighted the fact that sources of job dissatisfaction among registered nurses were poor interpersonal relationships, stress as a result of changes in policies and procedures, as well as demands inherent in their multiple roles. If registered nurses' morale is low, it might lead to their decreased motivation to engage in clinical accompaniment. Furthermore, students might not learn freely in a climate characterised by poor interpersonal relationships. Gerrish (1990) in Troskie, Guwa and Booyens (1998: 45) also stressed that a lack of adequate time to teach students is a major problem facing registered nurses. It is the responsibility of management of health institutions to develop strategies to minimise the effect of factors that could lead to decreased job satisfaction and lack of motivation to engage in clinical accompaniment.

Programmes and incentives for continuous education by registered nurses should be in place. Furthermore, Troskie et al (1998: 48) recommend that unit managers should receive ongoing training to enable them to keep registered nurses informed of new developments in the training of students. This is to ensure that registered nurses possess a sound up-to-date knowledge base and teaching skills that would give them the confidence required to act as effective teachers and role models. There should be liaison between the

nursing college and the clinical setting. Unit managers should disseminate information to registered nurses about trends and requirements in the training programme. By doing so they also become involved in the clinical accompaniment of students.

In terms of the Batho-Pele Principles (South Africa 1997(a): 13, par.1.3.3), students are customers in their learning programme. Registered nurses should constantly be reminded of the importance of a learning climate that underscores the students' status as learners in the clinical setting rather than simply another pair of hands. This will encourage them to conceptualise their future professional roles as teachers, mentors and guides. Troskie et al (1988: 48) highlighted the problems that are posed when students are regarded as a workforce in the clinical setting. This results in a lack of adequate clinical accompaniment by registered nurses, as students are seen and utilised as merely a pair of hands. It is therefore imperative that recognition is given to the primary purpose of clinical allocation of students, namely to achieve their learning objectives.

2.6.2 Creating a supportive climate for registered nurses

Effective learning requires a supportive learning climate. Reilly and Oermann (1992: 109) define a supportive climate as one characterised by the valuing of learning. The attitudes that registered nurses project towards students, client care and the profession should therefore support the learning process.

Students ought to be aware of what is expected of them. They should be informed of their responsibilities and the expected standard of performance, but should also be assured of the availability of guidance (Bezuidenhout, Koch & Netshandama 1999: 48; Cohen 1994: 120; De Young 1990: 3; Reilly & Oermann1992: 117; Sundeen, Stuart, Rankin & Cohen 1995: 33). Registered nurses ought to demonstrate their willingness to engage in individual discussions with students (Ewan & White 1991:69). They should also demonstrate commitment to act as supervisors, mentors, assessors, preceptors and counsellors where appropriate.

Reilly & Oermann (1992: 109) characterise a supportive climate as one which exhibits caring relationships. According to Ewan & White (1991: 69), registered nurses should try their best to help students achieve the learning objectives rather than being overcritical. Students should be able to approach registered nurses for guidance without fear and should not be made to feel guilty about their lack of knowledge of nursing skills.

Registered nurses should be aware of factors that could contribute towards stressful situations for students. According to Admi (1997: 327), lack of clear expectations of students could cause students stress. Registered nurses ought therefore to make clear their expectations to students. They should recognise students' concerns and discuss their fears, expectations and hopes with them. They should enhance open communication by demonstrating a concerted effort to deal with students at their level of training. Students could simply be asked what they need to discuss at a particular moment, what they are thinking about, what they are currently experiencing and whether they are making progress towards achieving their learning objectives (De Young 1990: 3; Sundeen, Stuart, Rankin & Cohen 1994: 120).

In a favourable learning climate nursing personnel accept and respect one another as unique individuals (Reilly & Oermann 1992: 109). Registered nurses' interaction with students should be characterised by mutual respect and rapport (Fassinger 1995: 88; Paterson 1998: 284; Reilly & Oermann 1992: 143). Registered nurses should be warm, open, highly student-centred and predictable. There should be trust, understanding, cooperation and collaboration between registered nurses and students.

The learning climate should provide opportunities for the professional development of students, empowering them to deal with ambiguities inherent in the clinical setting (Reilly & Oermann 1992: 109). According to Reilly & Oermann (1992: 115), the clinical setting is more than a place to apply theory to practice. It should provide opportunities for developing problem solving skills and for collaborating with other disciplines in finding solutions to problems. Registered nurses should also question students about the rationale for carrying out certain activities. Registered nurses should guide students towards

independent learning and creative thinking. Students should enjoy the freedom to explore and question and should be provided with opportunities to try various approaches to learning (DeMacro 1998: 133; Mashaba & Brink 1994: 199; Reilly & Oermann 1992: 117).

The managerial style of unit managers should support learning (Quinn 1995: 182). Nurse managers should serve as role models for both the students and the registered nurses working in the clinical units. Nurse managers should adopt a humanistic approach towards students. All individuals, nursing personnel as well as students, should be encouraged to work as a team member within the context of the multidisciplinary team. The unit managers ought to exercise an efficient and flexible management style. They should be able to identify and address problems that have the potential to impact negatively on students' learning. There should be collective planning to improve performance of students (Bezuidenhout, Koch & Netshandama 1999: 48).

According to Folkman (1984) in Kivisto and Couture (1997: 28), registered nurses can use various strategies to help students. Firstly, there are the behavioural interventions, which are aimed at changing behaviour so that new and effective coping patterns are acquired. This involves aspects such as controlling events in the environment and commitment, which is the involvement of one' self in the activities. The individual should be involved responsibly and should feel that he/she is in control of the situation. Secondly, there are cognitive interventions, which are aimed at encouraging persons to develop more realistic, positive self-supportive thinking patterns in order to deal with threats, catastrophe or self denigration. In this instance a person practises positive talk, thought stopping and the utilisation of imagery. Thirdly, there are interventions that entail physiological strategies aimed at producing a physical state that enhances an individual's ability to deal positively with stress. This state is referred to as relaxation or trophotropic response.

2.7 PROJECTED OUTCOMES OF EFFECTIVE CLINICAL ACCOMPANIMENT

Effective clinical accompaniment through the utilisation of teachable moments could contribute towards the development of the ability in students to make clinical judgements. Clinical judgement entails analysing clinical situations, gathering and interpreting data, generating tentative hypotheses, considering alternatives, and deciding on an appropriate course of action. By doing so, knowledge gained through training is applied appropriately to the clinical setting.

Effective clinical accompaniment through the utilisation of teachable moments would assist students in using various strategies to solve clients' problems. Such strategies include early hypothesis generation, devising multiple competing hypotheses, hypothesis testing and differentiating between relevant and irrelevant data. Students should have learned how to debate with colleagues without fear. Problems in the clinical setting are multi-causal and their solution requires multiple interactions and advanced decision making skills. Debating these problems would enhance critical thinking, which involves justification of beliefs and argumentation. Debating involves analysing the problem, finding evidence, compiling a brief, constructing a case, organising a speech, planning refutation and rebuttal and rehearsing (Reilly & Oermann 1992: 232; Van Aswegen 2001: 34).

Technical capabilities are also developed through effective clinical accompaniment. Effective clinical accompaniment ensures that students have opportunities to take responsibility for the development of their clinical skills by learning, practising and maintaining these skills under the guidance of more expert practitioners. Technical abilities imply that students have learnt the art and science of nursing, that is the practical component of nursing (Nicol & Glen 1999: 44). To demonstrate technical capabilities students should display fairly consistent performances regardless of factors that might fluctuate in the average person. Performance coincides with a high degree of spatial

precision and timing, and is executed within certain time limitations. Responses to stimuli are set in appropriate sequential order. The technically capable person has developed the ability to receive maximum information from minimum numbers of identifiable cues, and is capable of anticipating quickly and reacting timorously. Performance is characterised by less variability since there is no need to respond to every potential cue in the environment; there is economy of effort in the performance of skills. The technically capable person is able to perform at proficiency level under varying and even unpredictable conditions (Fichard, Viljoen, Botma & Du Rand 2000: 88; Reilly & Oermann 1992: 250).

According to Higgs and Edwards (1999: 42), students are expected to understand the roles of other health professionals and to be able to work collaboratively with them. Effective clinical accompaniment could contribute towards the development of a team spirit in students, which would enable them to work effectively as a member of the multidisciplinary health team and to share responsibilities for learning and safe practice with other health team members.

Clinical accompaniment contributes towards the development of a macro-vision. This means that students will learn that the clinical setting is a network of interrelated systems. In this way, as qualified practitioners, they will be able to think divergently. This will enable them to examine multiple problems or needs of clients rather than to focus on one problem or need. Dealing with multiple needs or problems could foster the development of critical thinking skills which are regarded as being purposeful, based on rationality, reflective in nature, open-minded and autonomous (Botes 2000: 28; Hawks 1999: 67; Mogale 2000: 35).

Effective clinical accompaniment may contribute towards the ability of the newly qualified practitioner to adopt a human needs approach and to apply appropriate strategies to meet the human needs of clients in a professional manner. They will have developed knowledge of different facilities and other resources or equipment used in the clinical setting. Students will understand the interrelationship of phenomena, for example

how poverty, malnutrition, and lack of health services could all lead to illness. This knowledge could assist students, as newly qualified practitioners, to consider aspects such as the culture, the social life of clients, their economic status and so on when making nursing diagnoses and developing care plans (Anderson 1998: 257; Ferrel, Grant & Virani 1999: 253; Moshidi 2000: 29).

2.8 CONCLUSION

The interpersonal theory of Peplau has provided direction to and a background for this study. The interpersonal relationship was found to be a crucial component of clinical accompaniment of students in the clinical setting. A positive relationship between registered nurses and students could be regarded as a determining factor for effective clinical accompaniment of students. The utilisation of teachable moments is considered to be an appropriate method by which effective clinical accompaniment could be rendered. The interpersonal relationship is still important during the utilisation of teachable moments, as teaching and learning are interpersonal processes. The projected outcomes of clinical accompaniment should produce a relatively mature professional who possesses knowledge of various dimensions of the nursing profession.

Chapter 3 provides a discussion of the research method used to guide this study.

CHAPTER 3

RESEARCH DESIGN AND METHOD

3.1 INTRODUCTION

In this chapter the researcher describes the research process, design and method. Quantitative descriptive research was done to answer the research questions. The population was registered nurses rendering direct patient care. The sample was selected using a stratified random sampling method. Data was collected using a structured questionnaire, which was developed by the researcher. The quality of the study was ensured through strategies which maintained reliability and validity. Data was analysed with the aid of computer software. The research respondents were protected through consideration of the ethical principles underlying research.

3.2 THE LITERATURE REVIEW

A preliminary literature review was carried out to enable the researcher to write a research proposal. The research proposal was submitted to the Department of Advanced Nursing Sciences at the University of South Africa in January 2000. The proposal was evaluated by the two supervisors and sent back to the researcher for corrections. After revising the proposal, the researcher submitted it again. The Research and Ethics Committee of the Department approved the revised proposal. The researcher was then given permission to proceed with the study, and two supervisors who are nursing education lecturers were appointed to guide the researcher. An extensive national and international literature review was then carried out. Peplau's Theory of Interpersonal Relations guided this study, including the literature review. The major concepts of the theory, as well as the clinical accompaniment and related concepts were discussed. The literature review is incorporated in Chapters 1 and 2 of this research report. Chapter 2 is structured according to Peplau's theory.

3.3 THE OBJECTIVES OF THE EMPIRICAL STUDY

Empirical research refers to research that aims to obtain reality through the use of the senses (Clifford 1997: 195; Mouton 1996: 104; Polit & Hungler 1995: 35). In order to attain the aims of this empirical research study the researcher formulated the following research questions:

What problems do registered nurses experience with regard to fulfilling their clinical accompaniment function?
How do registered nurses utilise teachable moments in the clinical setting?

3.4 RESEARCH DESIGN

Research design is defined as a blueprint for conducting a study that maximises control over the factors that could interfere with the validity of the study. Research designs are developed to meet the unique needs of a study. A research design describes the plan by which specific activities of the study could be conducted and brought to successful closure. Designs are concerned with sampling, operationalisation of constructs, decisions about and the actual gathering of data and subjection of the data to analysis (Burns & Grove 1996: 185; Burns & Grove 1993: 292; Powers & Knapp 1995: 43; Wiersma 1991: 81).

A quantitative research approach was chosen for this study. Quantitative research is done when data are quantifiable (Brink & Wood 1998: 5; Hek, Judd & Moule 1996: 26). This study was aimed at measuring the research variable (utilisation of teachable moments) using a numerical scale, namely a Likert scale. The features of this research are in accordance with the quantitative research approach. Its focus was concise, narrow and reductionistic in nature, as only one variable was measured. Logical reasoning was applied by structuring the sections of the dissertation in accordance with a selected theory and by following the research process systematically. Deductive reasoning was practised by deriving the items of the data collection instrument from existing theories. A

structured data collection instrument was used to enhance objectivity and to support statistical analysis. The findings of the study were generalised to the population.

For this study, a non-experimental, descriptive design was chosen. The researcher had no intention of exercising control over the variable that was being studied. The study was aimed at describing the key variable in the specific population (Brink & Wood 1998: 289; Duong, Bohannon & Ross 2001: 4).

Descriptive designs make certain assumptions that distinguish them from other designs, as stated by Brink and Wood (1998: 290). The first assumption is that the variable exists in the population under study and that it is a single variable amenable to description. In this study the variable was teachable moment utilisation. Another assumption is that there is little or no literature that describes the current variable. Although there is literature available on teachable moments as a teaching strategy, implementation of this strategy in clinical settings in the Northern Province has not been well documented. The researcher identified a need to investigate and document the utilisation of teachable moments by registered nurses in the Northern Province of South Africa. Thirdly, there might or might not be a theoretical framework for the study. This study was not aimed at theory testing. However, a theoretical framework was used to allow the researcher to approach the research in a structured and focussed manner. Lastly, the population parameters could be estimated from the sample measures. In this study the researcher selected a sample from the population using a probability sampling approach to enhance representativeness of the sample. The research findings were generalised to the population, namely registered nurses in the Northern Province who provide direct patient care and who come into daily contact with students from the Sovenga Campus of the Northern Province College of Nursing.

3.5 DEVELOPMENT OF THE DATA COLLECTION INSTRUMENT

The research instrument for data collection, namely a structured questionnaire, (refer to par.3.7.3 & Annexure I) was developed by the researcher under the guidance of the study

supervisors. The questionnaire comprised three sections. Section A dealt with biographical data. The items in section B were derived from the literature review in general, and dealt with problems experienced by registered nurses in fulfilling their clinical accompaniment function. The structure and the items of section C of the instrument were influenced by Peplau's theory (refer to par. 2.2 & 2.4.2), as well as Kolb's experiential learning cycle (refer to par. 2.5.2). The items in this section were focussed on the utilisation of teachable moments.

Decision-making regarding the data collection instrument and method was influenced by the chosen research approach and design, namely a quantitative, descriptive design. The research design is discussed in paragraph 3.4.

3.6 ETHICAL CONSIDERATIONS

When conducting research in institutions the researcher should follow certain procedures to obtain permission for the study and to get cooperation from the individuals who will be affected by it (Gall, Borg & Gall 1996: 103). The works by Brink and Wood (1998: 301) and Lo-Biondo-Wood and Haber (1994: 324) were used to guide the researcher on adhering to the ethical principles of research.

Permission to conduct the research was obtained from the Northern Province Department of Health and Welfare, as explained in paragraph 3.7.2 (refer to Annexure B). The researcher ensured that the conditions set by the Department when permission was given were adhered to. The researcher undertook to submit the research report after the study was completed, and to assist the Department in implementing the recommendations where possible.

Permission was also obtained from the hospital authorities, as explained in paragraph 3.7.2, and from the nursing authorities who were involved in the study, as explained in 3.7.3.4 and 3.7.4.

The respondents participating in the study have to be protected from any discomfort that the study might cause them and the researcher seriously considered those aspects. Firstly, an informed consent was obtained from the respondents who participated in the study. They were told the purpose of the study, what was to be accomplished and the significance. They were assured that participation was voluntary. The respondents were informed that they had every right to participate in or to withdraw from the study at any time. They were told that they should feel free to respond to the items in the data collection instrument. Absolute anonymity was ensured as the respondents were asked not to write their names or the institution's name on any part of the questionnaire. The identity of the respondents could not be linked to their responses nor to the individual information supplied. After the study was completed the data collection instruments were destroyed to protect the respondents. Furthermore, a covering letter was also attached to the questionnaire, as explained in paragraph 3.7.3.3 (also refer to Annexure H). Respondents were informed that the completed questionnaire could be given to the unit manager from whom the researcher would collect them.

3.7 RESEARCH METHOD

3.7.1 Choice of respondents for the study

The choice of respondents is discussed by referring to the population, sampling methods and the sample.

3.7.1.1 Population

A population is defined as any group of individuals who have one or more characteristics in common that are of interest to the researcher. The population is the entire aggregate of cases that meet the designated criteria. The population might all be individuals of a specific type or a more restricted part of the group (Best & Kahn 1993: 13; De Vos 1998: 190; Polit & Hungler 1995: 229).

According to Polit and Hungler (1995: 222), the accessible population is the population of subjects available for a particular study. The accessible population for this research study was those registered nurses who worked in the hospitals associated with Sovenga Campus which is part of the Northern Province College of Nursing. The number of registered nurses who were working in these clinical settings at the time was approximately 797. This number excluded the unit managers working in the hospitals. However, this number could have changed due to resignations, retirement and the provision of new staff. This study did not include registered nurses working on night shift or the unit managers. It would have been difficult for the researcher to include registered nurses on night duty as their work hours made them inaccessible to the researcher. The unit managers were in most cases performing administrative activities rather than student teaching and therefore they were not included in the study. In this study all registered nurses who were on day shift on 4th to 22nd May 2001 constituted the accessible population. The eligibility criteria for inclusion in this study were that the individual had to be a registered nurse, render direct client care and come into daily contact with student nurses.

3.7.1.2 Sampling

Sampling is defined as the process of selecting representative units of a population for a study in a research investigation (De Vos 1998: 190; Lo-Biondo-Wood and Haber 1994: 287).

In this study, a probability sampling approach was used because this study is quantitative in nature. According to Polit and Hungler (1995: 236), a probability sampling approach has the hallmark of random selection of respondents. This approach placed the researcher of this study in a position to specify the probability that each element of the population had an equal chance of participation in this study. In descriptive research, either the total population is used, or a sample is drawn from a target population by means of probability sampling. If the purpose of the study is to describe the population characteristics, probability sampling is ideal for ensuring external validity (Brink & Wood 1998: 292).

For this study the researcher followed the stratified random sampling approach. In stratified random sampling the population is divided into strata of subgroups according to the variable important to the researcher. After the population is divided into groups, a simple random sampling is taken (Nieswiadomy 1993: 176). Stratified random sampling is used in situations in which the researcher knows some of the variables that are critical in achieving representativeness. Those variables could include age, type of institution and the site of care. Stratified random sampling enhances the possibility that all the required variables are adequately represented in the sample (Burns & Grove 1996: 235).

The clinical settings used for this study consisted of four available hospitals where students from Sovenga Campus do their clinical practica. All the clinical units of each hospital were listed. A list of registered nurses available on duty on that day in each of the listed clinical units was compiled. Their names were written on pieces of paper, which were folded. Fifty percent of registered nurses were randomly selected for inclusion in the study. The actual number of registered nurses differed from unit to unit.

3.7.1.3. The sample

According to Polit and Hungler (1995: 230), a sample is defined as set of a subset of the units that compose the population.

The sample size of this study was 45. Sixty questionnaires were distributed but 45 were both returned and fully completed (Refer to table 3.1).

3.7.2 Permission to do the research

Permission to conduct the study in the Northern Province was obtained from the Northern Province Department of Health and Welfare. The researcher was requested by the Research and Quality Committee of the Department to present the research proposal and the questionnaire. The researcher went in person to present these on the 22nd March 2001.

The Research and Quality Committee set conditions, namely that only hospitals could be used for research, that the sample size should be reduced, and that unit managers should accompany the researcher to the units on a supervisory basis. The Committee also recommended that the number of items on the questionnaire be reduced and that some of the items be formulated in less complicated terms. They also recommended some technical changes. Concerning data collection, the Committee requested that the unit managers should help the researcher with the distribution of the data collection instrument, and that the respondents should not use official time to participate in the research. They further requested that the researcher assist the health authorities in implementing the recommendations and lastly, that the researcher should submit a copy of the research report to the Department of Health and Welfare of the Northern Province. After the researcher had met certain conditions and undertook also to adhere to the other conditions, the Committee granted permission to conduct the research. The letter requesting permission, and the letter granting permission are attached to this research report as Annexures B and C. The letter requesting permission outlined the research problem and research questions, and the reasons it is important for registered nurses to participate in the study. The time required by respondents to complete the questionnaire was specified. In the letter, the rights of the respondents, and the destruction of the questionnaire after completion of the study were explained. It was also explained that the research report would be made available in the library of the Northern Province College of Nursing.

3.7.3 Development and testing of the data collection instrument

3.7.3.1 Data collection approach

Data collection is the process of collecting information about the variable under investigation. According to Brink and Wood (1998: 146), data collection depends on several factors. Firstly, it depends on the level of the research question or how much is known about the variable. Secondly, it depends on whether the researcher intends measuring relationships. Thirdly, it depends on whether the researcher intends to control

the situation. A further factor that should be considered is whether the instruments are already available and already tested and evaluated in measuring the study variables.

For this study the researcher did not intend to manipulate the variables and no relationships between variables were measured. The researcher developed a self-administered, structured questionnaire and data collection occurred in a naturalistic setting. Self-administered questionnaires are relatively cost-effective and can be administered without the expenditure of much time and energy. Questionnaires have the advantage of anonymity. Another advantage is that response biases can be limited (Bless & Higgson-Smith 2000: 105; Burns & Grove 1997: 358; Polit & Hungler 1995: 289). The absence of the researcher when the questionnaires were being completed ensured that researcher-presence bias was limited.

3.7.3.2 Construction of the data collection instrument

According to Brink and Wood (1998: 293), data collection methods in descriptive designs are primarily structured. These methods could include, among others, self-report by means of a questionnaire. A structured self-report questionnaire was developed for this study in order to collect data to answer the research questions (refer to 3.3). Self-report questionnaires are completed by respondents either in writing or by responding directly into a computer (Polit & Hungler 1995: 275). In this study, respondents responded in writing.

Brink and Wood (1998: 157) describe structured questionnaires as those in which pre-specified questions are presented to all respondents in exactly the same order, using the same wording. Such standardisations enable the researcher to compare the responses. This study's questionnaire (refer to Annexure I) consisted of pre-developed items to which respondents indicated their responses by marking the appropriate option on closed-ended scales, namely 4-point Likert scales. One open-ended item was included to allow respondents to write down their responses freely. This was done to enable the researcher to gain some in-depth understanding, as explained in paragraph 3.7.3.3.

According to De Vos (1998: 156), researchers should, whenever possible, use instruments that have been developed in previous research projects. However, their feasibility and utility should be considered first before they are used in research other than that for which they were originally developed. For the purpose of this study the researcher did search for previously developed instruments, but it was not feasible to use any of them.

3.7.3.3 Subdivision of the questionnaire

According to De Vos (1998: 157), the covering letter is an integral part of the questionnaire. The researcher therefore wrote a covering letter and attached it to the questionnaire (refer to Annexure H).

The questionnaire comprised three sections.

Section A consisted of items to elicit biographical data about the respondents. This was included because the educational background and professional experience of the respondents, in particular, could elicit meaningful data that could influence the recommendations.

Five items on problems experienced by registered nurses with regard to fulfilling their clinical accompaniment function were incorporated in section B of the questionnaire. One open-ended item was also included to allow respondents to express their problems freely. This gave the researcher a more in-depth understanding of the nature of the problems facing registered nurses. Because problems are experienced subjectively, the inclusion of an open-ended item is appropriate. The pre-planned items in this section were derived from the literature review in general.

Section C consisted of items investigating how registered nurses utilise teachable moments in the clinical setting. The items in this section were derived from Peplau's

phases of the interpersonal process (refer to par. 2.4.2) and Kolb's stages of experiential learning (refer to par. 2.5.2). Items pertaining to Kolb's experiential learning stages were incorporated into the subsection dealing with items on Peplau's exploitation phase. Items 1 to 6 covered Peplau's orientation phase. Item 7 dealt with Peplau's identification phase. Items 8 to 20 covered Peplau's exploitation phase and Kolb's experiential learning stages. Peplau's resolution phase was not incorporated in the questionnaire because it did not lend itself to formulating a meaningful item within the context of this research.

The ordering of items should be planned carefully, according to Burns and Grove (1997: 360). Questions related to a specific topic should be grouped together. The researcher achieved this by using a theoretical framework as a foundation for constructing the questionnaire.

Section A elicited responses that were measured on the nominal and ratio levels of measurement. Section B and C comprised Likert Scales, and therefore the ordinal level of measurement was applicable. Polit and Hungler (1995: 279) define a Likert Scale as consisting of declarative items that express viewpoints on a topic. In Section B the respondents had to indicate with an X whether they strongly agreed, agreed, disagreed or strongly disagreed. In Section C they had to indicate their responses to either always, often, seldom or never options.

3.7.3.4 Pilot study

A pilot study was conducted to test the data collection instrument (Kerr, Taylor & Heard 1998: 167). This was carried out in one of the hospitals where registered nurses who formed the population for the study worked, and where students from Sovenga Campus do their clinical practica. The researcher made an appointment with the head of the Nursing Section to discuss the date on which the pilot study could be conducted. After permission had been granted to conduct the pilot study the researcher reported to each unit or area manager. There were six clinical units, of which three were selected for the pilot study. The names of the registered nurses on duty were written on pieces of paper

and folded up. Only 50% of registered nurses' names were randomly selected from each unit.

The researcher was taken to the training and development unit to wait for the unit managers until they had finished their meeting. The officer in charge of training and development gave the researcher a brief orientation regarding the routine activities of the clinical setting. According to Burns and Grove (1997: 401), it is important to have a significant other to share the joys, frustrations and current problems of data collection. This training and development officer served as a mirror for the researcher to see the situation clearly and objectively. Personal support assisted the researcher to share feelings and to discuss how problems related to data collection could be solved. This served to increase the confidence of the researcher in the ultimate success of data collection. The training and development officer accompanied the researcher to the clinical units to distribute the questionnaires and introduced the researcher to the unit managers. The researcher outlined the manner in which the questionnaires would be distributed for the purposes of the pilot study.

Permission was sought from unit managers to ask the respondents to complete the questionnaires. These were distributed to each clinical unit after the researcher had discussed, with the unit manager, the method of gaining access to the respondents. A total of six questionnaires were distributed. The researcher collected the questionnaires before 16:00 the same day. The researcher was able to determine whether there was a non-response rate by checking each questionnaire item by item.

The respondents were asked to complete the questionnaire. They were also supplied with an evaluation instrument which contained a semantic differential scale. The items were aimed at evaluating the face validity of the questionnaire (refer to paragraph 3.8 & Annexure E) and covered aspects such as clarity, appearance, layout, relevance, anonymity and privacy.

3.7.3.5 Revising the instrument

Based on the responses by those who participated in the pilot study, the data collection instrument was considered to be suitable for data collection. No problems concerning the items were identified. However, the instructions to the respondents were found to be confusing, and the researcher reformulated them in simpler and more understandable terms.

3.7.4 Data collection process

This section describes the process the researcher followed to collect data.

The researcher submitted the letter of the Department of Health and Welfare Northern Province, which granted permission (refer par. 3.7.2) to conduct the study, to the superintendents of the institutions at which data collection was done. A letter requesting permission from the hospital superintendent and the cover letter addressed to the research participants which formed part of the questionnaire was also shown to the authorities. The researcher then requested permission to conduct the study in the particular hospitals. The researcher informed the hospital authorities of how data collection would proceed.

According to Polit and Hungler (1995: 288), self-administered questionnaires can be administered in a number of ways, one of which is personal presentation of the questionnaires. In this study, the availability of the researcher enabled him to give explanations and clarifications where required by the unit managers. He personally distributed the questionnaires in the clinical setting, inexpensively and efficiently. Personal presentation of questionnaires to the respondents has a positive effect on the rate of return of questionnaires. In this study, a good response rate was achieved. However, collecting the completed questionnaires was found to require much effort on the part of the researcher. Initially, four days were set aside for data collection at the hospitals. The researcher delivered the questionnaires to the clinical settings and returned to collect them the following day. The unit managers were requested to keep the questionnaires

until the researcher came to collect them. However, it took the researcher a period of three weeks to collect most of the questionnaires.

Of the sixty (60) questionnaires that were distributed, 11 were not returned, and four were incomplete. Forty-five were useful and were subjected to data-analysis. The response rate was therefore 75%. Table 3.1 summarises the number of questionnaires that were distributed and the response rate:

Table 3.1 Questionnaire distribution and response

	TOTAL NUMBER OF QUESTIONNAIRES	FULLY COMPLETED	PARTIALLY COMPLETED	UNRETURNED
Questionnaires	60	45	4	11
Percentages	100%	75%	7%	18.3%

3.7.5 Data analysis

Data analysis is the process of organising individual pieces of data into meaningful information. Statistical procedures aid researchers in summarising, organising, evaluating, interpreting and communicating numerical information (Lo-Biondo-Wood & Haber 1994: 386; Polit & Hungler 1995: 371). According to Brink and Wood (1998: 300), the method of data analysis will differ according to the type of study, the sampling procedures and the complexity of data collection methods.

The items on the instrument were coded (refer to Annexure J) so that it would be possible to analyse them with the aid of a computer, using SPSS9.0 for Windows. Descriptive statistical tests were done. This entailed calculating frequencies, measures of central tendencies (mode, median, mean), standard deviations, variance, and correlation coefficients. The data collection instruments were also subjected to reliability tests, namely Chronbach alpha, Guttman's Split-half alpha, and Equal Length and Unequal

Length Spearman-Brown, as explained in paragraph 3.8. Data were displayed in the form of line graphs and pie graphs.

Data analysis and the research results are fully discussed in Chapter 4.

3.8 RELIABILITY AND VALIDITY

Reliability of an instrument refers to how consistently the measuring technique measures the concept of interest (Cormack 2000: 29).

Section C of the questionnaire was tested for internal consistency during data analysis. Cronbach's alpha was calculated. The value obtained was 0.84. The Guttman's Split-half alpha for items in part 1 of section C was 0.7, and the alpha for part 2 was 0.82. The Equal Length and Unequal Length Spearman-Brown were 0.72. Therefore the instrument for data collection could be considered as reliable.

Validity of an instrument is a determination of the degree to which the instrument actually measures what it is supposed to measure (Cormack 2000: 29).

Face validity was enhanced through the pilot study (Bless & Higgson-Smith 1996: 130; Burns & Grove 1996: 260; De Vos 1998: 179). The questionnaire was given to a few persons from the population who are not included in the study, as explained in paragraph 3.7.3.4. A semantic differential scale was developed and given to those persons to assess the questionnaire according to specified criteria. This had the benefits of communicating, to the assessors, criteria according to which they had to judge the instrument. Changes were made as explained in par. 3.7.3.5. Based on the input received, the instructions for the respondents were reformulated in simpler terms to avoid confusion on the part of the respondents.

The questionnaire was submitted to the supervisors for assessment of content validity. They provided input for improving the questionnaire. This input was aimed at ensuring

that the questionnaire items represented Peplau's interpersonal phases (par. 2.4.2) and Kolb's experiential learning phases (par. 2.5.2). Content validity was not quantified.

3.9 COMMUNICATION OF THE RESEARCH RESULTS

The planning, empirical and interpretative phases of the research were documented in a research report, namely this dissertation, which was submitted for examination in November 2001.

3.10 CONCLUSION

Chapter 3 provided a description of the research design and methods that were used to address the research problem. A quantitative approach was used to guide this research. For this purpose a non-experimental descriptive research design was used, and data collection occurred by means of a self-report method. Descriptive statistics were calculated to analyse the data. Chapter 4 provides a detailed description of data management, analysis and interpretation.

CHAPTER 4

ANALYSIS, PRESENTATION AND DESCRIPTION OF THE RESEARCH FINDINGS

4.1 INTRODUCTION

This section of the report discusses in detail the management and analysis of the data. The research findings are discussed in descriptive and visual form.

4.2 DATA MANAGEMENT AND ANALYSIS

Data management and analysis was done by using the SPSS 9.0 for Windows computer software.

The items on the questionnaire were coded as indicated (refer to Annexure I). Section A of the questionnaire elicited biographical data of the respondents. Section B consisted of items related to the problems faced by registered nurses in the fulfilment of their teaching role. Section C consisted of items on the utilisation of teachable moments by registered nurses.

The researcher used descriptive statistical tests, which included frequencies, measures of central tendency and measures of variance. Spearman's rank correlation coefficient was also calculated to correlate responses to each item within sections B and C respectively.

4.3 RESEARCH RESULTS

The research results are discussed by referring to the sample characteristics, the problems faced by registered nurses in the fulfilment of their teaching role and the extent to which registered nurses utilise teachable moments in the clinical setting.

4.3.1 Sample characteristics

Section 1 of the questionnaire comprised five items pertaining to the biographical data of the respondents. The research results for this section are subsequently discussed.

The sample size was 45 and the sample characteristics were as follows:

How old are you?

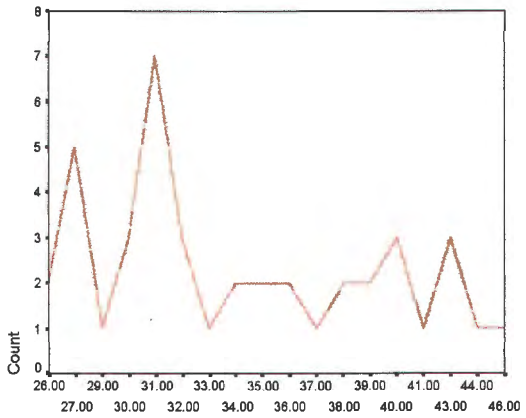

Figure 4.1 Age of respondents

The ages of the respondents (n=42) varied between 26 and 46 years. Three respondents did not specify their ages. The mean age was 34 years and the mode, 31 years. The standard deviation was 5.6, which indicates that the sample was heterogeneous in terms of age.

Indicate your highest nursing qualification

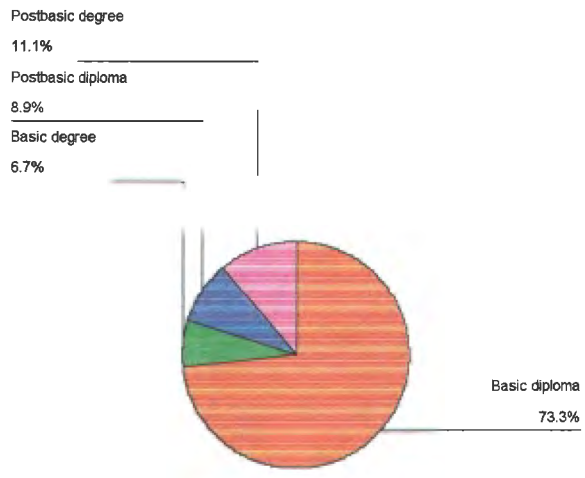

Figure 4.2 Qualifications of respondents

Thirty-three (73.3%) respondents held a basic nursing diploma and three (6.7%) a basic nursing degree. These qualifications are the entry qualifications into the nursing profession. Four (8.9%) respondents held a post-basic nursing diploma and five (11.1%) a post-basic nursing degree. The latter two qualifications are additional to the basic qualifications and therefore indicate continuing education.

Indicate your professional registrations

Table 4.1 Professional registrations of respondents

PROFESSIONAL REGISTRATION	FREQUENCY	PERCENTAGE
General nurse	43	95.6%
Psychiatric nurse	20	44.4%
Community health nurse	25	55.6%
Midwife	33	73.3%
Nurse educator	3	6.7%
Nurse manager	6	13.3%
Other:		
Occupational nurse	2	4.4%
Critical care nurse	1	2.2%
Operating theatre nurse	2	4.4

Forty-three (95.6%) respondents were registered general nurses. One respondent specified registration as a midwife only, while another did not specify his/her professional registration. Twenty (44.4%) respondents were registered psychiatric nurses, 25 (55.6%) were registered community nurses and 33 (73.3%) were registered midwives. Three (6.7%) respondents were registered nurse educators and six (13.3%) were registered nurse managers. Five (11.1%) respondents indicated "other" registrations. Of these, two(4.4%) specified registration as an occupational nurse, while one (2.2%) was a registered critical care nurse. Two respondents (4.4%) were registered operating theatre nurses.

How many years of professional experience do you have?

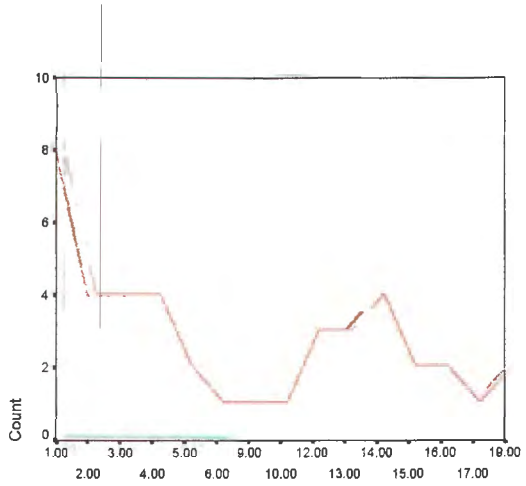

Figure 4.3 Years of professional experience of respondents

The years of experience of respondents varied between one and 19 years. The mean score was 7.8, and the mode, 1. The standard deviation was 6.1. The standard deviation indicated that the sample was heterogeneous in terms of years of experience.

Indicate the clinical unit in which you work

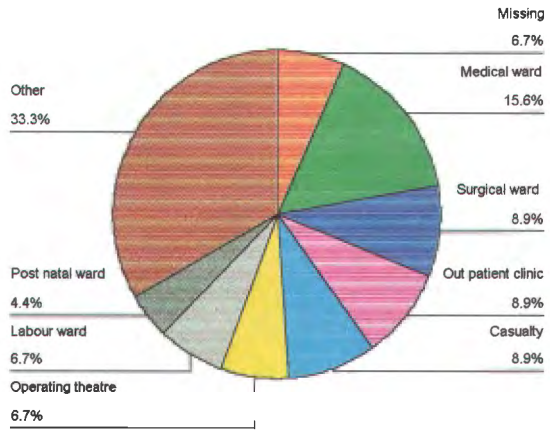

Figure 4.4 Units in which respondents worked

Seven (15.6%) of respondents worked in the medical wards, while four (8.9%) worked in the surgical wards. Four respondents (8.9%) worked in the out patient clinic and four (8.9%) in the casualty unit. Three (6.7%) respondents worked in the operating theatre. Three (6.7%) respondents worked in the labour ward while two (4.4%) worked in the post-natal ward. Fifteen (33.3%) respondents responded that they worked in other wards. These were specified as polyclinic (one respondent), intensive care unit (three respondents), neonatal ward (two respondents), ophthalmic ward (one respondent), psychiatric ward (three respondents), gynaecological ward (three respondents), and orthopaedic ward (two respondents). One respondent mistakenly responded to the other option, but specified that he/she worked in the operating theatre.

4.3.2 Problems faced by registered nurses

Section B of the questionnaire comprised five items pertaining to the problems faced by registered nurses in the fulfilment of their teaching role. The research results for this section are as follows:

My patient care workload makes it difficult to allocate time to teaching students in the clinical unit

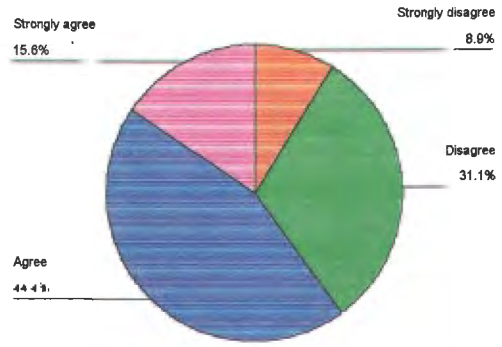

Figure 4.5 Responses regarding patient care workload

Four (8.9%) respondents strongly disagreed with this statement while 14 (31.1%) disagreed. Twenty (44.4%) respondents agreed with this statement and seven (15.6%) strongly agreed. The median score was 3.0 and the mode, 3.0. Most respondents therefore agreed with this item. Therefore, for most of the respondents (60%), workload makes it difficult to allocate time for student teaching.

Tutors from the nursing college are available to give me guidance about my clinical teaching responsibilities

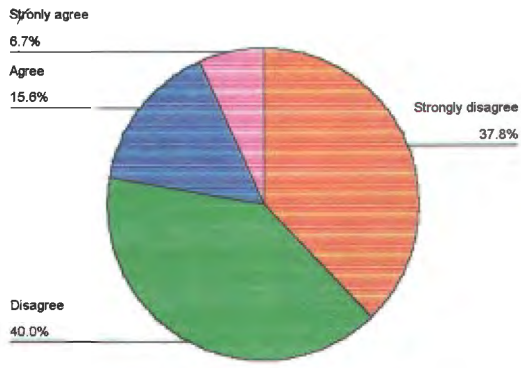

Figure 4.6 Responses regarding availability of tutors

Seventeen (37.8%) respondents strongly disagreed with this statement while 18 (40.0%) disagreed. Seven (15.6%) respondents agreed with this statement while three (6.7%) strongly agreed. The median score was 2.0 and the mode, 2.0. Most of the respondents therefore disagreed with this statement. These findings indicate that the availability of tutors is a problematic issue in the clinical settings, according to 78% of respondents.

I do not know what learning objectives students should achieve in the clinical unit

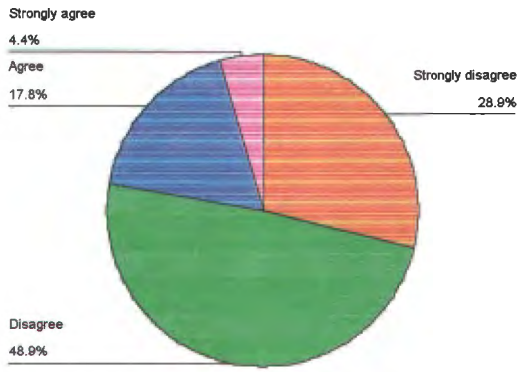

Figure 4.7 Responses regarding knowledge regarding learning objectives

Thirteen (28.9%) respondents strongly disagreed with this statement while 22 (48.9%) disagreed. Eight (17.8%) respondents agreed with this statement while two (4.4%) strongly agreed. The median score was 2.0 and the mode, 2.0. Most respondents therefore disagreed with this statement. Most respondents (77.8%) are therefore aware of the learning objectives students should achieve in the clinical setting. However, it is interesting that 22% of respondents responded that they were not aware of the learning objectives students should achieve in the clinical setting.

I do not have the necessary teaching skills to do clinical teaching of students in my area of practice

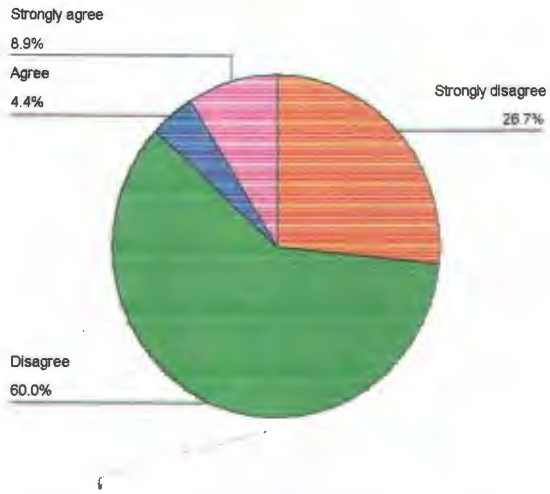

Figure 4.8 Responses regarding possession of the necessary teaching skills

Twelve (26.7%) respondents strongly disagreed with this statement while 27 (60.0%) disagreed. Two (4.4%) respondents agreed with the statement while four (8.9%) strongly agreed. The median score was 2.0 and the mode 2.0, which indicates that most respondents disagreed with this statement. Most of the respondents therefore felt that they do have the necessary skills to do clinical teaching.

I have the necessary clinical expertise to teach students effectively in my area of practice

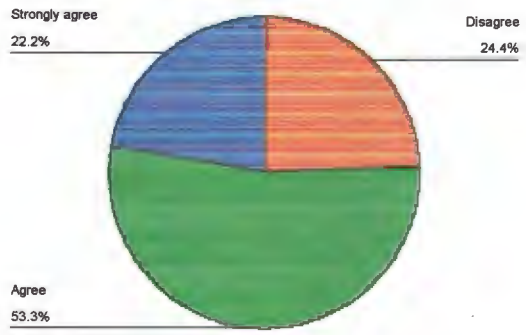

Figure 4.9 Responses regarding having the necessary clinical expertise

Eleven (24.4%) respondents disagreed with the statement. Twenty-four (53.3%) respondents agreed with the statement while 10 (22.2%) strongly agreed. The median score was 3.0 and the mode 3.0. Most respondents therefore agreed with this statement. These findings indicate that most of the respondents believe that they have the necessary clinical expertise to teach students. However, it is interesting that 24.4% of respondents did not indicate that they have the necessary clinical expertise to do clinical teaching. According to Peplau's theory (refer to par. 2.3.2), registered nurses are not only teachers and resource persons, but also expert practitioners. As experts registered nurses possess knowledge and skills about nursing dimensions. If they do not possess knowledge, students might not be able to achieve learning objectives in the clinical setting. As experts, registered nurses are expected to show a higher level of accountability.

> *List below any problems in your work environment that, according to your opinion, negatively impact on student teaching by registered nurses*

The respondents listed problems related to personnel shortages, high workload and time constraints, namely:

- There is a shortage of staff in the clinical settings.
- Registered nurses cannot cope with the patient care workload, particularly when the ward is full of patients.
- There are too many students to cope with in the clinical setting.
- There is no time to teach students even if a teachable moment occurs

The responses also brought to light problems with regard to registered nurses' views on student teaching and their abilities to teach students, namely:

- Registered nurses do not know the curriculum that students are following and therefore they cannot teach them.

- Registered nurses are not told what is expected of them regarding the teaching of students.
- Teaching of students is not their responsibility but that of college tutors as they are paid for teaching both theory and practice.
- Registered nurses do not possess the skill to teach students.

Responses to the open ended items also highlighted problems concerning student behaviour in clinical settings, namely :

- Student nurses do not show any motivation to learn.
- Sometimes students come to the clinical setting without learning objectives.
- The students undermine the capabilities of registered nurses.
- Students arrive late for work.
- Students absent themselves from the clinical setting without reporting to registered nurses.
- Some students do not share the problems that they experience in the clinical setting with registered nurses.
- Students cannot draw correlations between theory learnt at college and practice.
- Sometimes students are not properly identifiable and therefore it is difficult to know who they are.

Some responses exposed problems of cooperation between the college and the clinical settings, namely:

- Registered nurses receive some negative comments from college tutors especially when registered nurses demonstrate a procedure to students in the clinical setting. The college tutors often claim that the procedures are not properly demonstrated to students. There was a suggestion that college tutors should do the demonstrations of procedures first.

- There is poor time management regarding allocation of students in the clinical setting. The duration of students' stay in the clinical setting is not adequate.
- There is a lack of communication between the nursing college and the clinical settings.

A lack of infrastructure was also noted, namely

- There is a lack of library facilities.

4.3.3 Utilisation of teachable moments

Section three of the questionnaire comprised 20 items pertaining to the utilisation of teachable moments by the respondents. The research results for this section are discussed below.

I assess students' learning needs when they enter the clinical unit for the first time

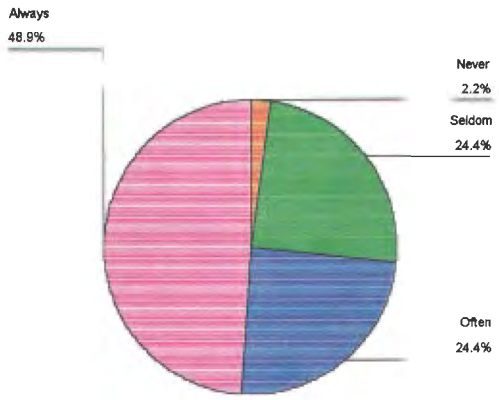

Figure 4.10 Responses regarding assessment of learning needs

One (2.2%) respondent responded that he/she never assesses students' learning needs, and 11 (24.4%) seldom do assessments. Eleven respondents (24.4%) responded that they often do assessments, while 22 (48.9%) responded they always do so. The median score

was 3.0 and the mode, 4.0. The mode indicates that most respondents always apply the principle reflected by this statement. Therefore most respondents (73.3%) assess the learning needs of the students when they enter the clinical setting for the first time. However, it is interesting that 27% of respondents seldom or never assess the learning needs of students. Therefore, the respondents do not properly implement the orientation phase of Peplau's theory in the clinical setting. According to Peplau's Theory, the nurse and client plan to work constructively towards meeting a client's needs, based on an analysis of a situation and the identification of needs (refer to Par. 2.4.2). If the registered nurse fails to analyse a student's learning needs, it would be difficult to help the student to achieve his/her learning objectives.

I enter into discussions with students to identify their previous learning experiences when they enter the clinical unit for the first time

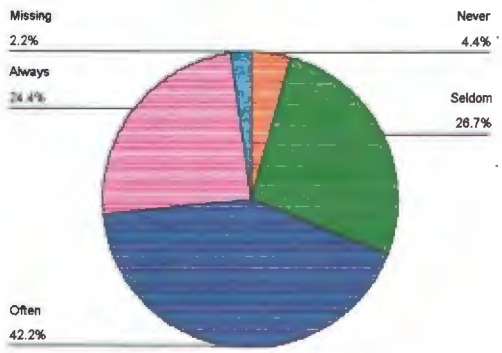

Figure 4.11 Responses regarding assessment of previous learning experiences

Two (4.4%) respondents responded that they never enter into discussion with students to identify their previous learning experiences, while 12 (26.7%) responded that they seldom do so. Nineteen (42.2%) respondents responded they often do these assessments and 11 (24.4%) responded that they always do so. One respondent (2.2%) did not respond to this item. The median score was 3.0 and the mode, 3.0. Therefore, most respondents (63.3%) often comply with the principle reflected by the statement. However, the fact that 31% of respondents responded to seldom or never indicates that registered nurses do

not enter into discussion with students regarding their previous learning experiences often enough. The respondents therefore do not implement the orientation interpersonal phase of Peplau properly. According to Peplau's theory, those involved in an interpersonal process bring unique experiences to the encounter (refer to par. 2.2.1.3).

I assess the clinical workbooks of students when they enter the clinical unit for the first time

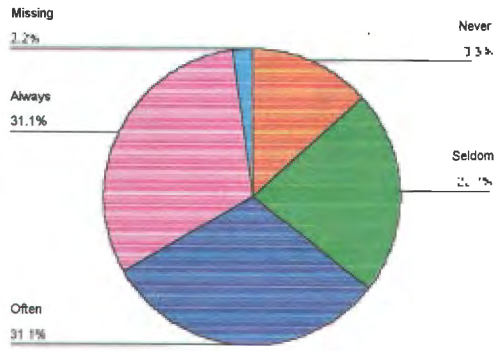

Figure 4.12 Responses regarding assessment of clinical workbooks

Six (13.3%) respondents responded that they never assess the clinical workbooks of students, while 10 (22.2%) responded they seldom do so. Fourteen (31.1%) respondents responded that they often assess the clinical workbooks of students, while 14 (31.1%) responded that they always do so. The median score was 3.0. The distribution was bimodal, which indicates variations in opinions on the implementation of this principle. These results indicate that 36% of respondents seldom or never assess the clinical workbooks of students, while 62% often or always do so. The high percentage of those who do not often assess clinical workbooks indicates that this is a problematic issue. This again indicates that the orientation phase of Peplau's interpersonal process is not properly implemented (Refer to par. 2.4.2).

I assess students' ability to learn independently when they enter the clinical unit for the first time

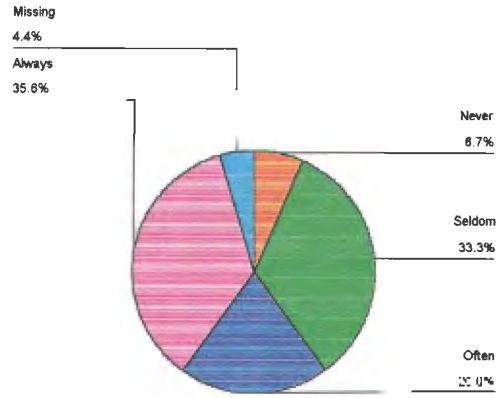

Figure 4.13 Responses regarding assessment of independent learning

Three (6.7%) respondents responded that they never assess students' ability to learn independently, while 15 (33.3%) responded that they seldom do so. Nine (20.0%) responded that they often assess students' ability to learn independently, while 16 (35.6%) responded they always do so. Two (4.4%) respondents did not respond to this item. The median score was 3.0 and the mode 4.00, which indicates that most respondents responded that they always implement the principle reflected by the item. Forty percent (40%) seldom or never assess students' ability to learn independently, while 56% often or always do so. This is clearly a problematic issue. According to Peplau's theory (refer to par. 2.2.1.1), the client could adopt an independent, an interdependent or a dependent role. Registered nurses might find it difficult to provide appropriate guidance if they do not assess students' abilities to learn independently.

I assess students' expectations when they enter the clinical unit for the first time

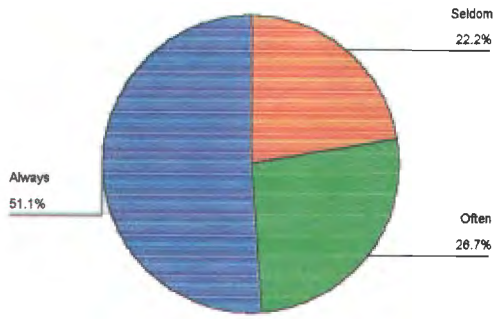

Figure 4.14 Responses regarding assessment of students' expectations

Ten (22.2%) respondents responded that they seldom assess students' expectations while 12 (26.7%) responded that they often do so. Twenty-three (51.1%) respondents responded that they always assess students' expectations. The median score was 4.0 and the mode 4.0, which indicates that most respondents responded that they always apply the principle reflected by the item. The majority of respondents (78%) responded that they often or always assess students' expectations. However, it is interesting that 22% seldom do so. According to Peplau's theory, those involved in an interpersonal process bring unique expectations to the encounter (refer to par. 2.2.1.3). If the expectations of students are not assessed, clarification of expectations during the identification phase of the interpersonal process could be compromised.

Students undergo an orientation program when they enter the clinical unit for the first time

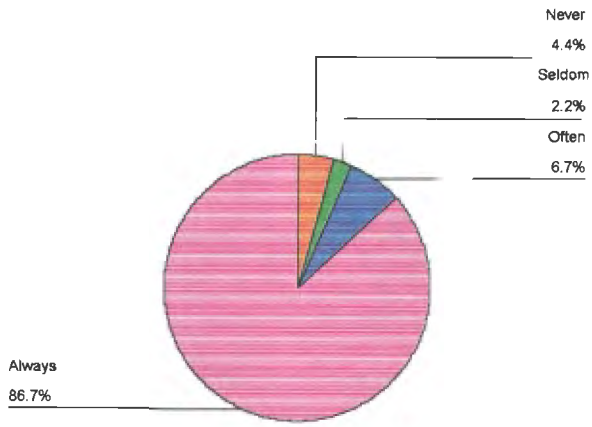

Figure 4.15 Responses regarding an orientation programme

Two (4.4%) respondents responded that students never undergo an orientation programme while one (2.2%) responded that this seldom happens. Three (6.7%) responded that students often undergo orientation while 39 (86.7%) responded that this is always the case. The median score was 4.0 and the mode, 4.00. Therefore, most respondents always apply the principle reflected by the item. The data indicated that most respondents (93%) responded that students always or often undergo an orientation programme when they enter the clinical setting for the first time. The orientation interpersonal phase of Peplau's theory is therefore partially applied in the clinical setting in the sense that students undergo an orientation programme to familiarise them with the clinical setting.

The expertise of each registered nurse working in the clinical unit is explained to students when they enter the clinical unit for the first time

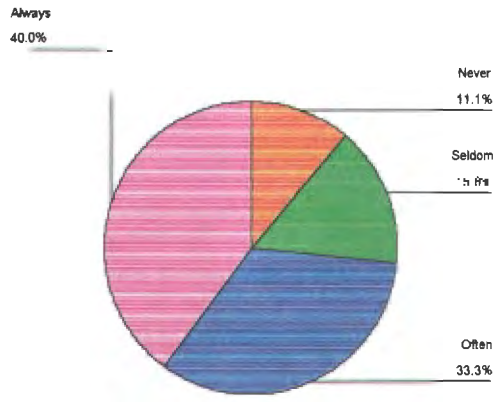

Figure 4.16 Responses regarding explanation of the expertise of each registered nurse

Five (11.1%) respondents responded that registered nurses' expertise is never explained to students while (15.6%) responded that this seldom happens. Fifteen (33.3%) respondents responded that the clinical expertise of registered nurses is often explained to students while (40.0%) responded that this is always done. The median score was 3.0 and the mode, 4.0. Most respondents therefore responded that they always apply the principle reflected by the item. The data indicated that most respondents (73.3%) always or often explain the expertise of each registered nurse to students. However, it is interesting that 26.7% respondents responded that they never or seldom explain the expertise of each registered nurse to students. Viewed within the context of Peplau's theory, such explanations would enable students to identify suitable persons to assist them in achieving their learning objectives (Refer to par. 2.4.2). Many students may therefore not be able to identify the expertise of registered nurses appropriately during the identification interpersonal phase of Peplau's theory (refer to par. 2.4.2.2). This may contribute towards seeking guidance from registered nurses who may not have the relevant expertise.

Daily work allocation of students is planned in accordance with their learning objectives

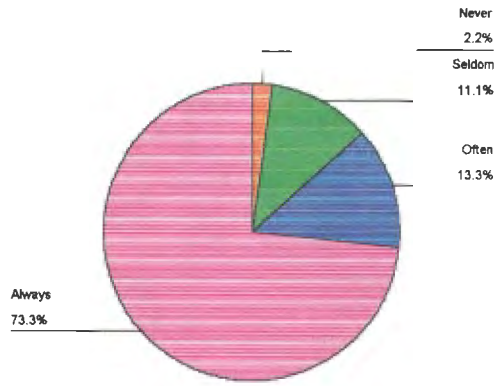

Figure 4.17 Responses regarding planning of daily work allocation of students

One (2.2%) respondent responded that he/she never planned daily work allocation in accordance with students' learning objectives while five (11.1%) responded that they seldom do so. Six (13.3%) responded that they often planned work allocation in accordance with students' learning objectives while 33 (73.3%) responded they always do so. The median score was 4.0 and mode, 4.0. Therefore, most respondents always implement the principle reflected by the item: 86.6% responded that they often or always plan work allocation in accordance with learning objectives. This principle is therefore adequately applied in the clinical setting. However, responses to the previous items in this section indicates that the respondents do not comprehensively assess the learning needs of students. The extent to which respondents succeed in planning work allocation of students in accordance with their learning objectives is therefore debatable.

Students work under the guidance of registered nurses with relevant expertise concerning the functions to be performed

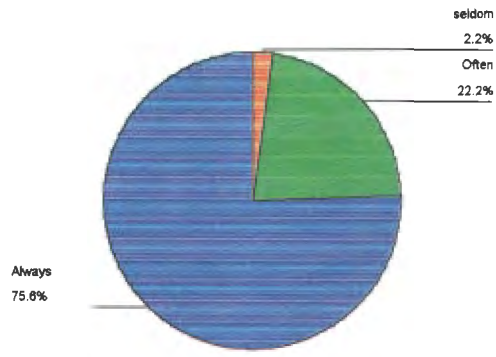

Figure 4.18 Responses regarding students working under the guidance of registered nurses

One (2.2%) respondent responded that students seldom work under the guidance of registered nurses while 10 (22.2%) responded that this often happens. Thirty-four (75.6%) respondents responded that students always work under the guidance of registered nurses. The median was 4.0 and the mode, 4.0. This indicates that most respondents responded that they always implement the principle reflected by the item: most of the respondents (98.6%) responded that students often or always work under the guidance of registered nurses. The exploitation phase of Peplau's theory (refer to par. 2.4.2.3) are therefore implemented and students would be able to make full use of the registered nurses' expertise during everyday practice.

I utilise interesting situations arising from routine patient care activities immediately for student teaching

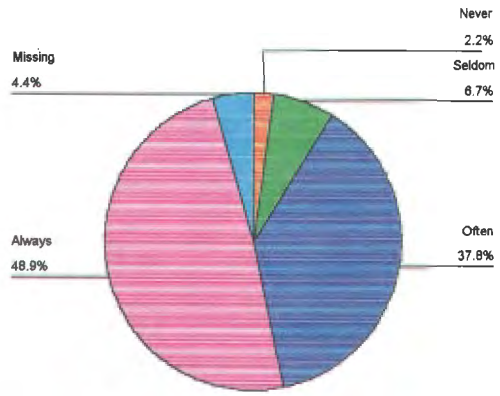

Figure 4.19 Responses regarding utilising interesting situations arising from routine patient care

One (2.2%) respondent responded that he/she never utilises interesting situations arising from the routine patient care while three (6.7%) responded that they seldom do so. Seventeen (37.8%) responded that they often utilise interesting situations while 22 (48.9%) responded that they always do so. Two (4.4%) respondents did not respond to this item. The median score was 4.0 and the mode, 4.0. This indicates that most respondents responded that they always implement the principle reflected by the item. The fact that 86.7% of respondents responded that they utilise interesting situations arising from the routine patient care activities indicates that this principle is adequately applied.

Utilisation of learning opportunities during patient care activities is followed up with group discussions

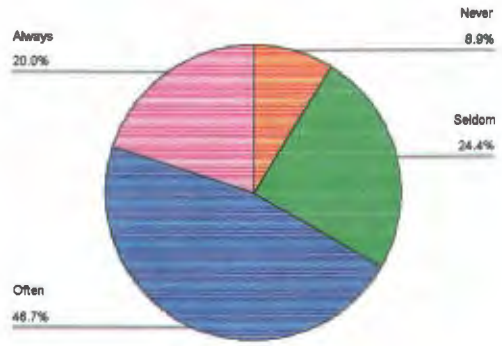

Figure 4.20 Responses regarding group discussions

Four (8.9%) respondents responded that utilisation of learning opportunities is never followed up by group discussions, while 11 (24.4%) responded that this is seldom done. Twenty-one (46.7%) respondents responded that utilisation of clinical learning opportunities is often followed up with group discussions while nine (20.0%) responded that this is always the case. The median was 3.0 and the mode, 3.0. This indicates that most respondents responded that they often implement the principle reflected by the item Although most of the respondents (66.7%) responded that utilisation of learning opportunities during patient care activities is always or often followed up by group discussions, it is interesting that 33.3% responded that this is seldom or never done. According to Kolb's experiential learning theory, the stage of concrete experiences is followed up by an observations and reflections stage (refer to par. 2.5.2.1 & 2.5.2.2). The purpose of the latter stage is to enable students to reflect upon their clinical practice. Students are also able to view situations from different perspectives. It is clear that not all registered nurses give students the opportunity to move through the second stage of the process of experiential learning.

During follow-up group discussions I ask students probing questions about their learning experiences

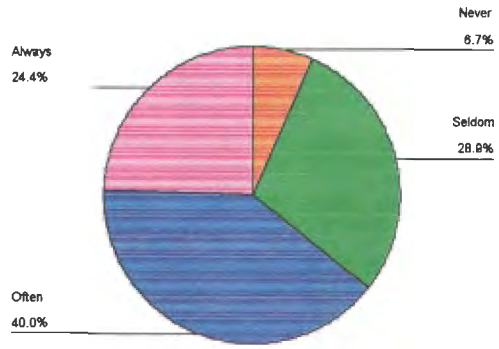

Figure 4.21 Responses regarding probing questions to students

Three (6.7%) respondents responded that they never ask students probing questions during follow-up discussions, while 13 (28.9%) responded that they seldom do so. Eighteen (40.0%) respondents responded that they often ask students probing questions while 11 (24.4%) always do so. The median was 3.0 and the mode, 3.0. This indicates that most respondents responded that they often implement the principle reflected by the item. Although the majority (64.4%) of respondents responded that they often or always ask students probing questions during follow-up group discussions, it is interesting that 35% seldom or never do so. According to Kolb's theory, the stage of personal experience is followed by the stage of reflective observations (refer to par. 2.5.2.2). Registered nurses should encourage students to discuss and reflect upon their experiences. Current feelings and thoughts of students could be obtained by asking them probing questions during a discussion session. If students are not giving this opportunity, reflective learning may be compromised.

I encourage students to ask for clarification about issues that they do not understand during follow-up group discussions

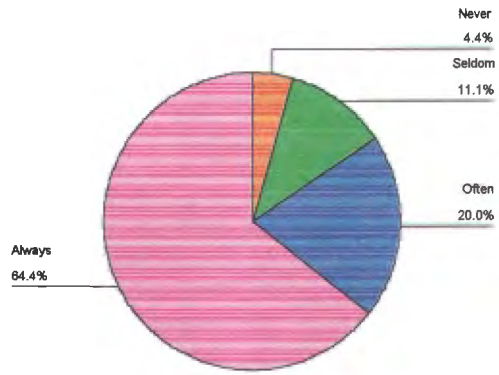

Figure 4.22 Responses regarding encouraging students to ask for clarification

Two (4.4%) respondents responded that they never encourage students to ask for clarification while five (11.1%) responded that they seldom do so. Nine (20.0%) respondents responded that they often encourage students while 29 (64.4%) responded that they always do so. The median was 4.0 and the mode, 4.00. This indicates that most respondents responded that they always implement the principle reflected by the item. The fact that 84% of respondents responded that they always or often encourage students to ask for clarification, is an indication that most of the respondents are aware of the fact that students need to be clear about issues that affect their learning process.

I encourage students to independently seek answers to questions about occurrences in everyday practice that they do not understand

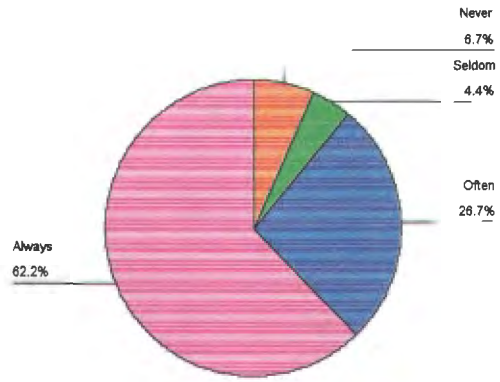

Figure 4.23 Responses regarding encouraging students to seek answers independently

Three (6.7%) respondents responded that they never encourage students to seek answers to questions independently, while two (4.4%) responded that they seldom do so. Twelve (26.7%) responded that they often encourage students to seek answers independently while 28 (62.2%) responded that they always do so. The median was 4.0 and the mode, 4.0. Most respondents therefore responded that they always implement the principle reflected by the item. The fact that 87% of respondents responded that they often or always encourage students to seek answers to questions independently indicates that this principle is applied by them in the clinical setting.

I encourage students to verbalise what they have learnt in the clinical unit

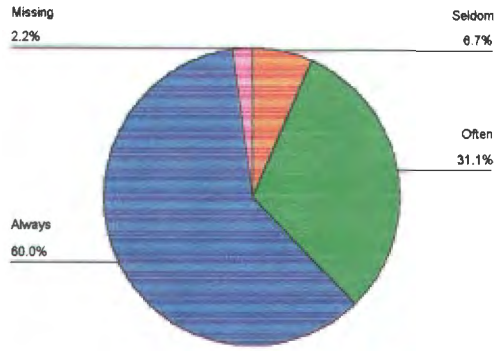

Figure 4.24 Responses regarding encouraging students to verbalise what they have learnt

Three (6.7%) respondents responded that they seldom encourage students to verbalise what they have learnt. Fourteen (31.1%) respondents responded that they often encourage verbalisation, while 27 (60.0%) responded that they always do so. The median was 4.0 and the mode, 4.00. This indicates that most respondents responded that they always implement the principle reflected by the item. The fact that most of the respondents (91%) responded that they often or always encourage students to verbalise what they have learnt in the clinical unit indicates that this principle is applied in the clinical setting.

I ask students to deliver formal presentations to other students about knowledge gained in the clinical unit

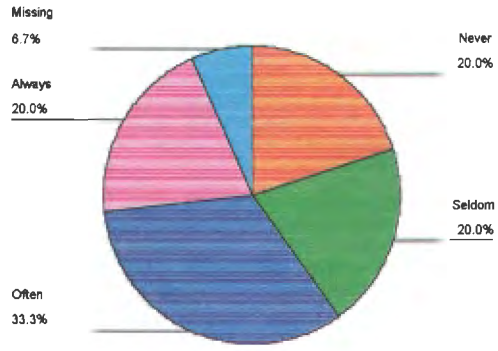

Figure 4.25 Responses regarding asking students to deliver formal presentations

Nine (20.0%) respondents responded that they never ask students to deliver formal presentations while nine (20.0%) responded that they seldom do so. Fifteen (33.3%) of the respondents responded that they often ask students to deliver formal presentations, while nine (20.0%) responded that they always do so. The median was 3.0 and the mode, 3.0. This indicates that most respondents responded that they often implement the principle reflected by the item. It is, however, interesting that 40% of the respondents responded that they never or seldom ask students to deliver formal presentations to other students. Implementation of the abstract conceptualisation phase of the experiential learning process (refer to par. 2.5.2.3) could therefore be compromised. The conceptualisation phase of Kolb's experiential learning process allows students to think independently, and to formulate what was learnt in a logical flow of ideas and concepts. Students should therefore be allowed to express what they have learnt during the first two stages in precise statements constituting claims to knowledge. Preparing and delivering formal presentations could promote this. The opportunity to deliver formal presentations would enable students to formalise their conceptualisations of what they have learnt, and to apply their learning through the presentation.

After each clinical teaching session, I provide the opportunity for students to apply their knowledge in similar patient care situations

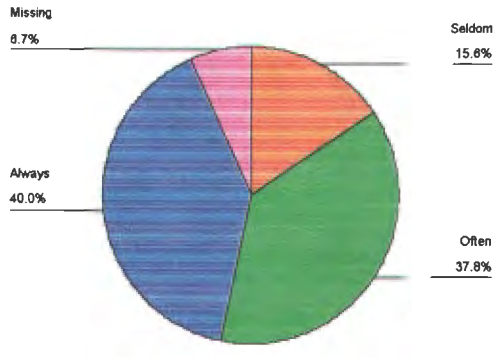

Figure 4.26 Responses regarding giving students opportunities to apply their knowledge

Seven (15.6%) respondents responded that they seldom provide an opportunity for students to apply their knowledge. Seventeen (37.8%) of the respondents responded that they often provide such an opportunity to students, while 18 (40.0%) responded that they always do so. Three (6.7%) respondents did not respond to this item. The median was 3.0 and the mode, 4.00. This indicates that most respondents claimed that they often implement the principle reflected by the item. The results indicated that the majority (78%) of the respondents provide students with an opportunity to apply their knowledge in similar patient care situations. Therefore, the active experimentation stage of Kolb's experiential learning process (refer to par. 2.5.2.4) appears to be applied in the clinical setting.

Assessment of learning is done on a continuous basis in the clinical unit

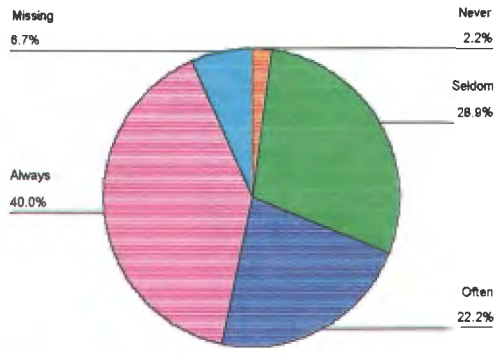

Figure 4.27 Responses regarding continuous assessment of learning

One (2.2%) respondent responded that he/she never assesses learning on a continuous basis while 13 (28.9%) responded that they seldom do so. Ten (22.2%) respondents responded that they often assess learning on a continuous basis, while 18 (40.0%) responded that they always do so. The median was 3.0 and the mode, 4.0. Most respondents therefore responded that they always implement the principle reflected by the item. Although 66.2% respondents responded that they always or often assess learning on a continuous basis, it is interesting that 31.1% responded that they never or seldom do so. These findings indicate that assessment of learning on a continuous basis is a problematic issue in the clinical setting. Therefore, adequate assessment of learning does not precede the termination of the educator-learner relationship in the resolution phase of Peplau's theory (Refer to 2.4.2.3).

I help students to overcome problems in achieving learning objectives

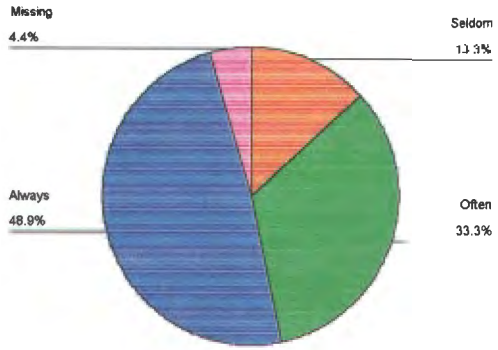

Figure 4.28 Responses regarding helping students to overcome problems

Six (13.3%) respondents responded that they seldom help students to overcome problems in achieving learning objectives. Fifteen (33.3%) responded that they often help students while 22 (48.9%) responded they always do so. Two respondents (4.4%) did not respond to this item. The median was 4.0 and the mode, 4.00. Most respondents therefore responded that they always implement the principle reflected by the item. The results indicated that 82% of respondents always or often help students to overcome problems in achieving learning objectives. Therefore, helping students to overcome difficulties in achieving learning objectives prior to terminating the interpersonal relationship during the resolution phase (refer to par. 2.4.2.3) appears to require attention.

I encourage students to perform functions for which they have gained the necessary competence, independently

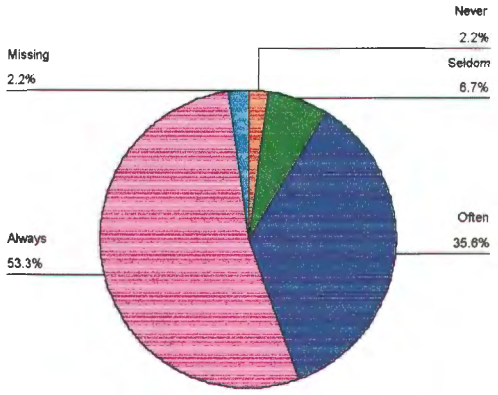

Figure 4.29 Responses regarding encouraging students to perform functions independently

One (2.2%) respondent responded that he/she never encourages students independently to perform functions for which they have gained the necessary competence, while three (6.7%) responded they seldom do so. Sixteen (35.6%) responded that they often encourage students while 24 (53.3%) responded they always do so. The median was 4.0 and the mode, 4.0. Most respondents therefore responded that they always implement the principle reflected by the item. The results indicate that most (89%) of the respondents encouraged students to perform functions for which they have gained the necessary competence independently. Therefore, the active experimentation stage of Kolb's experiential learning process (refer to par. 2.5.2.4) appears to be applied in the clinical setting.

4.3.4 Congruence of responses

The congruence of responses was determined by correlating each item in section B and section C, with all other items in the same section, using Spearman's rank correlation coefficient.

4.3.4.1 Congruence of responses in section B of the questionnaire

There was a significant negative correlation between the responses to variables B3 and B5 (-0.403 at the 0.01 level of significance). This indicates that respondents who responded that they have the necessary clinical expertise, also tended to indicate that they know what learning objectives students should achieve in the clinical unit.

There was a significant negative correlation between the responses to variables B1 and B5 (-0.496 at the 0.01 level of significance). This indicates that respondents who responded that they have the necessary clinical expertise, also tended to respond that they do not have problems with patient care workload. Patient care workload therefore does not appear prevent these registered nurses from do clinical accompaniment.

There was a significant negative correlation between the responses to variables B4 and B5 (-0.496 at the 0.05 level of significance). This indicates that respondents who responded that they have the necessary clinical expertise, also tended to respond that they have teaching skills.

4.3.4.2 Congruence of responses in section C of the questionnaire

There was a significant positive correlation between the responses to variables C1 and C2 (0.318 at the 0.05 level of significance). This indicates that respondents who responded that they assess students' learning needs also tended to respond that they enter into discussions with students to identify their previous learning experiences.

There was a significant positive correlation between the responses to variables C2 and C3 (0.646 at the 0.01 level of significance). This indicates that respondents who responded that they enter into discussions with students to identify their previous learning experiences, also tended to respond that they assess their clinical workbooks.

There was a significant positive correlation between the responses to variables C6 and C7 (0.341 at the 0.05 level of significance). This indicates that respondents who responded that students undergo an orientation programme also tended to respond that the expertise of registered nurses is explained to students.

There was a significant positive correlation between the responses to variables C7 and C9 (0.582 at the 0.01 level of significance). This indicates that respondents who responded that students undergo an orientation programme also tended to respond that students work under the guidance of registered nurses with relevant clinical expertise in the functions to be performed.

There was a significant positive correlation between the responses to variables C11 and C12 (0.597 at the 0.01 level of significance). This indicates that respondents who responded that utilisation of learning opportunities during patient care activities is followed up with group discussions also tended to respond that they ask students probing questions about their learning experiences during the follow up group discussions.

There was a significant positive correlation between the responses to variables C11 and C13 (0.491 at the 0.01 level of significance). This indicates that respondents who responded that utilisation of learning opportunities during patient care activities is followed up with group discussions also tended to respond that they encourage students to ask for clarification about issues that they do not understand.

There was a significant positive correlation between the responses to variables C11 and C14 (0.407 at the 0.01 level of significance). This indicates that respondents who responded that utilisation of learning opportunities during patient care activities is followed up with group discussions also tended to respond that they encourage students to seek answers to questions independently.

There was a significant positive correlation between the responses to variables C13 and C14 (0.306 at the 0.05 level of significance). This indicates that respondents who responded that they encourage students to ask for clarification about issues that they do not understand also tended to respond that they encourage students to seek answers to questions independently.

There was a significant positive correlation between the responses to variables C15 and C16 (0.509 at the 0.01 level of significance). This indicates that respondents who responded that they encourage students to verbalise what they have learnt in the clinical unit also tended to respond that they ask students to deliver formal presentations to other students about knowledge gained in the clinical unit.

There was a significant positive correlation between the responses to variables C13 and C19 (0.324 at the 0.05 level of significance). This indicates that respondents who responded that they encourage students to ask for clarification about issues that they do not understand during follow-up group discussions also tended to respond that they help students overcome problems in achieving learning objectives.

There was a significant positive correlation between the responses to variables C18 and C19 (0.550 at the 0.01 level of significance). This indicates that respondents who responded that assessment of learning is done on a continuous basis in the clinical unit also tended to respond that they help students overcome problems in achieving learning objectives.

4.4 CONCLUSION

This section of the report gave a detailed discussion of the research findings. All sections of the questionnaire were analysed and the findings presented. The findings highlighted some areas that are problematic for registered nurses in the clinical setting. The findings also indicated how registered nurses utilise teachable moments in the clinical setting. Some items of the questionnaire in Section C were correlated to indicate congruencies between the responses to various items.

Chapter 5 presents a summary of the research findings and provides detailed discussions of the conclusions based on the findings. It also comprises the recommendations that were formulated by the researcher.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter presents a discussion of the research design and method, a summary and research findings related to the problems faced by registered nurses and the utilisation of teachable moments, as well as recommendations for further research.

5.2 RESEARCH DESIGN AND METHOD

Non-experimental, quantitative, descriptive research was conducted to address the research problem.

The problem statement was:

> ***How are teachable moments utilised by registered nurses in the Northern Province of South Africa for the purpose of clinical accompaniment of students for the programme leading to Registration as a Nurse (General; Psychiatric; Community) and Midwife?***

The research questions formulated were:

> ***What problems do registered nurses experience with regard to fulfilling their clinical accompaniment function?***

> ***How do registered nurses utilise teachable moments in the clinical setting?***

Data to answer the research questions was collected using a self-administered, structured questionnaire. The sample comprised 45 registered nurses who are actively involved in

clinical accompaniment in the clinical settings where they work. Data was analysed by using descriptive statistics.

5.3 SUMMARY OF THE RESEARCH FINDINGS

This section of the report provides an integrated summary and interpretation of the findings obtained from the data. These findings are based on the research questions which relate to problems faced by registered nurses, and their utilisation of teachable moments.

5.3.1 Problems faced by registered nurses

The problems that impact most negatively on clinical accompaniment by registered nurses are a high patient care workload, personnel shortages and unavailability of the nursing college tutors to give guidance to registered nurses about their teaching responsibilities. These are therefore priority areas to be addressed in improving clinical accompaniment in the clinical settings.

> Most of the respondents (60%) indicated that patient care workload makes it difficult for them to allocate time for student teaching. This finding is supported by the research by Manzini (1998: 177) and Lathlean & Vaughan (1994: 17) namely, that registered nurses were too busy with patient care to teach and supervise students effectively (Lathlean & Vaughan 1994:17; Manzini 1998: 177). The respondents also highlighted problems such as shortages of nursing personnel and the limited time that students spend in particular clinical units. Personnel shortages are closely linked to a heavy workload. This necessitates that registered nurses focus primarily on patient care and this may contribute to neglect of their teaching function. It is, however, interesting to note that those respondents who indicated that they have the necessary clinical expertise were inclined not to indicate that they regard their workload as a problem. It may therefore be deduced that levels of clinical expertise also play a role and that those with expertise may be able to engage in clinical accompaniment despite a heavy workload. The above is supported by the literature that indicates that there are factors that impact

negatively upon registered nurses' abilities to perform their clinical accompaniment function. Nursing personnel shortages is a global problem. The report by the American Health Care Association on staffing shortages in nursing services in long-term care (Tanner 2001:99), which was released in January 2001, reached a dismal conclusion that even if the same proportion of total workers who work in nursing services today was to be maintained over the next 50 years, the ratio of practitioners to retirees would drop radically. This was a warning of a crisis in the supply of nursing personnel.

Apart from personnel shortages and a high patient care workload, effective clinical accompaniment is also hampered by inadequate co-operation between the tutors of the nursing college and the registered nurses in the clinical settings. The lack of availability of the tutors from the nursing college to give guidance to registered nurses about their teaching responsibilities was identified as a problem by registered nurses. This is further complicated by an apparent view on the part of registered nurses that clinical teaching is the responsibility of college tutors and not registered nurses. Other factors are criticisms levelled against registered nurses' teaching by college tutors.

Other problems mentioned by many, although the majority of respondents, that respondents are unaware of students' learning objectives (22%) and a lack of the necessary clinical expertise (24.4%) to do clinical teaching.

While most registered nurses indicated that they are aware of the learning objectives that students should achieve in the clinical setting, a substantial number indicated that they are not aware of these. This means that the latter would not be able to ensure the relevancy of their clinical teaching. However, it is the responsibility of registered nurses to assess the learning needs of students. This could assist them to ensure the relevance of their teachings. The narrative responses also indicate that some registered nurses are not familiar with the curriculum that the student nurses follow. It is interesting to note that those respondents who indicated that they have the necessary clinical expertise to teach students also tended to indicate that they are aware of the learning objectives that students should achieve. This implies that respondents who

possess clinical expertise would be able to assist students in achieving their learning objectives, based on assessment of these. The presence of college tutors in clinical settings would allow them to act as consultants to registered nurses with regard on aspects of the training programme of students, including the importance of determining what learning objectives each student should achieve. Another strategy would be for tutors to present frequent personnel development sessions. It is a necessity for students to be taught by registered nurses who have up-to-date and advanced knowledge of the dimensions of nursing practice.

Although most respondents indicated that they have the necessary clinical expertise to teach students effectively, it is disturbing that they appeared to be more confident about their teaching skills than their clinical expertise. These findings are in contrast to Peplau's assertion that the roles of registered nurses include being a teacher, resource person and a technical expert (refer to par. 2.3.2). As experts, they should possess the knowledge and skills that underlie professional practice, and the necessary teaching skills to impart their knowledge and skills to students.

A positive aspect that emerged from the data is that most respondents (60%) stated that they possess the necessary teaching skills to conduct clinical teaching of students in their area of practice. This could facilitate the attainment of learning objectives by students. The fact that the respondents did not respond as confidently about their clinical expertise as about their teaching skills, might, however, negatively affect the learning process of students in the clinical setting. Teaching requires not only the application of teaching skills, but also the display of confidence based on clinical expertise.

5.3.2 Utilisation of teachable moments by registered nurses

Teachable moments were defined in par.1.5.7 as any moment which registered nurses could utilise to teach the art and science of nursing. Positive and problematic aspects of the utilisation of teachable moments emerged from the study.

Initial assessment of students

Although most respondents (73.3%) do engage in initial assessment of students when they enter the clinical setting for the first time, there is a substantial proportion that do not often do so. This is an indication that initial assessment of students with regard to their learning needs, their previous learning experiences, their learning independence and their expectations, is problematic. Assessment of the clinical workbooks of students is also found to be somewhat problematic. If student assessment is not done adequately, clinical accompaniment may be compromised in terms of relevance, consistency with students' levels of training and integration of current learning with previously obtained knowledge. Clinical teaching that occurs without a needs assessment may be irrelevant in terms of the learning objectives that students have to achieve. Registered nurses would not be able to apply teaching strategies that are consistent with the learning styles of students. Students might also find it difficult to connect ideas into a coherent whole if current learning does not build upon, or is not linked to previous learning. Registered nurses might not be aware of the progress students have made with regard to the learning process and their teaching may be inconsistent with students' levels of training. Another consequence of inadequate assessment is that daily allocation of students would not be done in accordance with students' learning needs.

Those respondents who assess students' learning needs tend to enter into discussion with students to identify their previous learning experiences. Those who enter into such discussions with students also tend to assess their clinical workbooks. This is an indication that once the respondents enter into initial assessment of students, they tend s to assess more than one aspect.

The assessment of students' expectations was also found to be a problematic issue. This implied that registered nurses would find it difficult to ensure that expectations are met.

Orientation

Orientation of students when they enter the clinical setting for the first time appears to be satisfactory, as an overwhelming majority of respondents (93%) indicated that students do undergo an orientation programme. However, orientation of students with regard to the expertise of each registered nurse requires attention. If this is not done, it compromises the principle that students should be able to identify those individuals who would be best equipped to help them with aspects on which they require guidance. Therefore students might not be able to achieve learning objectives.

Teaching practices

The findings revealed that students generally work under guidance of registered nurses and that teachable moments are utilised in the clinical setting. However, the respondents do not follow through with the stages of experiential learning and this may compromise the effectiveness of clinical accompaniment.

On a positive note, students are given the opportunity to work under guidance of a registered nurse. Students are encouraged to ask clarifying questions and to seek answers independently to aspects that they do not understand. They are helped to overcome difficulties in achieving their learning objectives. They are encouraged to apply what they have learnt and to perform functions independently for which they have gained the necessary clinical expertise. Those who encouraged students to ask for clarification about issues that they did not understand tended to help students to overcome problems achieving learning objectives.

A problematic issue with regard to the utilisation of teachable moments is the aspect of reflective learning and application of learnt concepts. The utilisation of learning opportunities during patient care is not adequately followed up with group discussions , which would allow students to reflect upon what they have experienced. Another issue is that some registered nurses seem not to ask students probing questions, which would further stimulate critical reflections. This would mean that students might not develop critical analytical thinking and it would be difficult to engage in constructive debates about patient care situations. Students are not often asked to deliver formal

presentations to other students. This would mean that students might not conceptualise and apply what they have learnt. Those respondents who indicated that they do encourage students to verbalise what they have learnt also tended to indicate that they encourage students to give formal presentations about what they have learnt.

Assessment of learning

Assessment of learning appears to be a problematic issue since a substantial number of respondents (31.1%) indicated that they do not assess learning on a continuous basis. Those respondents who indicated that they do conduct continuous assessment of learning also tended to indicate that they help students to overcome problems in achieving learning objectives. However, those who do not do continuous assessment might not know the learning progress of students or whether the learning objectives are being achieved, and their efforts to help students to overcome problems in achieving learning objectives may be inappropriate. Registered nurses who indicated that they do assess learning on a continuous basis, also indicated that they tend to help students to overcome problems in achieving learning objectives.

Application of newly acquired knowledge

It appears as if students are provided with opportunities to apply what they have learnt in practice, as they are generally encouraged to perform functions for which they have gained the necessary competence, independently.

5.4 CONCLUSIONS

Clinical accompaniment is problematic. The main problems experienced by registered nurses in the hospitals associated with the Sovenga Campus of the Northern Province Nursing College are related to personnel shortages, a heavy workload and an inadequate support system due to inadequate cooperation and collaboration between the nursing college and the clinical institutions. Irresponsible behaviour on the part of the students may also compound these problems. These problems may contribute to ineffective clinical accompaniment and the inability of registered nurses to ensure that students' learning needs are met. The ultimate results would be a poor correlation of

theory and practice. Effective clinical accompaniment is also hampered, but to a lesser extent, by registered nurses not knowing what learning objectives students should achieve and what the curriculum entails. This may be linked to the finding that some registered nurses do not do a comprehensive assessment of students, as explained below.

It is also concluded that students are given opportunities to work under guidance of registered nurses and that the respondents do perform clinical accompaniment by utilising teachable moments. The respondents appear to have the necessary teaching skills, but they have less confidence in their clinical expertise and this may reduce the effectiveness of clinical accompaniment.

With regard to the utilisation of teachable moments, it is concluded that the registered nurses proceed through Peplau's interpersonal stages, namely orientation, identification, application and resolution. However, some aspects, which may impact negatively upon the relevance and effectiveness of clinical accompaniment, are problematic, namely:

- Initial assessment of students' learning needs, learning objectives and learning styles and expectations
- Initial assessment of previous learning of students and their ability to learn independently
- Explanation to students of the expertise of each registered nurse in the clinical setting
- Follow through of the experiential learning phases during teaching and learning
- Assessment of learning

While the respondents utilise teachable moments, they may not succeed in facilitating reflective learning, as many respondents do not guide students through reflective observations and abstract conceptualisations after utilisation of teachable moments in everyday practice. Furthermore, if initial assessments are not done comprehensively the content and focus of the teaching sessions may be irrelevant to the students'

learning needs, educational levels and learning styles. The fact that assessment of learning after teaching-learning sessions is problematic indicates that many respondents do not determine effectiveness of their teaching interventions. They would therefore not be able to improve upon their teaching practices to ensure effective learning by students, or to do appropriate remediation when problems in achievement of learning objectives are experienced.

5.5 RECOMMENDATIONS

According to Beck (2001: 322), nurse educators have a responsibility to avoid setting students up for disillusionment in the clinical setting. Nursing practice is challenging today, especially in terms of technological changes. Nurse educators should find creative ways to help students experience satisfaction through adjustment to the realities of health care. This could be achieved through effective clinical accompaniment.

The following recommendations are based on the research finding discussed in the preceding sections of the report.

5.5.1 Clinical accompaniment of students

Management of the clinical settings associated with the Northern Province College of Nursing should establish a clinical teaching strategy that supports effective clinical accompaniment by registered nurses.

It is recommended that a clinical accompaniment programme for registered nurses be established in the clinical setting. Such a programme should support the establishment of a deliberately fostered relationship between registered nurses and students. The clinical accompaniment programme should enable students to gain independence, accept responsibility and find meaning in the clinical situation (SANC 1992: 6, par. 1). Williams (2001: 135) maintains that through clinical learning experiences students develop qualities and abilities characteristic of competent professionals. This justifies the rationale for having an effective clinical accompaniment programme in the clinical setting.

It is recommended that the heavy workload of registered nurses should be alleviated. Related to this is the belief that there should be sufficient nursing personnel to establish varied learning opportunities for students.

It is recommended that library facilities should be made available for registered nurses to refer to whenever they teach students. This could serve as a motivating factor for them and they could easily obtain relevant information when they themselves are faced with a challenging situation.

Personnel development programmes should be available to registered nurses.

It is recommended that registered nurses should be orientated with regard to teaching when they arrive in the clinical setting after completing their training. This would help to remind registered nurses of the importance of their teaching function in the clinical setting and of the possibility of turning everyday activities and occurrences into learning opportunities. Registered nurses should be motivated to strike a balance between attending to the demands of patient care and the learning needs of students.

Even though the respondents believe that they have the necessary teaching skills, personnel development is required to assist them to improve their teaching practices and to utilise teachable moments in a planned fashion. This necessity is revealed in the finding that they do not effectively proceed through all of Peplau's interpersonal stages and the phases of experiential learning. Specific attention should be given to:

- following a teaching-learning process through conscious application of Peplau's interpersonal stages and the experiential learning phases
- conducting comprehensive initial student assessments
- giving orientation to students with regard to the expertise of each registered nurse
- conducting formative learning assessments

This is in accordance with the views of Cilliers and Terblanche (2000: 95), namely that registered nurses should be enlightened about facilitation of the learning process and how this can be applied.

It is also recommended that a supportive clinical teaching department should be established within each clinical institution. This would provide registered nurses with resource persons who could assist them in planning for and executing clinical accompaniment of students.

It is recommended that a personnel development programme to improve the clinical expertise of registered nurses on an on-going basis, should be established. This may lead to more effective clinical accompaniment, considering the finding that those registered nurses who regarded themselves as having the necessary clinical expertise did not indicate that they are hampered by a heavy workload. They are therefore able to cope with the demands of a high patient care workload and clinical accompaniment of students.

Collaboration structures between the nursing college and the clinical settings should be established.

It is recommended that formal collaboration structures between the nursing college and the associated clinical institutions be established. When students are sent to the clinical setting there should be open communication between the nursing college and the clinical setting. Tutors from the nursing college should be available in the clinical setting whenever students are allocated for clinical practice. They should assist registered nurses in clarifying some problems that are related to students' learning objectives. The learning objectives to be achieved by students in the clinical setting should be clearly spelt out. This would ensure that registered nurses become aware of what to teach students. In other words, registered nurses should be knowledgeable

about the curriculum content which students follow. This could be achieved by:

- having regular meetings between representatives from the nursing college and from the associated clinical institutions
- appointing representatives of the clinical institutions to nursing college committees such as the curriculum committee and the examination committee
- establishing short courses, offered by the nursing college, on aspects regarding clinical accompaniment and the educational requirements that students should meet

It is recommended that college tutors should demonstrate clinical skills to students before they are sent to the clinical setting. This could be done in the nursing college laboratory. This would alleviate the pressures placed on registered nurses and ensure that skills are performed as specified by college tutors.

Beeman (2001: 132) supports the importance of collaboration between nursing colleges and clinical institutions and states that strong partnerships are needed to facilitate student learning. This author suggests that a written contract between the nursing college and the clinical settings should be made. This could strengthen partnerships between clinical and educational institutions through their mutual acceptance of responsibility and accountability for student learning.

5.5.2 Education

It is recommended that basic education for future registered nurses should ensure that they are well prepared for their teaching role, and should specifically develop their skills in utilising everyday practice and occurrences for teaching purposes. During education and training the importance of the clinical accompaniment function of the registered nurse should be impressed upon the would-be graduate students. The educational programmes should also ensure that future registered nurses are equipped with relevant clinical expertise to enable them to impart their professional knowledge and skills to students with confidence. According to Bowles (2000: 373), it is imperative that registered nurses be proficient in the current knowledge and

procedural skills necessary for providing safe and effective patient care. They should be able to think and use the appropriate knowledge and skilled judgement in delivering patient care.

It is recommended that the responsibilities of students with regard to professional practice and taking responsibility for their own learning be impressed upon students during the early stages of their educational programme.

5.5.3 Further research

Based on the findings of this study it is recommended that further research be conducted to investigate:

- students' behaviour in the clinical settings, with specific reference to behaviours that could influence learning
- clinical teaching by registered nurses in the institutions that were not covered by this research

5.6 CONTRIBUTIONS OF THE STUDY

The study has highlighted some of the problems that the respondents experience with regard to clinical accompaniment of students. The recommendations could contribute to addressing the problems that registered nurses experience as impacting negatively on their abilities to perform their clinical function. These problems were brought to the attention of the Department of Health and Welfare in the Northern Province through the research report, and the recommendations for improvement were tabled.

The study could contribute towards effective clinical accompaniment by registered nurses, through utilisation of teachable moments, because turning everyday occurrences into learning opportunities enables registered nurses to fulfil their clinical accompaniment function without experiencing the pressures of increased demands on their time. The utilisation of teachable moments enables registered nurses to reconcile their clinical accompaniment function with their patient care function.

Registered nurses' utilisation of teachable moments, with specific reference to the process followed, was also investigated. Recommendations were made with regard to providing continuous education to registered nurses on the application of those phases of Peplau's interpersonal process and the experiential learning process that they currently do not apply effectively. The research could therefore contribute towards enabling registered nurses to utilise such moments effectively by following through a planned learning process.

5.7 LIMITATIONS OF THE STUDY

The researcher had to comply with the prescriptions of the Department of Health and Welfare before permission for the research was granted (refer to par. 3.7.2). Some of those prescriptions could be perceived as limiting the generalisation of the findings.

The researcher had to reduced the sample size and this could have compromised external validity. Smaller samples tend to reduce the likelihood that the sample is representative of the population under study (Polit & Hungler 1995: 240). The research was conducted in the Northern Province only and a condition for obtaining permission to do the research was that data collection should be conducted in hospitals only, and not in clinics. The findings are therefore only generalisable to the hospitals associated with the Northern Province College of Nursing.

The fact that some items had to be omitted from the questionnaire to shorten it could have affected the content validity (Burns & Grove 1997: 331). However, the researcher took care to omit only those items that were not essential to answering the research questions. The statistical reliability tests furthermore revealed that the questionnaire was reliable.

The researcher experienced problems in collecting the completed questionnaires. He had to send out reminders for about three weeks. However, he eventually managed to obtain a good response rate.

5.8 CONCLUSION

This non-experimental, descriptive study sought to describe how registered nurses utilise teachable moments in the clinical setting for the purpose of enhancing students' learning. The study included 45 registered nurses who agreed to participate in the study. A self-administered questionnaire was used to collect data. Data was analysed by using descriptive statistics. The study findings provided answers to the questions related to problems faced by registered nurses when they teach students, and how registered nurses utilise teachable moments to teach students.

The findings of this study indicated that there were some problems related to the teaching of students in the clinical setting. There were negative and positive aspects of registered nurses utilisation of teachable moments to teach students. These findings gave an understanding of the situations faced by registered nurses regarding student teaching. These led the researcher to make recommendations on how the situation could be improved as well as suggestions for further research.

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ANNEXURE A

APPROVAL FROM THE UNIVERSITY

Faculty of Arts

UNISA

Fakulteit Lettere en Wysbegeerte

Department of Advanced Nursing Sciences
PO Box 392
PRETORIA
0003
Tel no 429-6770
Fax no 429-6688

LdV/ecc

Student number 7666926

26 March 2001

Mr NW Mochaki
Private bag X1122
SOVENGA
0727

Dear Mr Mochaki

APPROVAL OF THE RESEARCH PROPOSAL

This is to certify that your research proposal entitled *The Teaching Role of Registered Nurses,* in which you indicated your intention to investigate *how registered nurses utilise teachable moments to enhance students' learning in clinical health care settings*, has been approved by the Research and Ethics Committee of the Department of Advanced Nursing Sciences.

The research problem is researchable and feasible. It complies to ethical principles which are applicable to the protection of the rights of the respondents and the institution in which the research will be conducted.

Yours sincerely

EPotgieter

Dr E Potgieter
acting **HEAD: DEPARTMENT OF ADVANCED NURSING SCIENCES**

ANNEXURE B

LETTER TO THE DEPARTMENT OF HEALTH AND WELFARE

Sovenga Campus
Private Bag x 1122
Sovenga
0727
2000-12-06

The Superintendent-General
Department of Health & Welfare
Private Bag x 9301
PIETERSBURG
0700

Sir/Madam

REQUEST TO CONDUCT A STUDY IN YOUR HOSPITALS

I am a student registered for Masters Degree in Nursing Science at the University of South Africa. Request is hereby made to conduct a study in your hospitals on: **HOW REGISTERED NURSES UTILISE TEACHABLE MOMENTS TO ENHANCE STUDENTS'LEARNING**. The study is to be conducted in the hospitals where the students following a programme leading to registration as a nurse (general, psychiatry and community) and midwife do their clinical practica.

The study needs to answer the following research questions:

How do registered nurses utilise teachable moments in the clinical setting?

What problems do registered nurses experience when they teaching students?

It is envisaged that the results would contribute towards improving the quality of clinical accompaniment and ultimately towards better-qualified registered nurses.

The research is conducted as a requirement for Masters Degree in nursing science at the University of South Africa. It is a quantitative research whereby the population was sampled using stratified approach.

Please find attached questionnaire that indicates the type of data to be collected from the respondents as well as a cover letter to the respondents. The completion of the questionnaire is estimated to take 20-30 minutes of their time.

The researcher undertakes to observe all ethical principles for conducting the research. All information would be kept in confidence. A copy of the research report could be made available to your office if requested.

Yours faithfully

MOCHAKI NARE WILLIAM
Tel: 015-267-1114
083 277 0066

ANNEXURE C

APPROVAL FROM THE DEPARTMENT OF HEALTH AND WELFARE

NORTHERN PROVINCE
DEPARTMENT OF HEALTH AND WELFARE

TEL: (015) 290 9000
(015) 290 9001
FAX: (015) 291 5961
(015) 291 5146

PRIVATE BAG X9302
PIETERSBURG
0700

Enquiries: Sinah Mahlangu

Reference: Research & Quality Improvement

18 April 2001

Private Bag x1122
SOVENGA
0727

Dear Mr N.W Mochaki

THE TEACHING ROLE OF THE PROFESSIONAL NURSE

1. Permission is hereby granted to collect data on the above topic in the Northern Province
2 The Department of Health & Welfare needs a copy of the research findings for its own resource centre.
3. The researcher should be prepared to assist in interpretation and implementation of the recommendations where possible.
4.Implications: Permission should be requested from regional and institutional management to do research.

Sincerely,

SUPERINTENDENT GENERAL
DEPARTMENT OF HEALTH & WELFARE
NORTHERN PROVINCE

2/5/2001

DR JAN MOOLMAN BUILDING
34 HANS VAN RENSBURG STREET
PIETERSBURG 0700

ANNEXURE D

LETTER TO CARRY OUT THE PILOT STUDY

Sovenga Campus
Private Bag x 1122
Sovenga
0727
2001-05-14

ENQUIRIES: MOCHAKI N.W
TEL: 015 267 1114
FAX: 015 267 1202
CELL: 083 277 0066

THE MEDICAL SUPERINTENDENT
THABAMOOPO HOSPITAL
LEBOWAKGOMO

Sir / Madam

REQUEST TO CONDUCT A PILOT STUDY IN YOUR HOSPITAL

I am a student registered for Masters Degree in Nursing Science at the University of South Africa. Request is hereby made to conduct a pilot study in your hospital on: **HOW REGISTERED NURSES UTILISE TEACHABLE MOMENTS TO ENHANCE STUDENTS' LEARNING.** The pilot study is to be conducted for one day only using five respondents. The study needs to answer the following research questions:

How do registered nurses utilise teachable moments in the clinical setting?

What problems do registered nurses experience when they teaching students?

It is envisaged that the results would contribute towards improving the quality of clinical accompaniment and ultimately lead towards better-qualified registered nurses.
The stratified random sampling approach would be used for getting the respondents for participation in the study.
Please find attached questionnaire that indicates the type of data to be collected from the respondents as well as the cover letter to the respondents. The letter of permission from Department of Health & Welfare is also attached. The completion of the questionnaire is estimated to take 20 minutes of the respondents' private time.

The researcher undertakes to observe all ethical principles for conducting the research. All information would be kept in confidence between the researcher and the supervisor. No name of the respondents should appear on any part of the questionnaire including the hospital's name. The researcher requests the assistance of the unit managers in order to get access to the respondents in the wards. The completed questionnaires would be collected by the researcher in the wards the same day before 16hrs.

Your positive response is highly appreciated.

Yours faithfully

MOCHAKI NARE WILLIAM
Tel: 015-267-1114
083 277 0066

ANNEXURE E

INSTRUMENT FOR THE EVALUATION OF THE QUESTIONNAIRE

EVALUATION OF THE QUESTIONNAIRE

PLEASE INDICATE HOW YOU RATE THE QUESTIONNAIRE BY CIRCLING THE APPROPRIATE OPTION

Clarity of covering letter	Good	7 6 5 4 3 2 1	Bad
Overall appearance	Good	7 6 5 4 3 2 1	Bad
Page layout	Good	7 6 5 4 3 2 1	Bad
Clarity of instructions	Good	7 6 5 4 3 2 1	Bad
Legibility	Good	7 6 5 4 3 2 1	Bad
Clarity of items	Good	7 6 5 4 3 2 1	Bad
Relevance of items to your teaching responsibilities	Good	7 6 5 4 3 2 1	Bad
Assurance of anonymity	Good	7 6 5 4 3 2 1	Bad
Information required not too revealing	Good	7 6 5 4 3 2 1	Bad
Completion time	Good	7 6 5 4 3 2 1	Bad

Write any suggestions for improving the questionnaire in the space below:

_____

_____

_____

_____

_____

_____

_____

ANNEXURE F

LETTER TO THE HOSPITAL AUTHORITY

Sovenga Campus
Private Bag x 1122
Sovenga
0727
2001-05-14

Enquiries: Mr Mochaki N.W
Tel: 015-267 1114
Fax: 015 267 1202

TO: HOSPITAL SUPERINTENDENT

Sir/Madam

REQUEST TO CONDUCT A STUDY IN YOUR HOSPITAL

I am a student registered for a Masters degree in nursing science at the University of South Africa. Request is hereby made to conduct a study at your hospital on: **HOW REGISTERED NURSES UTILISE TEACHABLE MOMENTS TO ENHANCE STUDENTS' LEARNING?** This study is conducted in the clinical settings where students following a course leading to registration as a nurse (general, psychiatry and community) and midwife do their clinical practica.

The study needs to answer the following research questions:

How do registered nurses utilise teachable moments in the clinical setting?

What problems do registered nurses experience when they teaching students?

It is envisaged that the results would contribute towards improving the quality of clinical accompaniment and ultimately towards better-qualified registered nurses. The research project is a requirement for master degree in nursing science at the University of South Africa. It is a quantitative research whereby the population was sampled using the stratified approach.

Please find attached questionnaire that indicates the type of data to be collected from the respondents as well as a letter to the respondents. The completion of the questionnaire is estimated to take 20-30 minutes of their time.

The researcher undertakes to observe all ethical principles for conducting the research. All information would be kept in confidence. A copy of the research report could be made available to your office if requested.

Yours faithfully

MOCHAKI NARE WILLIAM
Tel: 015-267-1114
083 277 0066

ANNEXURE G

APPROVAL FROM THE HOSPITAL AUTHORITY

NORTHERN PROVINCE
NOORDELIKE PROVINSIE

Department of Health and Welfare
Departement van Gesondheid en Welsyn

PIETERSBURG / MANKWENG HOSPITAL COMPLEX
PIETERSBURG / MANKWENG HOSPITAAL KOMPLEKS

DEPARTMENT / AFDELING: ☐ PIETERSBURG ☐ MANKWENG

Enquiries: DR DJ DU PLESSIS **Ext.:** 5000
Navrae: **Uitbr.:**

Reference No.:
Verwysing Nr.:

21 MAY 2001

Mr Mochaki NW
Sovenga Campus
Private Bag X1122
Sovenga
0727

Tel 015 267 1114
Cell 083 277 0066

Dear Mr Mochaki

RE CONDUCTING STUDY AT THE PMHC

1. Permission is herewith granted for the study as outlined in your letter of application.
2. Please observe the general proviso that such activities should not interfere with the normal work schedule of personnel, and
3. that permission be obtained from the relevant unit managers and clinicians as and where applicable.

We wish you every success.

.....
CHIEF EXECUTIVE OFFICER

PIETERSBURG HOSPITAL / PIETERSBURG HOSPITAAL
TEL: (015) 297-3163 FAX: (015) 297-2604
COR. HOSPITAL & DORP STREET, PRIVATE BAG X9316, PIETERSBURG 0700
H/V HOSPITAAL & DORPSTRAAT, PRIVAATSAK X9316, PIETERSBURG 0700

MANKWENG HOSPITAL / MANKWENG HOSPITAAL
TEL: (015) 267-0330 FAX: (015) 267-0206
PRIVATE BAG / PRIVAATSAK X1117, SOVENGA 0727

ANNEXURE H

COVER LETTER

Sovenga Campus
Private Bag x 1122
Sovenga
0727
2001-05-14

Enquiries: Mochaki N.W
Tel: 015-257 1114
Fax: 015 267 1202

Dear Colleague

I am a student registered for a Masters Degree at the University of South Africa. I am conducting a study on: **HOW REGISTERED NURSES UTILISE TEACHABLE MOMENTS TO ENHANCE STUDENTS' LEARNING?** The study needs to answer the following research questions:

How do registered nurses utilise teachable moments in the clinical setting?

What problems do registered nurses experience when they teaching students?

Your participation in this research is important because you could give inputs towards improving clinical accompaniment of students. Your inputs could lead to improved client care in the clinical settings.

You are hereby requested to complete the questionnaire attached to this letter. This questionnaire could take 20-30 minutes of time. Please use your private time to complete the questionnaire. Please ensure that clients are not left unattended for the purpose of completing this questionnaire. Please do not leave clients alone. You are assured of complete anonymity as well as confidentiality. Please do not write your name or clinical setting's name on any papers of questionnaire. You have the right to participate or withdraw from participating from this project at any time. The research report would be made available in the library of the Northern Province College of Nursing.

The research questionnaire would be destroyed at the end of the project.

Thank you in advance.

Yours faithfully

MOCHAKI NARE WILLIAM
Tel: 015-267-1114
083 277 0066

ANNEXURE I

QUESTIONNAIRE

SECTION A: BIOGRAPHICAL DATA

Indicate your response by marking the appropriate box with a X
For office use

1	How old are you?	☐ Years	**A1**	☐
2	Indicate your highest nursing qualification			
	Basic nursing diploma	☐		1
	Basic nursing degree	☐		2
	Post basic nursing diploma	☐		3
	Post basic nursing degree	☐		4
	Honours degree	☐		5
	Master's degree	☐		6
	Doctorate degree	☐		7
			A2	☐
3	Indicate your professional registrations			
	General nurse	☐		1
	Psychiatric nurse	☐		2
	Community nurse	☐		3
	Midwife	☐		4
	Nurse educator	☐		5
	Nurse manager	☐		6
	Other	☐		7
	If your response was "other", please specify) _____		**A3**	☐
4	How many years of professional experience do you have? _____	Years	**A4**	☐
5	Indicate the clinical unit in which you work			
	Medical ward	☐		1
	Surgical ward	☐		2
	Pediatric ward	☐		3
	Out patient clinic	☐		4
	Casualty	☐		5
	Operating theatre	☐		6
	Ante-natal clinic	☐		7
	Labour ward	☐		8
	Post natal ward	☐		9
	Other	☐		10
	If your response was "other", please specify) _____		**A5**	☐

SECTION B: PROBLEMS FACED BY REGISTERED NURSES

Indicate the extent to which you agree with the following statements by marking the appropriate box with an X

		Strongly agree	Agree	Disagree	Strongly disagree	FOR OFFICE USE	
1	My patient care workload makes it difficult to allocate time to teach students in the clinical unit					B1	
2	Tutors from the nursing college are available to give me guidance about my clinical teaching responsibilities					B2	
3	I do not know what learning objectives students should achieve in the clinical unit					B3	
4	I do not have the necessary teaching skills to do clinical teaching of students in my area of practice					B4	
5	I have the necessary clinical expertise to teach students effectively in my area of practice					B5	

List below any problems in your work environment that, according to your opinion, negatively impact on student teaching by registered nurses

_____

_____

_____

_____

_____

_____

_____

_____

SECTION C: THE UTILISATION OF TEACHABLE MOMENTS

Indicate the extent to which you agree with the following statements by marking the appropriate box with an X

		Always	Often	Seldom	Never	OFFICE USE	
1	I asses students' learning needs when they enter the clinical unit for the first time					B1	
2	I enter into discussions with students to identify their previous learning experiences when they enter the clinical unit for the first time					B2	
3	I assess the clinical workbooks of students when they enter the clinical unit for the first time					B3	
4	I assess students' ability to learn independently when they enter the clinical unit for the first time					B4	
5	I assess students' expectations when they enter the clinical unit for the first time					B5	
6	Students undergo an orientation program when they enter the clinical unit for the first time					B6	
7	The expertise of each registered nurse working in the clinical unit is explained to students when they enter the clinical unit for the first time					B7	
8	Daily work allocation of students is planned in accordance with their learning objectives					B8	
9	Students work under the guidance of registered nurses with relevant expertise concerning the functions to be performed					B9	
10	I utilise interesting situations arising from routine patient care activities immediately for student teaching					B10	
11	Utilisation of learning opportunities during patient care activities is followed up with group discussions					B11	
12	During follow-up group discussions I ask students probing questions about their learning experiences					B12	
13	I encourage students to ask for clarification about issues that they do not understand during follow-up group discussions					B13	
14	I encourage students to independently seek answers to questions about occurrences in every day practice that they do not understand					B14	

		Always	Often	Seldom	Never	OFFICE USE	
15	I encourage students to verbalise what they have learnt in the clinical unit					B15	
16	I ask students to deliver formal presentations to other students about knowledge gained in the clinical unit					B16	
17	After each clinical teaching session, I provide the opportunity for students to apply their knowledge in similar patient care situations					B17	
18	Assessment of learning is done on a continuous basis in the clinical unit					B18	
19	I help students to overcome problems in achieving learning objectives					B19	
20	I encourage students to perform functions for which they have gained the necessary competence, independently					B20	

ANNEXURE J

C/L PROGRAMME FILES / SPSS 9.0

	age	qualific	general	psychiat	communi	midwife	edu
1	46.00	4.00	1.00	.	1.00	.	.
2	31.00	1.00	1.00	.	.	.	.
3	35.00	1.00	1.00	.	.	1.00	.
4	27.00	1.00	1.00	1.00	1.00	1.00	.
5	39.00	1.00	.	.	.	1.00	.
6	40.00	4.00	1.00	1.00	1.00	1.00	1.00
7	33.00	1.00	1.00	1.00	1.00	1.00	.
8	31.00	1.00	.	.	.	.	.
9	27.00	1.00	1.00	.	.	.	.
10	44.00	2.00	1.00	1.00	1.00	1.00	.
11	27.00	1.00	1.00	1.00	1.00	1.00	.
12	36.00	4.00	1.00	.	1.00	1.00	1.00
13	31.00	1.00	1.00	.	.	.	.
14	38.00	1.00	1.00	.	.	1.00	.
15	39.00	4.00	1.00	.	1.00	1.00	.
16	40.00	1.00	1.00	.	.	1.00	.
17	41.00	3.00	1.00	.	1.00	1.00	.
18	32.00	1.00	1.00	1.00	1.00	1.00	.
19	30.00	1.00	1.00	1.00	1.00	1.00	.
20	43.00	3.00	1.00	.	.	1.00	.
21	31.00	1.00	1.00	1.00	1.00	1.00	.
22	30.00	3.00	1.00	.	.	1.00	.
23	26.00	2.00	1.00	1.00	1.00	1.00	.
24	40.00	3.00	1.00	.	1.00	1.00	.
25	31.00	1.00	1.00	1.00	1.00	1.00	.
26	43.00	4.00	1.00	1.00	.	1.00	1.00
27	38.00	1.00	1.00	.	1.00	1.00	.

	manager	other	experien	unit	b1	b2	b3
1	1.00	.	19.00	2.00	4.00	1.00	2.00
2	.	.	5.00	9.00	4.00	1.00	3.00
3	.	.	13.00	8.00	4.00	1.00	4.00
4	.	.	1.00	10.00	3.00	2.00	2.00
5	.	.	12.00	2.00	3.00	1.00	2.00
6	1.00	1.00	13.00	.	4.00	1.00	2.00
7	.	.	2.00	5.00	1.00	1.00	1.00
8	.	.	4.00	5.00	3.00	1.00	3.00
9	.	.	1.00	5.00	2.00	3.00	2.00
10	1.00	.	10.00	10.00	3.00	1.00	2.00
11	.	.	3.00	1.00	3.00	1.00	2.00
12	1.00	.	16.00	1.00	3.00	1.00	1.00
13	.	.	17.00	1.00	3.00	2.00	4.00
14	.	.	12.00	2.00	3.00	2.00	1.00
15	1.00	.	19.00	.	3.00	2.00	2.00
16	.	.	14.00	1.00	3.00	2.00	1.00
17	.	.	.	1.00	1.00	4.00	2.00
18	.	.	.	1.00	4.00	3.00	3.00
19	.	.	4.00	1.00	3.00	2.00	2.00
20	.	2.00	14.00	10.00	1.00	2.00	1.00
21	.	.	6.00	6.00	3.00	2.00	3.00
22	.	3.00	13.00	10.00	3.00	1.00	2.00
23	.	.	4.00	6.00	2.00	1.00	1.00
24	.	3.00	16.00	6.00	2.00	1.00	1.00
25	.	.	5.00	4.00	2.00	2.00	2.00
26	1.00	.	14.00	10.00	2.00	3.00	2.00
27	.	.	15.00	10.00	2.00	1.00	1.00

	b4	b5	c1	c2	c3	c4	c5
1	2.00	3.00	3.00	4.00	3.00	.	3.00
2	2.00	2.00	3.00	3.00	1.00	3.00	3.00
3	1.00	3.00	2.00	3.00	4.00	4.00	4.00
4	2.00	3.00	4.00	4.00	3.00	3.00	3.00
5	2.00	3.00	3.00	4.00	3.00	4.00	4.00
6	2.00	3.00	4.00	2.00	2.00	3.00	4.00
7	1.00	4.00	4.00	2.00	1.00	2.00	2.00
8	2.00	2.00	4.00	3.00	3.00	3.00	3.00
9	2.00	4.00	4.00	4.00	4.00	3.00	2.00
10	2.00	3.00	3.00	3.00	3.00	4.00	4.00
11	1.00	3.00	3.00	2.00	1.00	2.00	2.00
12	2.00	3.00	4.00	3.00	4.00	2.00	4.00
13	4.00	3.00	2.00	.	3.00	2.00	4.00
14	2.00	3.00	4.00	3.00	2.00	4.00	4.00
15	2.00	3.00	4.00	3.00	2.00	2.00	4.00
16	2.00	3.00	4.00	3.00	4.00	2.00	3.00
17	2.00	2.00	4.00	2.00	2.00	4.00	4.00
18	2.00	3.00	2.00	2.00	1.00	4.00	4.00
19	2.00	2.00	4.00	3.00	4.00	4.00	2.00
20	4.00	4.00	3.00	3.00	3.00	.	4.00
21	2.00	2.00	4.00	3.00	3.00	4.00	3.00
22	1.00	3.00	2.00	2.00	3.00	2.00	2.00
23	1.00	3.00	2.00	2.00	2.00	1.00	3.00
24	1.00	4.00	4.00	4.00	3.00	3.00	3.00
25	2.00	3.00	2.00	2.00	3.00	2.00	2.00
26	1.00	3.00	4.00	4.00	4.00	4.00	4.00
27	1.00	4.00	2.00	3.00	3.00	2.00	3.00

	c6	c7	c8	c9	c10	c11	c12
1	3.00	2.00	4.00	3.00	3.00	3.00	4.00
2	4.00	1.00	3.00	3.00	2.00	1.00	2.00
3	4.00	4.00	4.00	4.00	4.00	4.00	4.00
4	4.00	4.00	4.00	4.00	4.00	3.00	3.00
5	4.00	4.00	4.00	4.00	3.00	3.00	3.00
6	3.00	3.00	3.00	4.00	3.00	1.00	2.00
7	4.00	4.00	4.00	4.00	4.00	3.00	4.00
8	4.00	2.00	4.00	3.00	3.00	2.00	2.00
9	4.00	4.00	4.00	4.00	.	2.00	4.00
10	4.00	4.00	4.00	4.00	3.00	3.00	3.00
11	4.00	3.00	2.00	3.00	3.00	2.00	2.00
12	4.00	3.00	4.00	2.00	4.00	3.00	3.00
13	4.00	3.00	3.00	4.00	4.00	4.00	4.00
14	4.00	2.00	4.00	4.00	4.00	2.00	2.00
15	4.00	2.00	2.00	3.00	3.00	3.00	2.00
16	4.00	3.00	3.00	3.00	4.00	3.00	3.00
17	4.00	3.00	4.00	4.00	2.00	3.00	3.00
18	4.00	2.00	2.00	3.00	3.00	3.00	3.00
19	4.00	4.00	4.00	4.00	3.00	2.00	2.00
20	4.00	4.00	4.00	4.00	4.00	4.00	4.00
21	4.00	4.00	4.00	4.00	3.00	3.00	4.00
22	4.00	4.00	2.00	4.00	4.00	4.00	2.00
23	4.00	2.00	4.00	4.00	4.00	1.00	1.00
24	4.00	1.00	4.00	4.00	4.00	3.00	3.00
25	4.00	1.00	4.00	3.00	4.00	3.00	3.00
26	4.00	4.00	4.00	4.00	4.00	3.00	3.00
27	4.00	3.00	4.00	4.00	4.00	2.00	2.00

	c13	c14	c15	c16	c17	c18	c19
1	4.00	3.00	4.00	.	4.00	3.00	4.00
2	2.00	1.00	3.00	1.00	3.00	2.00	.
3	4.00	4.00	4.00	3.00	4.00	4.00	4.00
4	3.00	3.00	3.00	1.00	3.00	3.00	3.00
5	3.00	4.00	4.00	4.00	.	3.00	4.00
6	4.00	2.00	3.00	1.00	3.00	2.00	2.00
7	4.00	4.00	4.00	4.00	2.00	4.00	4.00
8	2.00	4.00	3.00	2.00	3.00	2.00	2.00
9	4.00	4.00	4.00	4.00	4.00	2.00	4.00
10	4.00	3.00	3.00	3.00	4.00	4.00	4.00
11	3.00	4.00	3.00	2.00	3.00	2.00	3.00
12	4.00	4.00	4.00	3.00	3.00	2.00	4.00
13	4.00	4.00	4.00	3.00	4.00	3.00	4.00
14	4.00	3.00	4.00	3.00	3.00	4.00	2.00
15	4.00	4.00	4.00	3.00	3.00	2.00	3.00
16	4.00	4.00	3.00	2.00	2.00	3.00	3.00
17	4.00	4.00	3.00	3.00	2.00	.	3.00
18	4.00	1.00	4.00	2.00	3.00	2.00	3.00
19	3.00	3.00	3.00	3.00	4.00	2.00	3.00
20	4.00	4.00	4.00	4.00	4.00	4.00	4.00
21	4.00	4.00	4.00	3.00	4.00	4.00	4.00
22	2.00	4.00	2.00	2.00	4.00	2.00	2.00
23	1.00	1.00	3.00	1.00	3.00	4.00	2.00
24	3.00	3.00	3.00	2.00	2.00	3.00	4.00
25	4.00	4.00	3.00	2.00	4.00	2.00	3.00
26	3.00	4.00	4.00	3.00	4.00	4.00	4.00
27	4.00	4.00	4.00	4.00	3.00	4.00	4.00

	c20	var00001
1	2.00	.
2	4.00	.
3	4.00	.
4	3.00	.
5	4.00	.
6	2.00	.
7	4.00	.
8	3.00	.
9	4.00	.
10	4.00	.
11	4.00	.
12	4.00	.
13	3.00	.
14	3.00	.
15	4.00	.
16	3.00	.
17	4.00	.
18	3.00	.
19	4.00	.
20	4.00	.
21	4.00	.
22	4.00	.
23	4.00	.
24	3.00	.
25	4.00	.
26	4.00	.
27	4.00	.

	c20	var00001
1	2.00	.
2	4.00	.
3	4.00	.
4	3.00	.
5	4.00	.
6	2.00	.
7	4.00	.
8	3.00	.
9	4.00	.
10	4.00	.
11	4.00	.
12	4.00	.
13	3.00	.
14	3.00	.
15	4.00	.
16	3.00	.
17	4.00	.
18	3.00	.
19	4.00	.
20	4.00	.
21	4.00	.
22	4.00	.
23	4.00	.
24	3.00	.
25	4.00	.
26	4.00	.
27	4.00	.

	age	qualific	general	psychiat	communi	midwife	edu
28	27.00	1.00	1.00	1.00	1.00	1.00	.
29	36.00	1.00	1.00	.	.	.	.
30	32.00	1.00	1.00	.	.	.	.
31	32.00	1.00	1.00	1.00	1.00	1.00	.
32	.	1.00	1.00	1.00	1.00	1.00	.
33	34.00	1.00	1.00	1.00	1.00	1.00	.
34	27.00	1.00	1.00	1.00	1.00	1.00	.
35	.	1.00	1.00	.	.	.	.
36	31.00	1.00	1.00	1.00	1.00	1.00	.
37	30.00	1.00	1.00	1.00	1.00	1.00	.
38	29.00	1.00	1.00	1.00	1.00	1.00	.
39	26.00	2.00	1.00	1.00	1.00	1.00	.
40	31.00	1.00	1.00	.	.	1.00	.
41	35.00	1.00	1.00	.	.	.	.
42	34.00	1.00	1.00	.	.	.	.
43	.	1.00	1.00	.	.	.	.
44	37.00	1.00	1.00	.	.	1.00	.
45	43.00	1.00	1.00	.	.	.	.

	manager	other	experien	unit	b1	b2	b3
28	.	.	2.00	10.00	2.00	4.00	2.00
29	.	.	3.00	10.00	2.00	3.00	1.00
30	.	.	2.00	10.00	2.00	3.00	1.00
31	.	.	2.00	10.00	2.00	2.00	1.00
32	.	.	1.00	.	4.00	1.00	3.00
33	.	.	9.00	10.00	1.00	1.00	2.00
34	.	.	3.00	10.00	2.00	2.00	2.00
35	.	.	.	10.00	3.00	2.00	2.00
36	.	.	1.00	10.00	2.00	3.00	2.00
37	.	.	1.00	9.00	3.00	2.00	2.00
38	.	.	1.00	8.00	2.00	2.00	3.00
39	.	.	1.00	8.00	3.00	3.00	1.00
40	.	.	14.00	4.00	3.00	2.00	2.00
41	.	1.00	15.00	4.00	3.00	2.00	1.00
42	.	.	1.00	4.00	3.00	2.00	2.00
43	.	.	12.00	2.00	3.00	1.00	3.00
44	.	.	3.00	10.00	4.00	4.00	2.00
45	.	.	4.00	5.00	2.00	2.00	3.00

	b4	b5	c1	c2	c3	c4	c5
28	2.00	4.00	4.00	4.00	4.00	4.00	4.00
29	2.00	3.00	4.00	3.00	2.00	4.00	4.00
30	2.00	3.00	4.00	3.00	3.00	4.00	4.00
31	1.00	4.00	3.00	4.00	4.00	4.00	4.00
32	4.00	3.00	4.00	2.00	4.00	3.00	3.00
33	2.00	4.00	3.00	4.00	4.00	1.00	4.00
34	2.00	3.00	2.00	2.00	2.00	1.00	2.00
35	2.00	2.00	3.00	3.00	4.00	2.00	4.00
36	2.00	4.00	3.00	4.00	4.00	3.00	4.00
37	2.00	3.00	2.00	2.00	2.00	2.00	4.00
38	1.00	3.00	4.00	3.00	2.00	2.00	2.00
39	1.00	4.00	4.00	4.00	4.00	4.00	4.00
40	1.00	2.00	2.00	2.00	2.00	2.00	2.00
41	2.00	2.00	3.00	3.00	3.00	4.00	4.00
42	3.00	2.00	1.00	1.00	1.00	3.00	3.00
43	3.00	2.00	2.00	3.00	.	2.00	2.00
44	4.00	2.00	4.00	1.00	1.00	2.00	3.00
45	2.00	3.00	4.00	3.00	4.00	4.00	4.00

	c6	c7	c8	c9	c10	c11	c12
28	4.00	4.00	4.00	4.00	4.00	4.00	4.00
29	4.00	3.00	4.00	4.00	4.00	3.00	3.00
30	4.00	3.00	4.00	4.00	3.00	3.00	4.00
31	4.00	3.00	4.00	4.00	4.00	4.00	4.00
32	4.00	4.00	4.00	4.00	3.00	4.00	3.00
33	1.00	3.00	2.00	4.00	4.00	3.00	3.00
34	4.00	3.00	4.00	4.00	3.00	2.00	2.00
35	4.00	4.00	4.00	4.00	3.00	1.00	1.00
36	4.00	4.00	3.00	4.00	3.00	2.00	2.00
37	4.00	2.00	4.00	4.00	2.00	2.00	4.00
38	1.00	1.00	4.00	4.00	4.00	4.00	2.00
39	4.00	3.00	4.00	4.00	4.00	4.00	3.00
40	3.00	3.00	3.00	3.00	3.00	3.00	3.00
41	4.00	4.00	4.00	4.00	3.00	3.00	3.00
42	4.00	3.00	4.00	4.00	4.00	3.00	3.00
43	2.00	1.00	1.00	3.00	.	2.00	2.00
44	4.00	4.00	4.00	4.00	1.00	2.00	1.00
45	4.00	4.00	4.00	4.00	4.00	3.00	3.00

	c13	c14	c15	c16	c17	c18	c19
28	4.00	4.00					
29	4.00	4.00	4.00				4.00
30	4.00	4.00	4.00	4.00	4.00	4.00	4.00
31	4.00	4.00	4.00	3.00	4.00	4.00	4.00
32	4.00	4.00	4.00	4.00	4.00	4.00	4.00
33	4.00	3.00	4.00	1.00	3.00	4.00	4.00
34	3.00	4.00	2.00	2.00	2.00	2.00	2.00
35	2.00	2.00	4.00	3.00	3.00	4.00	4.00
36	2.00	3.00	4.00	3.00	4.00	4.00	4.00
37	4.00	4.00	4.00	1.00	2.00	4.00	4.00
38	4.00	4.00	3.00	1.00	2.00	3.00	3.00
39	4.00	3.00	4.00	4.00	4.00	4.00	3.00
40	3.00	3.00	3.00	3.00	3.00	2.00	3.00
41	4.00	3.00	4.00	3.00	3.00	3.00	3.00
42	4.00	4.00	4.00	1.00	3.00	3.00	3.00
43	3.00	3.00	2.00	2.00	3.00	3.00	3.00
44	1.00	4.00	4.00	1.00	4.00	1.00	3.00
45	4.00	4.00	4.00	4.00	4.00	4.00	4.00

	c20	var00001
28	.	.
29	3.00	.
30	4.00	.
31	4.00	.
32	4.00	.
33	3.00	.
34	2.00	.
35	3.00	.
36	3.00	.
37	4.00	.
38	3.00	.
39	3.00	.
40	3.00	.
41	3.00	.
42	4.00	.
43	3.00	.
44	1.00	.
45	4.00	.