Effect of an Instructional Programme on Attitudes of Registered Nurses Towards Nursing Care Plans

by

Leah Jongo Mkumbwa

Submitted in partial fulfillment of the requirements for the Degree of Master of Nursing at Dalhousie University, Halifax, Nova Scotia October, 1991

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This thesis has been dedicated to my late father

Bishop Anosisye Jongo,

whose belief in importance of education
has been a source of constant
encouragement.
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ABSTRACT

The purpose of this study was to examine the effect of an instructional programme on registered nurses' attitudes towards nursing care plans and to compare these attitudes with registered nurses who did not take part in the instructional programme. A sample of 36 randomly selected registered nurses "A" working full time in two hospitals in Tanzania, completed questionnaires on nurses' attitudes towards nursing care plans (pretest, posttest I and posttest II). The experimental group received an instructional programme on nursing process and nursing care plans before posttest I. The participants' attitudes were measured by means of the "Nursing Care Planning Rating Scale" modified by Thomas (1984). Results indicated that all participants had overall positive attitudes towards nursing care plans. There was evidence that the instructional programme had an effect on attitudes towards care planning however, it was not significant at the $p<.05$ level. There was no significant difference between the participants in relation to age, educational background, year of graduation and number of years of practice. Nursing educators and nursing administrators can use these findings in formulating a more constructive and practical instructional programme on nursing process and nursing care planning.
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INTRODUCTION, BACKGROUND AND CONCEPTUAL FRAMEWORK

Gradually, since the introduction of the nursing process in 1950, nursing care plans (NCPs) have come to be widely acclaimed as a better means of providing quality nursing care to patients. Unfortunately, the application or non-application of the nursing process through the use of nursing care plans is an ongoing dilemma for Tanzanian nurses as well as for nurses all over the world.

In a survey of the nursing literature, Shea (1986) shows that disuse/abuse of nursing care plans by nurses has been documented consistently since 1972. These documentations coincide with the approximate dates when written NCPs were required as part of accreditation guidelines. A variety of reasons why nurses do not use NCPs or why the plans that are used are poorly written have been cited (Kelly, 1966). Most of these reasons emphasize the fact that: NCPs too often dwell on physician-dependent orders rather than on nursing orders; nurses do not have sufficient knowledge about the nursing process and NCPs (Huckabay & Neal, 1979; Parent, 1989) and nurses often have negative or, at best, mixed feelings about writing NCPs. Lack of administrative support and minimal positive reinforcement for writing and using NCPs have also been
given as reasons that nurses do not use the nursing care plans (Kelly, 1966; Huckabay & Neal, 1979). Similarly, Carnevali (1983) identified the following reasons for the poor use of nursing care plans: confusion about responsibility for the plans, logistical and accessibility problems; perceived lack of importance of the plans to nurses; and minimal positive or negative sanctions associated with use of the plans. One gathers from the literature that a nursing care plan is a complex and multifaceted plan and that it results from an inter-relationship of many factors. Shea (1986, p. 148) concluded, "What is clear is that there is no simple answer to why nurses do not use NCPs".

A behavioural theory which provides a foundation for studying and explaining the intricately interwoven factors which influence the poor use of nursing care plans by nurses is the Value-Expectancy Theory. A major contributor to the development of behaviour theory was Lewin (1935) who proposed that behaviour is directly related to a person's field, the relationship between the momentary structure and state of the person and the psychological environment (p.79).

Lewin further elaborated the Field Theory in 1944 to describe the value-expectancy theory of motivation as the probability that a given action (behaviour) will achieve a
valued desired outcome. Later models describe the variables that form attitudes and values that influence the psychological environment which affects a person's choice to act or behave in a certain manner (Rosenstock, 1974).

Although no single existing model can be said to successfully effect change and/or predict behaviour, the model developed by Becker and Maiman (1975) does take into account the complexity of social behavioural determinants of behaviour. The basic outline of their model divides the variables presented into three classes. The first class is motivating factors, such as nurses' and administrators' values leading to the probability of success. The second is modifying factors, such as environment, demographic, education, experience, nurses' attitudes and beliefs about nursing care plans. The third is ultimate outcome, which in turn falls into one of five categories depending on whom it benefits. Thus, an outcome may benefit the patient, such as directly linking the nurse-patient relationship, and/or the nurse, such as communication of information, organization and evaluation of care. Similarly, it may benefit the clinical unit, such as all information pertaining to time and resources, and/or the administration, such as data from selected nursing care plans used for the nursing audit which measures the quality of nursing practice for the institution. Finally, nursing itself may benefit from an
outcome with the advantages for the discipline of nursing in writing of nursing care plans requiring greater emphasis on the independent nursing functions, although all aspects of care must be considered.

STATEMENT OF THE PROBLEM

Nurses' concerns about nursing care plans are valid and shared by many nurses internationally. One concern which has been recognized by several authors as being particularly crucial is the lack of knowledge about the nursing process as a whole concept. MacMahon (1988, p. 39) says, "In this country [U.S.A.] letters and articles from nurses still appear in press complaining that nursing process does not 'work' in their wards and appealing for help from colleagues in similar specialities!" She goes on to say that perhaps the nursing process is only a developmental phase to be mastered before we move on.

The purpose of this study was to examine how an instructional programme affected the attitudes of registered nurses towards nursing care plans and to compare these attitudes with registered nurses who did not take part in the instructional programme. The following hypothesis and research question directed this study.
HYPOTHESIS

Registered nurses who receive an instructional programme will have more positive attitudes towards nursing care plans than registered nurses who do not receive the instructional programme.

RESEARCH QUESTION

Is there a relationship between demographic factors such as age, sex, educational background, year of graduation and years of practice and registered nurses' attitudes towards nursing care plan?

OPERATIONAL DEFINITIONS

The following definitions were used throughout this study:

Attitude: an organization of several beliefs focused on a specific object (physical or social, concrete or abstract) or situation predisposing one to respond in some preferential manner (Rockeach, 1968, p. 159).

Functional nursing: a nursing-assignment pattern with division of labour according to specific tasks and routines, such as temperatures, treatments and medications. These activities are assigned to personnel for all patients with no one
A professional staff member assuming responsibilities for directing a specific patient's total nursing care (Zander, 1980).

**Nursing process:** A systematic method by which nurses plan and provide care for clients. This involves a problem-solving approach that enables the nurse to identify or assess client problems and needs, and to plan, deliver or implement, and evaluate nursing care in an orderly, scientific manner (Marriner, 1983; Yura & Walsh, 1983, 1988; Hickey, 1990).

**Nursing care planning:** A decision making process which results in creation of a written plan for nursing action based on patient/client assessment and resulting in implementations of the plan (Lewis, 1976; Hunt & Marran, 1980).

**Patient care plan:** An abstract of data concerning a specific patient, organized in a concise and systematic manner; a written guideline for patient care that is organized in such a way that "anyone can quickly visualize what care is needed and why". The plan facilitates achievement of patient's goals. It clearly communicates the nature of patient's needs and problems and specifies what nursing and medical interventions
are planned (Mayers, 1978, p. 12).

Primary nursing care: a system whereby each nurse is totally accountable for the care she/he delivers to the patient for twenty-four hours a day, seven days a week. The primary nurse is responsible for being the advocate of the patient and his/her family to all health professionals and thus for ensuring a high quality of health care (MacDonald, 1988).

Value: abstract ideal, negative or positive, which represents a person's belief about ideal modes of conduct or goals. Values are learned through countless interactions with other persons and are influenced significantly by one's experience, education, sex, and age (Rockeach, 1968, 1973).

ASSUMPTIONS

Two assumptions were integral to this study:

1. Registered nurses who graduated since 1985 have knowledge of and are intellectually capable of developing a written nursing care plan.

2. Registered nurses who graduated prior to 1985 will not have had nursing process as part of their educational programme.
REVIEW OF LITERATURE

The following review of literature covers five concepts which have relevance for this study: patient classification, nursing care planning, primary nursing staffing assignment pattern, attitudes and behaviours, and instructional programme. The majority of the literature comes from North America and United Kingdom.

Patient classification

According to Huckabay and Skonieczny (1981, p. 90), patient-classification systems are "the process of categorizing patients according to an assessment of their nursing care requirements over a specified period of time". The institution of prospective payment by Diagnostic Related Groups (DRGs) emphasizes nursing's need for a patient-classification system. DRGs do not now recognize that some patients require more nursing care than others, even if they have the same diagnosis, but focus on medical diagnosis. Yet nurses know that there may be considerable differences in the amount of nursing care required by any two individuals who are classified in the same DRG category.

Ethically, nurses are expected to be personally responsible for delivering safe and sufficient care to patients. Most of the time they experience an increased pace of work and heavier work loads which reduce their capability to provide quality care to patients. Even if they speed up
or sacrifice their unpaid time so that they can cope with the situation, they suffer frustrations, anxiety and self-blame about the care they give (Shaffer, 1986).

Nurses need to be seen consistently as autonomous professionals by consumers, physicians and hospital administrators. This may be possible if nursing services were seen as revenue generating and patients were only charged for the actual amount of nursing care received (Dayani, 1983). Unfortunately, current clinical observations have revealed that nurses perform nursing functions on a daily basis which are not documented in the patient's care plan or medical record and thus not charged to the patient. It is assumed that the patient classification, when properly used, could incorporate identification of actual nursing costs. Data for a patient-classification system can be correlated by the nurse and nursing administration with information documented on the nursing care plan. A well-documented nursing care plan is critical to a successful patient-classification system and both impact the outcome of costing nursing services.

Nursing Care Planning

Today, nursing practice is not just providing nursing care to patients, it also includes planning for this care and evaluating its effectiveness. Little (1969, p. 1) says, "Systematic planning of nursing care is becoming a nursing
responsibility of mounting importance. Nurses have been taking care of patients, as individual social beings and human organisms experiencing illness in various settings. At the same time, the nursing skills available are being augmented to assist the patient toward coping with these problems holistically.

Marram (1980) comments about the organization of nursing care for the maximum utilization and development of nurses. She points out that it is an enormous task because nurses are struggling hard to write and implement nursing care plans in their health settings.

Little and Carnevali (1976, p.2) write, "Nurses have become increasingly aware of the constant flow of observations, judgements and modifications they are making". Nurses have realized that there are areas that are not being dealt with in medical practice and that their decisions need to be at least as skilled, well founded, and critically evaluated as those of medical colleagues; thus, the growing interest in nursing diagnosis, treatment and planning of nursing care.

Lewis (1976, p.1) points out that "constant advances in technology contribute to rapid changes in health care, but that some concepts remain relatively stable; one being, 'process of planning care'". She goes on to argue that nursing care plans are valuable tools and are the result of
combined efforts of nurses, patients, family, and health
team to assist the patient with his or her problem.

Mayers (1978, p. 1) states, "Patient care planning,
involves systematically assessing and identifying patients' problems, setting objectives, establishing interventions and evaluating results". Hunt and Marran (1980, p. x) say, "Nursing care plans are written for individual patients and are a practical way of putting the nursing process to work". They go on to say that a nursing care plan has four purposes: it provides an assessment of patient's needs; it details a plan of care and describes the implementation and evaluation of the outcome for the patient. They conclude by saying that these steps correspond to the four stages of the nursing process.

Yura and Walsh (1988) agree with these definitions and further state that the nursing process is the core and essence of nursing, in that it is central to all nursing actions and it is applicable in any setting and within any theoretic-conceptual reference.

In the last two decades, professional nurses have had consistent exposure to the concept of the nursing process through education and the literature. Curricula in most nursing schools and in-service education programmes have reflected the nursing process for many years, as have most clinically based nursing literature and research studies.
A review of the literature (Bower, 1977; Griffith & Christman, 1980; Huckabay & Neal, 1979; Little & Carnevali, 1976; Manthey, 1981; Marriner, 1983; Mayers, 1978) reveals six anticipated benefits of nursing care plans. Nursing care plans individualize each patient's care by assuring that each patient receives nursing care appropriate for his or her needs. Written nursing care plans reduce fragmentation of nursing care by helping to assure consistent methodical communication of nursing activities between nurses on the same shift, during shift changes, with other departments, and including all aspects of hospital care and discharge planning. Also, competent nursing care planning requires the nurse to set priorities and interact with the patient regularly. Another advantage is that nursing care planning is essential to continuity of nursing care and allows for collaboration and successful coordination of patient care activities with other departments. Thus, nursing care planning enables one to evaluate the outcome of nursing care, resulting in personal growth because a well-developed written nursing care plan gives direction, guidance and meaning to professional nursing care. Despite the enthusiastic claims regarding these benefits and efforts to prepare the nurse to adapt to this trend, there is very little evidence (if any) that such assumptions have been tested.
Many authors (Mayers, 1978; Brown, 1980; Carnevali, 1983; Fletcher & Mulligan; 1982 Huckabay & Neal, 1979; Manthey, 1981; Nichols & Barstow, 1980; Bower, 1977) have identified several problems that currently prevail with writing nursing care plans. Among these are pressures of short staffing with insufficient time to devote to writing care plans; nursing staff who are unclear about what nursing care plans are and how to use them; newly graduated nurses who are frustrated in their attempts to implement the educational concept of nursing care planning in the service setting; unclear definitions in the service setting regarding the meaning and purpose of nursing care plans; a lack of clear delegation of responsibilities to certain nursing personnel who are to be responsible for initiating and updating care plans; and lack of positive reinforcement by an authority figure.

Bower (1977, p. 124) says, "Too many nurses already feel burnout with what seems to be unnecessary and time consuming paper work .... [for them, writing a nursing care plan] is a waste of time, especially since no one ever reads it". Mayers (1978) says that when all these basic problems are operative in a given nursing service setting, it is not surprising that the concept of patient care planning causes great frustrations for nursing service, education, practice and administration.
Daws (1988), in her study of the attitudes of nursing staff on medical and surgical wards towards the use of nursing care plans as a teaching tool, reported four observations which are in agreement with Bower's remarks. It can be concluded from Daws' results that the ward sisters, who are the supervisors, had an overall positive attitude, while staff nurses and enrolled nurses, who are actually the caregivers, were apathetic. Daws point out that two of the barriers which are constantly seen raised against the nursing process are lack of time and the need for nurses to be doing rather than writing, the two being raised in harmony. Daws also points out that there are several sensitive statements which concur with Bower's ideas but three statements stand out as being different: "I do not feel qualified to teach others when I have never been properly taught; I lack experience in writing effective care plans; the format of documentation needs to be critically scrutinized, nurses cannot be expected to use the tool which precludes efficient patient care".

Moss (1988, p. 615) says this about the nursing care plan:

No single issue, thought, technique, problem, or phenomenon has received as much attention, has been as much written about, taught, talked about, worked at, read about
and cried over with little success. No other issue in nursing has caused so much guilt, energy to be misspent. Yet, no other piece of paper in a hospital system is as devoid of information as that entitled "Nursing Care Plan".

She concludes by saying that nursing care process has been met with considerable degree of resistance from many nurses. This is unfortunate because the nurse is the key figure in the care of patients. She spends more time with the patients than any other single professional and will often know the patient more intimately than anyone else.

Grady (1986, p. 44) admits that the nursing process is the backbone of our practice but asks, "Is there life after nursing care plans?" She continues to say that her experience with hospitals, involvement with in-service groups, all those articles on the pros and cons of making nursing care plans and finally her own survey of the situation have reinforced her fears that we may be beating a dead horse! She further explains that nurses often skeptically associate care plans with questions about their competence and doubts about their authority.

Nurses are painfully aware that many choices for helping patients are not within the range of their job description. Committing their thoughts to an official form
risks criticism of their judgement or exposure of their inability to control the outcomes of their plans. So nurses resort to ritualistic jargon, delay taking notes or filling in forms, assign low priority to planning and complain of the lack of time or facilities for completing this kind of work. Thus they passively resist the implications of what may really be at stake; constantly providing their capacity for resolving situations whose variables they cannot control for a case load of patients which may change every day or so.

Finally, Grady (1986, p. 44) suggests, "Nursing orders should be given the same imperative authority that physicians orders are" and says that if that were a common performance expectation, nurses would have the incentives they need to master the planning process and to confidently share information within the institutional policy standards and affirm their powers in judgement. In such an atmosphere, there will indeed be life after care plans. Shaffer (1986, p. 46) remarks, "Care plans inconsistent in stages of development and utilization of nursing process; how many times has this critical evaluation echoed down the hospital corridor after a Joint Commission on Accreditation of Hospitals (JCAH) accreditation visit?" The main complaint is that the care-plan forms concentrated on tasks which medical orders generated rather than the analysis, decisions and
interventions nurses themselves initiated. Shaffer further explains that recent nurses had received regular instructions on the nursing process at school while many experienced nurses had not, and the curricula for Licensed Practical Nurses (LPNs) in their region did not include nursing process at the time.

Since both managers and staff members in her hospital so often questioned "finding the time" to develop and document care plans, they used the notion of time itself as the starting point for exploring just how nurses could incorporate this activity into their work patterns. Nurses came to realize that pleading lack of time masked insecurities about competence. The word soon spread that (LPNs) and Registered Nurses (RNs) would be held responsible and must sign the nursing diagnosis (Shaffer, 1986).

Karen (1988) describes the advantages experienced from a trial of bedside care plans which was introduced in her hospital. She says that this trial proved to be popular with nurses and patients in that it improved nurse-patient communication and led to more personalized care. Also, results indicated that all patients either needed or wanted more information on the nursing process. Most of the patients liked the bedside handover report and some even gave their own reports on the nursing care. They felt that they were more informed because they had access to
information about themselves and their progress and because they were involved in their own care. Also, relatives tended to read the care plans more than the patients being nursed, and most relatives liked the idea of access to patients' information at the bedside. The night staff felt that the bedside reporting with care plans was an improvement because, if they had been off duty for a while, it was easier to get to know the patients and to become familiar with their nursing care. All trained staff felt that there was more effective communication, that the patients were more involved with this system, and that the use of the bedside care plans was generally less time consuming than a report at the nurses' station.

The day staff also noticed that physicians were looking at care plans. They felt that the physicians were more inclined to look at them at the bedside than to look through a kardex at the nurses' station because they were already used to looking at the temperature charts at the end of beds. They hoped that the new system would encourage doctors as well as nurses to see patients more as individuals with social and psychological as well as physical needs.

The ward, moreover, did seem to be more organized because of improved communication with patients and because the relative ease of access to information brought theory and practice together. Indeed, used in conjunction with
patient allocation, it was a less time-consuming method, and the more personalized care was appreciated by patients, making them feel more of an individual rather than "the man with the hernia in bed three" (Karen, 1988).

Primary Nursing Care

Primary nursing was first discussed in the nursing literature in 1970. Since that time some authors (Anderson & Chio, 1980; Marram, 1980; Mayer, 1982) have expanded on the topic. Primary nursing has been defined as a philosophy for a patient care delivery system which places the responsibility and accountability for planning and directing the 24-hour nursing care of an individual patient to one nurse for the duration of the patient’s hospital stay. It is a professional commitment made by the registered nurse to specifically assigned patients and their families (Zander, 1980). Raab (1985, p. 11) says, "When the primary nurse is not working, her nursing care plan for her client is being followed by the other nurse taking care of the patient".

Key elements described by several authors (Christman, 1980; Mayer, 1982; Zander, 1980) which help define the concept of primary nursing are: accountability, responsibility, advocacy, authority, autonomy, continuity, commitment, collaboration, coordination, communication and decentralization.
Studies of primary nursing (Christman, 1980; Mayer, 1982; McCarthy & Schifacagna, 1978) have shown that it has improved cost effectiveness; increased patient, nurse and physician satisfaction; decreased staff turnover; increased contact between nurse and patient; reduced fragmentation of care; increased patient education; and improved nurses' documentation, especially written care plans.

MacDonald (1988), however, wonders whether primary nursing is worth it. She states that primary nursing involves an investment in energy, time, money and emotions. She further explains that, with emphasis on accountability and autonomy, it might even be possible to increase professionalization of nurses. She nevertheless concludes by saying that primary nursing is worth trying because it has many advantages, such as staff satisfaction, patient satisfaction, quality of care and cost effectiveness that are possible to achieve.

Raab (1985, p. 12) says, "Unit administrators agreed that one of the most difficult aspects of implementing primary nursing care was preparing the staff for change". She also lists steps to take when preparing staff for change; these include modelling, discussing feelings, addressing the appropriate timing of events, being sensitive to staff needs and reinforcing professional responsibility and accountability for their actions.
Attitudes and Behaviour

Moss (1988, p. 616) says, "Strict definition of attitudes vary considerably although it is generally agreed that a person’s attitude towards an object constitutes a predisposition to respond to that object in a favourable or an unfavourable manner". Several other authors have defined attitude as an abstract term, composed of beliefs which focus on a specific object and relates to a person’s inner experience (Conners, 1979; Eichorn, 1981; Hayler, 1983). Lewin (1935, 1951) studied the influence of attitude on behaviour and concluded that behaviour is a joint function of determinants unique to the person and those contributed by the environment. The simultaneous interaction of the two may result in a behaviour pattern for that individual. This behaviour pattern can be altered by the influence of either perceived or real rewards or punishments and/or by repeated experience. This suggests that when nursing leaders consistently place high value on nursing care plans and nurses perceive this value, nurses will consistently write nursing care plans.

Carlson (1986) puts a question of whether attitude really influences the writing of nursing care plans. She describes an audit of 21 nursing units in her hospital which demonstrated that nursing care plans were not being written for each patient within 24 hours after admission. They
decided to investigate the problem and they set a positive hypothesis which stated, "A positive attitude about nursing care plans would have a direct relationship to the writing of nursing care plans by professional nurses". For this study, attitude was chosen as the independent variable because, in a review of the literature, attitude was referred to as being a factor that influences behaviour. The dependent variable was the actual number of written nursing care plans determined by the monthly audit score of each unit. A questionnaire developed by Yurchuck (1974) was used to measure the attitudes of professional nurses about nursing care plans. Using the attitude score and an audit score from each unit, a Pearson correlation was calculated for the 21 units ($r = .26$, $p = .12$). Although the hypothesis was not statistically supported, there are implications for nursing managers to consider.

Carlson (1986) suggests that nursing managers need to evaluate how nursing care plans are presented, promoted and used in their work setting. She further asks the following questions, "Are nurses complimented on their nursing care plans or is a particularly well written care plan recognized by being posted as 'care plan of the month'? Is the writing of nursing care plans incorporated into staff performance evaluation?" Carlson concludes that there seems to be no one answer to why nursing care plans are not written. She
optimistically states that this is a productive area for further studies.

Another study on attitudes of registered nurses towards writing nursing care plans was done by Thomas (1984). The study compared the attitudes held by 30 registered nurses working in a functional nursing staffing-assignment pattern with attitudes held by 27 registered nurses working in a primary nursing staffing pattern towards writing care plans.

The attitude scores for nurses in the functional group ranged from 77 to 146, with a mean of 123.23 and a standard deviation (SD) of 13.14. The attitudes scores for the nurses in the primary group ranged from 92 to 149, with a mean of 126.62 and a SD of 11.39. The resultant $t$ statistics ($t = 1.0369$) was not significant at the .05 level. Therefore, it was concluded that there was no significant difference between the two groups in their attitudes towards writing nursing care plans. However, the scores of the nurses working in the primary nursing environment did reveal a smaller range.

Thomas (1984) spelled out the following implications and recommendations for further studies:

1. Clearly defining the differences between nursing care plans used as a learning tool and nursing care plans used as a communication tool.

2. Developing a reward system in institutions for those
who write nursing care plans.

3. Replicating her study to look at actual behaviour as well as attitude towards writing nursing care plans.

Instructional Programme

Cunning and Pflederer (1986, p. 49) ask, "Why aren't nurses using the nursing process in their daily practice?" They go on to say that the time-honoured excuse of needing more time and more nurses probably is not the answer. These authors identify two factors which contribute to the obvious gap between theoretical understanding and practical application of the nursing process: variance in knowledge base among nurses and the reward systems in many clinical settings, especially in acute health settings, do not encourage formal use of nursing process.

Cunning and Pflederer (1986) comment that the nursing literature has addressed the individual concept of the process but has given less attention to the process as a whole. Therefore, neither the nursing student nor the experienced nurse may have a clear picture of the entire process. They go on to say that today's semantic jungle of "nursing process terminology" contributes to the difficulty in implementing these concepts in daily nursing care. For example, they ask the following questions: Is the patient problem called a nursing need or nursing diagnosis? Are
goals, objectives or expected outcomes identified in the patient care plan? Is the planned nursing care called the nursing approach, nursing action or nursing orders? They conclude by saying that it is no wonder nurses find themselves confused.

To reduce the gap in the knowledge base among nurses and to establish a common working vocabulary of nursing process concept, Cunning and Pflederer (1986) developed a schematic model for use in staff development programmes. This model has been useful in the orientation of new nursing employees, continuing education, workshops and staff development in-services. It contains 29 concepts diagrammed according to the four basic tenets of the nursing process. The gameboard facilitates thinking and group involvement. The concepts identified in the schematic model are printed on individual labels. The gameboard exercise consists of dividing the concepts labels equally among participants. The participants are instructed to arrange the labels approximately on the gameboard. Discussion is encouraged as the group aims to arrive at a mutually agreeable placement of all the concepts.

Mayers (1983) presents a course outline for teaching staff the principles of nursing care planning skills. She points out that variations of models can be used by all nursing agencies and subunits. This outline is followed by a
detailed explanation of the content of each class and clinical assignment. Some of the points included are overview of the system, stating the problems, stating the expected outcome (objectives), nursing orders, evaluation of nursing history and use of standard care plans. The above general outline calls for a course of seven classes of two hours each. Mayers (1978) concludes that the successful implementation of a system for care planning depends also upon the support of administrative and in-service staff. She goes on to say that it is the job of the in-service education department, in cooperation with staff nurses and others, to plan an organized educational programme whose aim is to aid staff in discovering how they can best put effective care planning into operation. No wonder Roper, Logan and Tierney (1983) suggest that perhaps, indeed, some of the difficulties experienced up till now in using the nursing process stem from the lack of a model to give it relevance.

As there is no Tanzanian literature related to nursing, the nursing literature from North America and the United Kingdom is used. Due to divergences in cultural factors, Tanzanian nurses have tended to select concepts which are compatible with Tanzanian values and the availability of nursing resources. The type of nursing care delivery is functional nursing.
CHAPTER 2

METHODOLOGY

Research Design

A quasi-experimental design (split-group pretest and posttest) was used to examine the hypothesis and the research question. The investigator was interested in examining the effect of the instructional programme on the attitudes of registered nurses towards nursing care plans. Shelley (1985, p. 52) says, "Differences found between the pretest and posttest scores could show that the experimental variable had an effect." She points out that extraneous events such as death of a relative or friend while the programme is in progress might change attitudes of a participant.

There was an experimental group (who received the instructional programme) and a control group (who did not receive the instructional programme) at two consultant hospitals in Tanzania. In this study the word "nurse" referred to a registered nurse.

SETTING

This study was conducted at Muhimbili Medical Centre, Dar-es-salaam, and at Kilimanjaro Christian Medical Centre, Moshi, in Tanzania, East Africa. Tanzania covers 945,000 sq
km (compared to 9,976,000 sq km for Canada) (World Development Report, 1985, World Bank) and has a total population of over 21.7 million (compared to 24.9 million for Canada). About 85% of the population live in the rural areas.

The Muhimbili Medical Centre in Dar-es-salaam is the main consultative and teaching hospital in the country. There are other consultant hospitals at Moshi, Mwanza and Mbeya. The Muhimbili Medical Centre, incorporating the Faculty of Medicine, University of Dar-es-salaam, came into being by an act of Parliament in 1977 (Sarungi, 1987). It is an autonomous body whose management is vested in its Board of Trustees and has a Director General, who is the chief executive officer, and has a dean of the Faculty of Medicine.

The Kilimanjaro Christian Medical Centre in Moshi is a zonal reference hospital for five regions of Tanzania and is a training centre for various categories of students. The Kilimanjaro Christian Medical Centre is an institution established by the Good Samaritan Foundation of Tanzania at the specific request of the Tanzanian Government in 1971 (Tesha, 1981). It is headed by the Medical Superintendent assisted by the Executive Secretary of the Good Samaritan Foundation and other authorities.
The classification of nursing staff is similar to that in Canada. However, there are some differences: nurses aides, referred to as auxiliary staff, take a one-year course and are responsible for basic patient care; the registered nurses’ assistants and Licensed Practical Nurses (RNAs, LPNs) are called Grade B nurses; they take a three-year course and are responsible for all nursing care of patients except administration. Registered Grade A nurses are trained for four years in a national hospital and may aspire to become administrators, nurse teachers, public health nurses or head nurses.

The department of nursing service at Muhimbili Medical Centre has approximately over 594 trained staff and 920 untrained staff. There is a crisis involving an acute shortage of trained staff and shortage of equipment in Tanzania as a whole.

The bed capacity at Muhimbili Medical Centre is 1,500 and at Kilimanjaro Christian Medical Centre approximately 420 beds, but the daily inpatient census mounts up to about 450 at times. Each ward indicated that the number of patients per trained nurse was high; for example, a 40-bed surgical or medical ward could have 50 or 60 patients. There may be two trained nurses (1 Grade A and 1 Grade B) and two or three nursing auxiliary staff. It was obvious that the current crisis facing nurses at the two centres required
innovative ways of achieving the patients’ quality of care with fewer resources and greater efficiency.

Letters of explanation concerning the study (Appendix A) and a consent form (Appendix B) were sent to the Director General of Muhimbili Medical Centre and to the Medical Superintendent of Kilimanjaro Christian Medical Centre, Moshi, for permission to approach the registered nurses working in their facilities, and permission was granted.

SAMPLE

The sample included 36 registered nurses working in two different hospitals about one thousand miles apart. A list of 30 names from each hospital was obtained from the matrons and nurses were randomly selected to participate according to the following criteria:

1. Registered to practice professional nursing in Tanzania.
2. Able to read and write in English.
3. Responsible for direct patient care.
4. Willing to participate in the study.
5. Have not had previous in-depth instruction in the nursing process or nursing care plans.

A table of random numbers was used to draw a sample of 36 registered nurses, 19 from Muhimbili Medical Centre and 17 from Kilimanjaro Christian Medical Centre and all responded
to the questionnaires. The total pool of registered nurses "A" level available at either institution was also limited by nurses who had previously attended workshops on nursing care planning and by the number of nurses that could be released for the study by either of the matrons concerned.

**INSTRUMENTS**

The "Nursing Care Planning Attitude Rating Scale" (Thomas, 1984; Appendix C) was used to collect data. This instrument consisted of 30 items on a five-point Likert-scale (strongly agree - strongly disagree) which addressed attitudes towards different aspects of planning nursing care (scores on the instrument range from 30 - 150). Originally this instrument was developed by Yurchuk (1974) and was designed to measure students' attitudes towards nursing care planning. Thomas, with permission from Yurchuk, modified the items to fit registered nurses. Permission to use the Nursing Care Planning Attitude Scale was given (Appendix D).

The instrument was reported to have content and face validity and internal consistency reliability (alpha=.93). Scoring for the items was transformed so that high means indicated agreement with the premise that a nursing care plan was important and low means indicated disagreement with the premise.
Demographic Questionnaire: The participants completed a demographic questionnaire developed by the researcher, pertaining to age, sex, educational background, year of graduation and years of practice (Appendix E). The information was used to describe the sample and to determine if there was any relationship between those variables and the attitudes of registered nurses towards nursing care plans.

DATA COLLECTION PROCEDURE

General information was given during the initial meeting with participants. The objectives of the study was explained, as well as confirmation of their participation and freedom to withdraw from the study at any time.

To start with, each group was given two questionnaires (Pretest) on nurses' attitudes towards nursing care plans and a demographic questionnaire. Following completion of the pretest, the control group received a brief general introduction to the nursing process and care planning. Then two weeks later, the experimental group was given the three-week instructional programme on the nursing process and nursing care planning skills (Appendix F). Six weeks later, each group was measured (Posttest I) on their attitudes towards nursing care plans. Finally, two months later, each group completed the questionnaire (Posttest II).
Although it was anticipated that the Nursing Care Planning Rating Scales could be completed in twenty minutes, it took forty-five minutes each time. The demographic questionnaire took ten minutes instead of the five minutes that had been anticipated by the researcher. The total data collection was completed in a five-month from November 1990 to March 1991.

INSTRUCTIONAL PROGRAMME

The following was the proposed course outline for the Instructional Programme. Lecture/discussion was given by the researcher. (See Appendix F for the full Instructional Programme).


Descriptive definition of the nursing process.

1. Assessment:
   . Communicate effectively
   . Observe systematically
   . Perform a nursing history
   . Perform a head-to-toe assessment
   . Identify interaction patterns
   . Validate impressions

2. The Process of Planning:
   . Establish priorities of care
3. Implementation:

- Indicate expected outcome criteria (client goals)
- Write nursing interventions that will lead to the achievement of the proposed outcome
- Record nursing outcomes and nursing interventions in an organized fashion on the care plan.

4. Evaluation:

- An ongoing process that determines the extent to which the goals of care have been achieved
- Revision of nursing care plan as needed.

In actual practice, it is impossible to separate the phases because they are interrelated and interdependent.

II The Nursing Care Plan

1. Purposes: Individual care, continuity of care, communication and evaluation

2. Characteristics:

- Written by a registered nurse
- Initiated following the first contact with the client
- Readily available
- Current.
3. Components of nursing care plans:
   · Problems (actual, possible and potential)
   · Outcome criteria (client's goals)
   · Nursing orders or nursing interventions
   · Rationale
   · Evaluation.

This outline was compiled from several authors (Carpenito, 1983; Taptich, Iyer & Bernocchi-Losey, 1989; Doenges, Moorhouse & Geissler, 1989). The programme was conducted for two hours per day, five days a week, for three weeks. During the first week, participants learned about the nursing process concept as a whole. In the second week, they learned about the nursing care planning process. Finally, in the third week, the participants put the nursing process into use.

LIMITATIONS

1. The study was limited to a small sample of 36 registered nurses working full time in two different consultant hospitals.

2. Characteristics of the sample that might limit the generalizability of the research findings were the Hawthorne effect (subjects behaving in a particular manner largely because they are aware of their participation in a study).
3. There are different sociopolitical characteristics in each hospital. Muhimbili Medical Centre, which is in the city, has a warm climate, mixed tribes and incorporates the faculty of medicine; while Kilimanjaro Christian Medical Centre which is in the northern region, is in a cooler climate, has highland that is covered by snow-capped, 19,340-foot-high Mt. Kilimanjaro, (the highest peak in Africa), and Chagga is the main tribe.

4. The current crisis facing nurses in Tanzania ... understaffing, shortage of equipment and other situational factors ... might have presented problems.

5. The study was limited by the subjects' willingness to verbalize their thoughts and feelings.

ETHICAL CONSIDERATIONS

The risk to subjects participating in this study was minimal or non-existent. Subjects who volunteered to participate in this study were assured that their names would not be identified by the investigator. Confidentiality of the hospital and the registered nurses in the study was strictly maintained.

Subjects were also assured of voluntary participation and that whether they participated or not would not affect their job. Signed permission was not required. Return of the completed questionnaire implied consent to participate.
DATA ANALYSIS

The SAS software package was used for statistical analysis at Dalhousie University. Descriptive statistics was used to summarize the subjects' attitudes and the demographic data. The research hypothesis and the question were answered as follows:

1. Registered nurses who receive an instructional programme will have positive attitudes towards nursing care plans than registered nurses who do not receive the instructional programme.

Repeated Measures Analysis of Variance (ANOVA) was used to measure the effects of the instructional programme on the registered nurses' attitudes towards nursing care plans.

2. Is there a relationship between demographic factors such as age, sex, educational background, year of graduation and years of practice and the attitudes of registered nurses towards nursing care plans?

Pearson's $r$, also known as the Product Moment Correlation Coefficient, was used to measure the relationship between attitudes and demographic variables.
CHAPTER 3

STUDY RESULTS AND DISCUSSION OF FINDINGS

The purpose of this study was to examine the effect of an instructional programme on attitudes of registered nurses towards nursing care plans (experimental group) and to compare these attitudes with registered nurses who did not take part in the instructional programme (control group).

Demographic Data

Participants were 36 registered nurses who worked full time in two consultant hospitals in Tanzania. The subjects completed questionnaires about attitudes towards nursing care planning and a short demographic data form. Of this sample, 19 participants were in the experimental group and 17 participants were in the control group.

The subjects ranged in age from 24 to 47 years (M = 30.8, SD 4.9). In the experimental group, the mean age was 30.2 years (SD 4.1) whereas in the control group, the mean age was 31.5 years (SD 5.8).

In the experimental group, 17 participants were female and two were males, while in the control group, all participants were female. Therefore, because there were only two males in the study, gender was not assessed in relation to participant's attitude towards nursing care plans.

The basic education of the subjects represented three
out of the four entry levels: the primary, secondary, high school and diploma. In the experimental group, there were 17 participants with secondary education and two participants with high school education. In the control group, four participants had primary education, 12 had secondary education and one participant had high school education (Table 1).

The number of years of experience as registered nurses ranged from one to 16 years (M 6.2, SD 3.9). In the experimental group, the number of years of experience ranged from one year to 16 years (M 6.4, SD 4.5). In the control group, the years of experience ranged from one to 12 years (M 5.9, SD 3.3). Thirteen of the 19 (68%) participants in the experimental group had less than eight years of experience while 15 of the 17 (88.2%) participants in the control group had less than eight years experience. There were 10 Assistant Nursing Officers, three Nursing Officer III and six Nursing Officer II in the experimental group while in the control group, nine were Assistant Nursing Officers, seven Nursing Officer III and one Nursing Officer II.

The participants in the study graduated from their schools of nursing between 1976 and 1989. Ten participants in the experimental group and nine participants in the control group graduated in 1983 or later.
Table 1

Basic educational preparation

<table>
<thead>
<tr>
<th>Type of education</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>0.0</td>
<td>23.5</td>
</tr>
<tr>
<td>Secondary</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>89.5</td>
<td>70.6</td>
</tr>
<tr>
<td>High school</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>10.5</td>
<td>5.9</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Thirty-five participants indicated that nursing care plans was emphasized in the curriculum of their basic programmes. In the experimental group, seven of the 19 nurses (36.8 %) reported that they had attended inservice courses on nursing care plans, while only one of the 17 participants in the control group indicated this. All but one of the participants in the study reported that they felt adequately prepared to develop nursing care plans.

The hypothesis that guided this study was:
Registered nurses who receive an instructional programme will have more positive attitudes towards nursing care plans than registered nurses who will not receive an instructional programme.

Attitudes towards nursing care plans (for example "The systematic planning of nursing care is an important professional responsibility") were measured by a modified form of "Nursing Care Planning Attitude Rating Scale" (Thomas, 1984). The alpha coefficient was .64 for the pretest, .49 for posttest I, and .60 for posttest II.

The attitude scores of the experimental group on the pretest ranged from 114 to 142 with a mean of 125.7 (SD 7.0) (minimum score 30 and maximum score 150); posttest I ranged from 112 to 143 with a mean of 129.4 (SD 7.6); posttest II ranged from 120 to 143 with a mean of 130.4 (SD 7.1). The attitude score for the participants in the control group on
the pretest ranged from 102 to 141 with a mean of 129.8 (SD 10.4); posttest I ranged from 119 to 144 with a mean of 128.7 (SD 6.9); posttest II ranged from 108 to 139 with a mean of 126.8 (SD 9.6). (Table 2)

The Repeated Measures Analysis of Variance (ANOVA) was used to analyze the effect of site on the participants attitudes towards nursing care plans over time. There was no overall site and time effect on the participants attitudes towards nursing care plans.

There was a slight increase of mean scores for the experimental group from 127.7 during pretest to 129.4 during posttest I and 130.4 during posttest II, and for the control group there was a slight decrease of mean scores from 129.8 during pretest to 128.7 during posttest I and to 126.8 during posttest II. Therefore, it was concluded that there is evidence to suggest that there was an effect of the instructional programme on attitudes towards nursing care plans although it is not significant. There was no significant difference between participants on attitudes towards nursing care plans but within participants, there were significant differences in the time x site interaction ($F=3.81, P=.03$).

The research question: Is there a relationship between demographic factors such as age, educational background, year of graduation and years of practice and attitudes of
### Table 2

**Attitude scores**

<table>
<thead>
<tr>
<th>Type of Test</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=19</td>
<td>n=17</td>
</tr>
<tr>
<td></td>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
</tr>
<tr>
<td>Pretest</td>
<td>125.7</td>
<td>6.95</td>
</tr>
<tr>
<td>Posttest I</td>
<td>129.4</td>
<td>7.59</td>
</tr>
<tr>
<td>Posttest II</td>
<td>130.4</td>
<td>7.1</td>
</tr>
</tbody>
</table>
registered nurses towards nursing care plans?

A Pearson Product Moment Correlation Coefficient was computed to examine the relationship between these variables. There was no significant relationship between any of the variables to nurses attitudes towards nursing care plans.

Discussion

Although many nursing services in various health care settings are making significant progress towards the implementation of nursing care plans, several agencies across the world find implementation of care planning to be a major problem. Mayers (1978) cites some of the difficulties to be related to short staffing with insufficient time to devote to nursing care plans, to nursing staff who are unclear about what nursing care plans are and how to use them. She goes on to say that the recent graduates are usually frustrated in their attempts to implement the educational concept of nursing care planning in the service setting.

Some authors (Bower, 1977; Mayers, 1978; Fletcher & Mulligan, 1982) have identified another crucial concern for this difficulty as lack of knowledge about the nursing process as a whole concept. MacMahon (1988) says "Perhaps the nursing process is only a developmental phase to be
 mastered before one moves on". This investigator anticipated that registered nurses who had the instructional programme would have significantly higher scores on attitudes towards nursing care plans than the registered nurses who did not take part in the instructional programme for this study. The results of this study did not support this hypothesis.

When the mean scores are compared with maximum and minimum scores of the participants, the findings reveal that both the experimental and control groups were all above 3.0—the neutral point on the scale for the combined total of the present instrument (90 points of a maximum of 150 points). Thus, this indicates that both groups had positive attitudes towards nursing care plans. However, when mean scores of both groups are compared from the pretest to posttest II, the findings demonstrate that the positive attitudes for the nurses in the experimental group slightly increased and were maintained throughout the research period whereas for the control group, the mean scores were higher during pretest and slightly decreased during the posttest I and posttest II. This investigator speculates that with an extension of time for the instructional programme from three weeks to six weeks, there might be a significant effect of the programme on nurses attitude towards nursing care plans.

There may be several reasons for the lack of difference in scores. Beer and Locke (1965) stated that a more positive
response to the task is evolved when one had extended experience with the task. Because of the design of this study, this investigator was not able to measure the extent to which the registered nurses who had the instructional programme had gained in content from the three weeks instructional programme. Further investigation is necessary to assess the learning behavioural changes of the registered nurses throughout the learning process in addition to measuring the attitudes of the subjects towards nursing care plans.

Another factor that may have influenced the findings of this study was that the English Language is not the first language in Tanzania. Although nursing studies are done in English Language, this investigator suspects that some of the subjects might have had some problems in understanding and answering the 30-item questionnaire. Interestingly, almost all participants indicated that they felt adequately prepared to develop a written nursing care plan but the majority indicated "strongly disagree" to one of the statements "I feel very confident of my ability to plan individualized patient care". Yura and Walsh (1978) state "At times different persons perceive the same problem in different ways".

Another factor that may have influenced the results of this study is the sensitivity of the instrument. The Nursing
Care Planning Attitude Rating Scale, although proven reliable may not have been capable of identifying small cultural based attitudinal changes. A review of the item statistics showed that the subjects' responses were spread across the entire response continuum and that the majority were above the mean of 3 with a range of 1 to 5.

This study revealed that there was no significant difference in subjects' attitudes towards nursing care plans by age. This investigator had anticipated that the older the nurses, the less positive their attitude scores would be towards nursing care plans, and also that the registered nurses with less advanced education, i.e. primary education, to have negative attitudes towards nursing care plans, the assumptions being that registered nurses who graduated prior to 1985 might not have had nursing process as part of their basic educational programme. However, if positive attitude towards nursing care plans is to be promoted and maintained, nursing process and nursing care planning must be stressed in all nursing educational programmes. This study revealed that all except one nurse indicated that there had been emphasis placed on nursing care plans in their basic programmes.

Although all subjects except one indicated that they felt adequately prepared towards developing nursing care plans, the tool failed to indicate to what extent they were
prepared. This investigator argues that if they felt adequately prepared, why were they not writing and implementing the nursing care plans in their health care settings? This is another area requiring further investigation.

In summary, mean attitude scores of both registered nurses who had the instructional programme and those registered nurses who did not have the instructional programme did indicate an overall positive attitude towards nursing care plans. However, no significant difference could be found between the two groups in relation to age, educational background, year of graduation and years of practice. Thus, these four factors may be interrelated and further research is necessary to identify those factors most important in influencing registered nurses attitudes towards nursing care plans.
CHAPTER 4

SUMMARY, IMPLICATIONS FOR NURSING AND RECOMMENDATIONS

Summary

The aim of this study was to examine the effect of an instructional programme on attitudes of registered nurses towards nursing care plans and to compare these attitudes with registered nurses who did not take part in the instructional programme. It was also designed to focus on the relationship between the attitudes of the registered nurses towards nursing care plans and selected demographic variables.

This study was conducted in two consultant hospitals in Tanzania, East Africa. The sample included 36 registered nurses working full time in a variety of care giving units. The attitudes of the subjects were measured using the Nursing Care Planning Attitude Rating Scale modified by Thomas (1984). Each subject completed a demographic data form developed by the researcher. The information gathered was used to describe the sample in relation to the participants' attitudes towards nursing care plans.

For the purpose of answering the hypothesis for significance of difference in attitude scores between participants who had the instructional programme and those
who did not take part in the instructional programme, Repeated Measures Analysis of Variance (ANOVA) was used. Pearson Product Moment Correlation Coefficient was utilized to study the relationship between the attitudes of the subjects and the demographic variables.

The attitude scores for the participants who had the instructional programme ranged from 114 to 143 with a mean of 125 (SD 7.0) for the pretest. The attitude scores increased over time during posttest I and posttest II. The attitude scores for the participants who did not take part in the instructional programme the scores for the pretest ranged from 102 to 141 with a mean of 129.8 (SD 10.4). The attitude scores decreased over time during posttest I and posttest II. It was concluded that there is evidence that there was an effect of the instructional programme although it is not significant. There was no significant relationship between the attitudes of the participants and the demographic variables.

Conclusions

The major conclusions drawn from the study are as follows:
1. Registered nurses in Tanzania regardless of their work setting have a positive attitude towards nursing care plans.
2. Registered nurses in Tanzania as a whole, regardless of
whether they participated in the instructional programme or not, have positive attitudes towards nursing care plans but the instructional programme increases and maintains the participants positive attitudes.

3. The attitudes of registered nurses in Tanzania towards nursing care plans do not vary according to demographic variables of age of the participants, years of practice as registered nurses "A" level and whether or not emphasis was placed on the development of nursing care plans in their basic nursing programme.

4. Attitudes did not appear to be different between the two sites.

Limitations of the Study

1. The study was limited to a small sample size of 36 registered nurses working full time in two different consultant hospitals in Tanzania, thus this limits the generalization of the research findings.

2. The Hawthorne effect (subjects behaving in a particular manner largely because they are aware of their participation in the study) could have affected the results and therefore the generalization of the research findings.

3. The current crisis facing nurses in Tanzania might have influenced the participants' attitudes towards many aspects of patient care including planning patient care due to
understaffing, shortage of equipment etc.

4. The use of the English Language by the participants as a third language might have presented some problems of understanding when completing the 30-item questionnaire.

5. The study was limited by the participants' willingness to verbalize their thoughts and feelings.

6. Finally, this study focused only on attitudes of the participants towards nursing care plans and did not examine the behavioural changes as a result of the instructional programme. It is possible that some nurses with positive attitude scores have negative attitudes towards nursing care plans. It is also possible that even those participants who attempt to write nursing care plans do so because it is expected by the nursing administrators and nursing educators but have negative attitudes towards nursing care plans.

Implications for Nursing

A registered professional nurse as a unique person interacting with a patient who is also a unique individual comprises that system of nursing whose goal is to meet the health care and needs of people as individuals. One means by which the registered nurse may realize this goal is through the utilization of nursing process and nursing care plans.

Unfortunately, not all registered nurses currently practicing in hospitals realize the significant impact that
nursing care plans can have towards professional responsibility, accountability and the quality of nursing care given to patients. Mayers (1978) concludes that successful implementation of a system for care planning depends also upon the support of administrative and inservice staff. She continues to say that it is the job of the inservice education department, in cooperation with staff nurses and others, to plan an organized educational programme whose aim is to aid the staff in discovering how they can best put effective care planning into operation.

A study of this nature which focuses on the effect of the instructional programme on attitudes of registered nurses towards nursing care plans may increase the awareness in nursing educators, nursing administrators and nursing researchers.

Implications for Nursing Education and Nursing Administration

These data can be used by nursing educators in schools of nursing and staff development programmes for promoting and maintaining the registered nurses positive attitudes towards nursing care plans. As well, nursing educators can use this information to formulate a more constructive and more practical instructional programme which includes the nursing process and nursing care plans as a whole concept.
Mayers (1983) suggests that a variety of models can be used to teach nursing staff in nursing agencies and subunits on principles of nursing care planning skills.

Nursing educators must clearly define and demonstrate to the student nurses and registered nurses the difference between the nursing care plan as a learning tool and as a communication tool. This will reduce the frustration held by new graduates in their attempt to implement the educational concept of nursing care planning in the service area. Moritz (1979) emphasized the vast difference between the learning tool used in education and the communication tool used in the service setting. The learning tool is generally developed for one patient, over a long period of time, and is usually more detailed. In contrast, the nursing care plan as a communication tool is developed for many patients, is ever changing, and is concise. Its purpose is to increase communication among the staff members and the patient. Thus, nursing leaders can enhance and reinforce the differences between the learning tool and the communication tool by actively participating in the orientation of new graduates and new employees.

Since attitudes are known to influence behaviour, and effective change can occur if there is modification in both attitude and behaviour of an individual; nursing administrators and nursing educators collectively should
work out some strategies for effective implementation of nursing care plans in their health care settings. MacDonald (1988) stated that with more emphasis on accountability and autonomy, it might even be possible to increase professionalization of the registered nurses.

Although all participants except one from this study reported that they felt adequately prepared to develop nursing care plans, clinical observation have revealed that very few, if any, nursing care plans do exist in the wards. Grady (1986) suggests that nursing orders should be given the same imperative authority that are given to physicians orders. She further states that if that were a common performance expectations, nurses would have the incentives they need to master the planning process, and to confidently share information within the institutional policy standards and affirm their powers of judgement. For nursing administrators and nursing educators this fact is significant.

Carlson (1986) suggests that nurse managers need to evaluate how nursing care plans are presented. She further asks whether nurses are complimented on their nursing care plans, particularly a well-written care plan being recognized and posted as a care plan of the month or the writing of nursing care plan by the nurse being incorporated into the staff performance evaluation.
This investigator suggests that educators periodically review the objectives of the inservice educational programmes. They should also place priority for conducting inservice courses on nursing process and nursing care plans as a whole concept. This is because lack of theoretical knowledge or technical skills, either perceived or real, can result in frustrations and negative attitudes among registered nurses towards the nursing care plans.

Recommendations for Further Research
As a result of this study, recommendations for further research include:

1. A follow up with the registered nurses in the experimental group, to determine changes in their attitudes towards nursing care plans over time.

2. A replication of this study in more simplified English or in Swahili, in order to identify those factors most important in influencing registered nurses' attitudes towards nursing care plans.

3. Measure nurses' attitude towards nursing care plans by means of the "Nursing Care Planning Rating Scale" following the establishment of a continuing educational programme, designed to teach and evaluate the participants' learning behavioral changes throughout the learning process about nursing process and nursing care plans.
Summary

This study revealed that the mean attitude scores of the participants did indicate an overall positive attitude towards nursing care plans. However, there was no significant difference between the participants in relation to age, educational background, year of graduation and number of years of practice. There was a slight increase of mean scores for the experimental group relative to that of the control group throughout the study period. Thus, it was concluded that there is evidence to suggest that there was an effect of the instructional programme on attitudes towards nursing care plans, although it is not significant. The implications for nursing education and nursing administration, as well as recommendations for further research, have been indicated.

The results of this study correspond with the results obtained by Thomas (1984) from her study on the attitudes held by registered nurses working in a functional nursing staffing pattern with attitudes held by registered nurses working in a primary nursing staffing assignment pattern towards nursing care plans.
APPENDIX A
July 20, 1990

Prof. P.M. Sarungi
The Director General
Muhimbili Medical Centre
P.O. Box 65000
Dar-es-salaam, Tanzania

Dear Prof. Sarungi:

Re: Research Project

I am a graduate student in the school of Nursing at Dalhousie University. Through my programme of study, I have become interested in factors which influence the nursing care plans by registered nurses.

In order to complete my studies, I have to perform a research project. I have decided to conduct the study in my home country at Muhimbili Medical Centre and at Kilimanjaro Christian Medical Centre, Moshi. Please see the attached preliminary summary for more details of the project.

This project should begin in October 1990 and be completed by late March 1991. Enclosed is a permission sheet. If you are in agreement to allow me to perform the research project in your hospital, please sign this sheet and return it to me.

Sincerely,

Leah J. Mkumbwa
RN, Dip. NE, BScN, BA Psychology
Graduate Student
School Nursing
Dalhousie University.
July 20, 1990

Dr. P. Tesha
The Medical Superintendent
Kilimanjaro Christian Medical Centre
P.O Box 3010
Moshi, Tanzania

Dear Dr. Tesha:

Re: Research Project

I am a graduate student in the school of Nursing at Dalhousie University. Through my programme of study, I have become interested in factors which influence the nursing care plans by registered nurses.

In order to complete my studies, I have to perform a research project. I have decided to conduct the study in my home country at Muhimbili Medical Centre and at Kilimanjaro Christian Medical Centre, Moshi. Please see the attached preliminary summary for more details of the project.

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Sincerely,

Leah J. Mkumbwa
RN. Dip. NE, BScN, BA Psychology
Graduate Student
School of Nursing
Dalhousie University.
APPENDIX B

I understand that subjects who agree to participate may be asked to complete questionnaires about their experiences of nursing care during and after hospitalisation. I also understand that this study will not involve any risk to any patient of this Institution. If confidentially will be maintained for the individual and only the investigator will have access to this information. Any details which will be kept strictly confidential. If you have any questions, you will be...
CONSENT FORM

I give my permission for Leah J. Mkumbwa, who is a graduate student at Dalhousie University to perform her research as factors influencing nursing care plans on registered nurses. I understand that subjects who agree to participate will be asked to complete questionnaires about attitudes towards nursing care planning and a short demographical data forms.

I also understand that this study will not involve a risk to employees and patients of this institution. I understand that confidentiality will be maintained for the institution and the individual nurse by the investigator.

______________________________       __________
Director General/Medical Superintendent       Date

______________________________       __________
Witness
CONSENT FORM

I give my permission for Leah J. Mkumbwa, who is a graduate student at Dalhousie University to perform her research as factors influencing nursing care plans on registered nurses. I understand that subjects who agree to participate will be asked to complete questionnaires about attitudes towards nursing care planning and short demographical data forms.

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[Signatures and dates]

Witness

Date
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I also understand that this study will not involve a risk to employees and patients of this institution. I understand that confidentiality will be maintained for the institution and the individual nurse by the investigator.

[Signature]
Director General/Medical Superintendent

[Signature]
Witness

27/9/90
Date

27/9/90
Date
APPENDIX C

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<th></th>
<th>The written systematic planning of nursing care is an important professional responsibility.</th>
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<td>2.</td>
<td>I think it is important that nursing care plans be developed for all patients on a given unit.</td>
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<td>Setting patient priorities doesn't really help me in writing nursing care plans.</td>
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<td>4.</td>
<td>My employing agency should set aside time for me to plan nursing care.</td>
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<td>5.</td>
<td>Most nurses place too much emphasis on planning nursing care.</td>
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<td>6.</td>
<td>Nursing care plans are not valuable.</td>
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<td>7.</td>
<td>Planned nursing care tends to improve patient care.</td>
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<tr>
<td>8.</td>
<td>Nursing care plans are vital to patients who are chronically ill, e.g., with diabetes.</td>
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<tr>
<td>9.</td>
<td>Written systematic planning of nursing care is a waste of time.</td>
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<td></td>
<td>Writing nursing care plans is primarily a student activity.</td>
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<td>11.</td>
<td>Head nurses should encourage the writing of nursing care plans.</td>
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<td>12.</td>
<td>Written nursing care plans are not really essential to the continuity of nursing care.</td>
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<td>13.</td>
<td>I feel very confident of my ability to plan individualized patient care.</td>
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<td>14.</td>
<td>Nurses should assume more responsibility for planning as well as giving care.</td>
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<td>15.</td>
<td>Evaluation of nursing care is easier with a written nursing care plan.</td>
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<td>16.</td>
<td>Writing nursing care plans is another communication burden imposed on nurses by nursing educators.</td>
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<td>17.</td>
<td>Skilled nurses don't need to develop nursing care plans.</td>
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<td>18.</td>
<td>Short-term patients cannot benefit from skillful planning of nursing care.</td>
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<td>19.</td>
<td>There is little need for nursing care plans when there is good communication on a unit.</td>
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<tr>
<td>20.</td>
<td>Nursing care plans are vital to patients who are critically ill, e.g., with acute myocardial infarction.</td>
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February 6, 1990

Leah J. Mkumbwa
1602 Walnut Street
B3H 352
Halifax, Nova Scotia
Canada

Dear Leah:

I was delighted to receive your letter requesting permission to utilize the Instrument on Nursing Care Planning Attitude Rating Scale. The revised instrument used in the article is enclosed.

Your background and proposed research study is most interesting. I am currently working on another project with an instructor on students attitudes towards writing nursing care plans before graduation and then 6 months to 1 year after graduation. Nurses concerns about care plans are valid and shared by many nurses internationally.

Good luck on your research project. I would be very interested in obtaining copies of your results.

Sincerely,

JoAnn Thomas
Vice President Patient Services

JT/gm
Enclosure
Number ______

DEMOGRAPHIC QUESTIONNAIRE

Please answer the following questions.

Age: ________

Gender: Female_______ Male_______

Basic Education: Primary _______
                   Secondary _______
                   High School _______
                   Diploma _______

Number of years of practice as a registered nurse ______

Year of Graduation from Basic Programme
(School of Nursing 'A'): ____________________________

When you were in your basic programme, were nursing care plans emphasized? Yes ______ No ______

Have you attended any in-service courses in nursing care plans? Yes ______ No ______

Do you feel adequately prepared to develop a nursing care plan? Yes ______ No ______
RESEARCH PROJECT

INSTRUCTIONAL PROGRAMME

ON

NURSING PROCESS

AND

NURSING CARE PLANS

DATE: NOVEMBER 1990 TO MARCH 1991

PLACE: TANZANIA EAST AFRICA.

INVESTIGATOR:

LEAH JONGO MKUMBWA

GRADUATE STUDENT NURSE
DALHOUSIE UNIVERSITY.

THE AUTHOR FULLY ACKNOWLEDGES THAT THIS
INSTRUCTIONAL PROGRAMME
IS AN ADAPTATION OF TAPTICH, B., IYER, P., AND BERNOCCHI, L.
(1989).
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RESEARCH PROJECT COURSE OUTLINE

1. THE NURSING PROCESS:
   Assessment, Planning, Implementing and Evaluating. Descriptive definition of the nursing process.

A. Assessment:
   . Communicate effectively
   . Perform a nursing history
   . Observe systematically
   . Perform a head-to-toe assessment
   . Identify interaction patterns
   . Validate impressions.

B. The Process of Planning:
   . Establish priorities of care
   . Indicate expected outcome criteria (client goal)
   . Write nursing interventions that will lead to the achievement of the proposed outcome
   . Record nursing outcomes and nursing interventions in an organized fashion on the care plan.

C. Implementation:
   . Initiation and completion of the actions necessary to achieve the stated outcomes
   . Use plan of care as a guide
   . Record the clients' care on the proper documents.
D. Evaluation:

. An ongoing process that determines the extent to which the goals of care have been achieved
. Revision of nursing care plan as needed.

11. THE NURSING CARE PLAN

1. Purposes: Individual care, Continuity of care, communication and evaluation

2. Characteristics:

. Written by a registered nurse
. Initiated following the first contact with the client
. Readily available
. Current.

3. Components of nursing care plans:

. Problems (potential, actual, possible)
. Outcome criteria (clients' goals)
. Nursing orders or nursing interventions
. Rationale
. Evaluation.
NURSING PROCESS

Objectives:

1. Give a brief introduction of the nursing process and nursing care plans.
2. Give a descriptive definition of the nursing process.
3. List the components of the nursing process.
4. Describe the components of the nursing process.

A brief introduction of nursing process and nursing care plan

Gradually, since the introduction of the nursing process in 1950, nursing care plans have been widely acclaimed as a better means of providing quality care to patients. Unfortunately, the application or non-application of the nursing process through the use of nursing care plans is an ongoing problem for Tanzanian nurses and, indeed, for nurses all over the world.

Descriptive definition of the nursing process

A process is a series of planned actions or operations directed toward a particular result or goal. The nursing process is thus a systematic method by which nurses plan and provide care to patients. This involves a problem-solving approach that enables the nurse to identify or assess client's needs and problems, and to plan, deliver

The nursing process is conceived of as having five phases (components): assessment, diagnosis, planning, implementation and evaluation. In actual practice, however, it is impossible to separate these phases because they are interrelated and interdependent.

ASSESSMENT

Is the first phase of the nursing process. The nurse’s activities are focussed on gathering information regarding the patient, the patient’s family system, or the community for the purpose of identifying the patient or client’s needs, problems, concerns or human responses. Data are collected in a systematic fashion by means of the interview or nursing history, physical examination, laboratory results and other sources.

N.B. Assessing is the act of reviewing a situation for the purpose of diagnosing the patient/client’s needs and problems.

DIAGNOSIS

During this phase, the data collected during assessment are critically analyzed and interpreted. Conclusions are drawn regarding the client’s needs, problems, concerns and human responses. The nursing diagnoses are identified and
provide a central focus for the remainder of the phases. Indeed, it is based on the nursing diagnoses, that the plan of care is designed, implemented and evaluated.

By definition nursing diagnosis is: a statement that describes a health state or an actual or potential in one's life processes (physiological, psychological socio-cultural developmental and spiritual) (Carpenito, 1983).

Therefore, nursing diagnosis (problem statement) is the end product of the assessment process, or reaching conclusions about patient's data that have been collected and analyzed.

Nursing diagnosis is not a medical diagnosis. The nursing diagnosis is a client problem amenable to nursing interventions, whereas a medical diagnosis is a client problem amenable to medical intervention (Yura and Walsh, 1978).

PLANNING

In the planning phase, strategies are developed to prevent, minimize, or correct the problems identified in the nursing diagnosis. Short-range or proximate goals as well as Long-range or ultimate goals will be established within which priorities are set.

The planning phase consists of four steps:
1. Establishing priorities for the problems diagnosed.
2. Setting outcomes with the client/family to correct,
minimize, or prevent the problems.

3. Writing nursing interventions that will lead to the achievement of the proposed outcomes.

4. Recording nursing diagnoses (statement problems), outcomes, and nursing interventions in an organized fashion on the nursing care plan (Page 111).

N.B. Planning is determining what can be done, what goals are necessary to assist the client to achieve his/her desired goals.

IMPLEMENTATION

Implementation is the initiation and completion of the actions necessary to achieve the outcomes defined in the planning stage. It involves communication of the plan to all those participating in the client’s care. The interventions can be carried out by members of the health team, the client or the client’s family. THE PLAN OF CARE IS USED AS A GUIDE. The nurse continues to collect data regarding the client’s condition and interaction with the environment.

Implementation also includes recording the client’s care on the proper documents. This documentation verifies that the plan of care has been carried out and can be used as a tool to evaluate the plan’s effectiveness.

N.B. Implementation is an action-oriented phase of nursing process in which the nurse is responsible for implementing the nursing care plan that was developed. Or is
when the nurse is performing actions necessary to achieve patient’s goals.

EVALUATION

The last phase of the nursing process is evaluation. It is an ongoing process that determines the extent to which the goals of care have been achieved. The nurse assesses the progress of the client, institutes corrective measures if required and revises the nursing care plan as needed.

Therefore, evaluation is appraising client’s behavioural changes as a result of the actions of the nurse.

A. ASSESSMENT:

Some effective ways of collecting client’s data:

1. Communicating effectively:

   All nurse-patient interactions are based on communication (therapeutic communication). The technique incorporates verbal and non-verbal skills as well as empathy and a sense of caring.

   Non-verbal communication includes active listening and a heightened sensitivity to the person’s emotional state. Also the use of silence, touch and eye contact.

   In order to create an effective nurse/patient relationship, the nurse should be an active listener and take a patient as an individual.

2. Perform a nursing history:

   The most important method of collecting patient’s data
is the nursing history. This procedure usually involves purposeful observation and interview or oral history. The nursing history is a record of the client's habits, emotional status, expectations and other factors. The purpose is to provide a basis for optimum treatment and care.

The nursing history differs from medical history, for it deals with patient's social history, personal habits, emotions and expectations, whereas medical history deals with past illness, present and previous illness and hospitalization.

3. Observe systematically:

The ability to observe systematically is dependent on nurse's knowledge base (anatomy, physiology and pathophysiology, etc.).

The following is a list of some of the essential observations that can be made by the nurse through the use of her/his senses of sight, hearing, smell and touch.

Observations by seeing

General appearance and visible mood expressions eg. male, female, old, young, infant, tall, short, dirty, clean, comatose, stuporous, etc.

Visible physical factors:

Head and neck area: macrocephalic, microcephalic, bulging fontanelles, tumours, goiter, swelling, etc.
Hair: amount, texture, baldness, etc.

Eyes: swollen eye lids, red moist eye, discharges, etc.

Nose: small, enlarged, dilated nares, draining mucus, etc.

Ears: normal, enlarged, deformed, bloody discharges, etc.

Lips and mouth: smooth lips, tongue condition, teeth-full dentition or absent, etc.

Skin: clear, full, firm, aged, boils, colour-racial, jaundiced, etc.

Posture: position, erect, upright, scoliosis, shoulder curved, etc.

Extremities: extended, paralyzed, knocknee, absence of fingers or toes, etc.

Trunk area: breathing rhythmic, barrel chest, protruding ribs, enlarged nipples, abdomen flat or protruding, liver or spleen condition, etc.

Pelvic and genital area: male, female, infant, old, urinary, bloody or mucus discharges, deformities, etc.

Attachments and prostheses: jewelry, wedding or casual rings, watches, eye glasses, etc.

External environment of the client: immediate personal-possessions wallet, brief case, purse, picture, etc.
Observation made by hearing

Voice and speech: calm, excited, high pitched, expression of needs and problems, etc.

Breathing: rhythmic, slow, rapid, difficult inhalation, deep, stertorous, etc.

Heart sounds: apex rate, regular beat, tachycardia, etc.

Abdomen: presence of peristalsis, absence of peristalsis, flatus, etc.

Environment: conversation with client, radio, etc.

Observations made by touching

The client-body contour size, hair dry or oily, swelling of fontanelles, skin texture and temperature, abdomen: soft, hard, masses, swelling, etc.

Muscle tension, muscle relaxation, convulsing, etc.

Observation made by smelling

Client's respiration, body odor, axillary odors, perfumes, urinary and stool odors, etc.

Environment odors: food, hospital odors, etc.

4. Perform a head-to-toe assessment:

The nurse examines the client in a physically consecutive manner, that is each body part is examined (inspected carefully to ascertain its quality or condition) for structure and function, starting with the head and working down to trunk and extremities in an orderly manner.
Nurses should perform a thorough examination so as not to overlook the other parts of the patient's body.

5. Identify interaction patterns

Many questions arise as the nurse gathers initial patient/client's data during the assessment period:
- What is the person's usual pattern?
- What represents altered patterns?

Collect enough data before making a nursing diagnosis, which is the judgement, conclusion, or inference that occurs as a result of nursing assessment. It is an established and independent function of the professional nurse and calls for the utmost intelligent judgement and sensitivity in her part. It is one of the keys to the successful practice of nursing.

6. Validate information (impression)

By assessing client's problems deliberately and systematically through knowledgeable perceptions, observation and communication and by validating her findings rather than relying on her intuition, the nurse provides qualitative data from which accurate diagnoses can be made and a sound plan developed.

Inferences are the nurse's judgement or interpretation of cues, which in turn, are facts that one acquires through the use of one's senses (touch, smell, hearing, sight) or findings from a patient's subjective feelings (or
statement). By making inferences, the observer goes beyond immediate sensory data and extracts information that gives the truest impression of the nature of the situation. Thus, crying is a cue from which the nurse might infer that a patient was fearful or sad, and being 5 ft. tall and weighing 200 lbs are cues from which obesity might be inferred.

Example of a problem statement (nursing diagnosis)

Potential impairment of skin integrity related to imposed bed rest.

N.B. Making inferences about the information and validating with the client emphasizes the nurse's desire to get an accurate picture of the client's experiences and will minimize the possibility of imposing a judgement based on inadequate information, a few symptoms or limited social history.

B. PLANNING PROCESS

Planning is designing or arranging the parts of something to achieve an end or goal. Is the third step of the nursing process. The nurse's activities are focussed on designing the nursing strategies to prevent, reduce or eliminate health problems identified during analysis.

Planning is done before giving the nursing care to the patient unless it is an emergency situation. Thus, it is intellectually based.
The components of planning

1. Setting priorities
2. Establishing client goals and outcome criteria
3. Planning nursing strategies
4. Writing a nursing care plan.

i. Establishing Priorities

Priority setting is the process of establishing a preferential order for nursing strategies in order of importance (starting with emergencies moving to non-emergencies).

One strategy to use, for doing this can be to follow Dr. Abraham Maslow’s Hierarchy of Motives (Dworetzky and Davis, 1989).

- Physiological or survival needs (air, food, water, sleep, elimination and sex).
- Safety and security (shelter or housing and hospital wards)
- Love and belonging (family and friends)
- Esteem and self-esteem (good opinion of others and oneself)
- Self-actualization (personal growth and achievement and realization of potentials and spiritual).

Maslow argues that the higher motivations can come into play only when the basic needs have been satisfied.

To set priorities the nurse decides which needs and problems...
deserves attention first, which second, etc.

**Urgency of health problems**

Life-threatening situations require that the nurse establish priorities quickly in order to save the patient's life, e.g. difficulty in breathing should always be attended to first, as the individual can die within a very short time.

**ii. Establishing Client Goals (Expected Outcome)**

A goal is a hoped-for outcome. A goal is the desired outcome for the nursing interventions and the patient's expectations. The appropriateness and direction of the nurse's actions are determined by the client's behavioural changes in the direction of goal achievement.

**A point to note:** What do we expect the patient to be doing after we have given the nursing care? State the client's goals in terms of desired client behavioural changes (outcome criteria).

Outcome criteria are statements that describe specific observable and measurable responses of the patient. Thus, whereas an example of a client goal might be:

- The client will not develop the presentable complications of imposed bed-rest (too broad).

The appropriate criteria might be:

- Have intact skin (skin integrity) particularly over bony prominences (specific).
Writing nursing interventions (orders, strategies)

"Nursing orders" is preferable to terms such as "nursing approaches", "activities", "actions" and "interventions" because "order" connotes a sense of accountability for the nurse who gives the order and for the nurse who carries it out.

Nursing orders are the specific actions the nurse takes to help the client meet the established health goals, e.g. Increase fluids to at least 2500 ml/24 hours.

Recording:

Document nursing outcomes and nursing interventions or nursing orders in an organized fashion on the care plan.

Advantages of recording (documentation)
- Effective way of communicating client's information
- For future memory or reference.
- To visualize the progress of the patient
- For legal and administrative aspects.
- Increase nurses knowledge and skills
- For teaching purposes.

C. IMPLEMENTATION

Implementation is putting nursing orders into action, the actual application of the care plan to work. This is the fourth step of the nursing process. It involves preparing and carrying out the actual nursing care as planned and documenting the clients responses to the interventions.
After the patient, environment and supplies are prepared, interventions are carried out as planned. During the implementation step, the care plan is transformed from idea to practice.

There are three phases of implementation:
1. Preparation
2. Interventions
3. Communication.

- Preparation

The nurse should first create a good interpersonal relationship with the patient. Greet the patient, mention the patient’s name. As a result the patient feels good and secured (the patient is a KING in our nursing profession). This is client/patient centered.

The nurse should identify the client’s abilities, fears, hopes and needs. Then the nurse should review the care plan, detect priorities of care, what specific actions need to be taken first, what equipment and skills are needed and who is best qualified to deliver this care.

- Implementation (intervention)

The primary focus of the implementation step is intervening on client’s behalf. Successful implementation of nursing actions requires an environment in which the client feels comfortable and safe.

The nurse should create a comfortable environment
involving consideration of patient's room, space, privacy, age, light, etc.

Client's rights

1. Considerate and respectful care
2. Individualized care (client centered)
3. Informed consent
4. Privacy
5. Confidentiality
6. Information and explanation of care
7. Continuity of care.

The client's needs and the level of nursing care should also change, necessitating adjustments in the level, kind and amount of nursing strategies.

- Communication

Ongoing communication with the client and health care team and accurate documentation are crucial for continued quality care delivery. Good communication also forms the basis for objective evaluation.

Since the client is the focus of the interventions, the client should be the first person with whom the nurse communicates. During and after intervening the nurse assesses the client's responses and judges the effectiveness of the interventions.

N.B. Always remember to get the patient's view about his/her care.
Reports about client's condition should be factual, specific and concise. It should also include only relevant data, such as patient's physical status, psychosocial status, emotional responses, spiritual concerns also nursing concerns, care plan status, what is accomplished, what needs to be done, current concerns, and helpful hints to facilitate meeting client's needs.

N.B. Receiving a patient's report is as active a process as giving it.

GUIDELINES FOR IMPLEMENTING NURSING STRATEGIES
1. Nursing actions are related to the knowledge and skills of the nurse.
2. Nursing actions are adapted to the individual client's beliefs, values, age and health status.
3. Nursing actions should always be safe (to prevent injury).
4. Nursing actions should always or often require teaching supportive and comfort component.
5. Nursing actions should always be holistic (view patient as a whole).
6. Nursing actions should respect the dignity of the patient/client and enhance his or her self-esteem e.g. (privacy).
7. The client's active participation in implementing nursing actions should be encouraged as health
permits (assertiveness).

D. EVALUATION

Evaluation is the planned, systematic comparison of the client's health status with the outcome. It is the critically important and concluding step of the nursing process which makes it nursing's scientific method.

It is an act of discovering whether the plans were fulfilled and goals met. It is an ongoing process that determines the extent to which the goals of care have been achieved. Therefore, to evaluate is to judge or appraise the changes experienced by the client as a result of the actions of the nurse.

The nurse uses assessment skills to gather data and uses objectives or client's goals for the purpose of evaluation. Several aspects of client's health status are evaluated, including the appearance and functioning of the body, with the nurse focussing on how the appearance, condition and functioning of client's body have changed as a result of nursing interventions.

The patient's chart or file which contains the results of the studies such as blood gasses, blood glucose, chest x-rays, electrolytes or urinalysis, etc. is also used to gather data for the purpose of evaluating the functions of the client's body and thus the client's progress.

Basic knowledge about normal values and interpretation
of abnormal findings is needed and expected from registered nurses.

Strategies of collecting some specific symptoms:

1. Direct observation will yield data about current situations of the patient/client's response to illness.

2. Client/patient interview - discussion with client will provide the nurse with information about the client's symptoms.

3. Subjective - feeling felt by the patient.

Clinical symptoms are observable. But be careful with pain symptoms - tricky.

4. Psychomotor skills (practical) are fairly easy to evaluate, especially if observable behaviour has been identified by direct observation. Watching the client performing specific activities is the most appropriate way to evaluate psychomotor skills.

5. Emotional states are difficult to measure because they are subjective feelings experienced by the patient. Direct interaction with the client is useful in evaluating emotional status. The nurse observes facial expression, body posture, and tone of voice as well as content of verbal messages.

6. Feedback from other staff is important for validating observations about the client. There are many opportunities to share information, including informal conversations,
patient-centred conference and change of shifts reports.

DOCUMENTATION

The nurse documents (writes) the evaluation of the outcome achievement of patients on the nursing care plan. Phrases such as "patient had a good day" should be avoided. Documentation of clients status would include specific notations such as "Patient complained of substernal chest pain radiating to left arm".

Revise the nursing care plan as required - go back to the assessment stage and follow the process again to detect patient's achievement and replan if necessary. This is essential because in actual practice it is impossible to separate the phases since they are interrelated and interdependent.
NURSING CARE PLANS

Objectives:
1. Give a descriptive definition of nursing care plan.
2. Describe the purposes of nursing care plans.
3. Explain the characteristics of nursing care plans.
4. Describe the components of nursing care plans.
5. Utilize nursing care plans when giving care to patients (clinical objective).

Nursing is a therapeutic process involving mutual interaction of the nurse, client and family collaborating for the maximum health potential. The nurse assists the client to acquire his maximum potential by supporting, protecting, caring and preventing diseases.

Nursing care planning is a decision-making process which results in the creation of a written plan for nursing action based on the patient/client’s assessment and resulting in implementation of the plan (Lewis, 1976; Hunt and Marran, 1980).

A patient care plan is an abstract of data concerning a specific patient, organized concisely and systematically. Is a written guideline for the patient that is organized in such a way that “anyone can quickly visualize what care is needed and why”. The plan facilitates achievement of the patient’s goals. It clearly communicates the nature of
patient' needs and problems and specifies what nursing care and medical interventions are planned (Mayers, 1978, p. 12).

Nursing care plans are a visible and written record of the implementation of care planning. Care planning uses a problem-solving approach which enables the nurses to be more objective and logical in their work.

A care plan is centred on the patient and is specifically written for that individual.

The nursing care plan takes into account the patient's background and environment, his/her likes and dislikes, strength and weakness, his/her responses to his/her illness and with his/her daily life. It is so individualized that it cannot be used for any other patient.

THE PROBLEM SURROUNDING NURSING CARE PLAN IMPLEMENTATION

The problem of introducing the use of nursing care plans is the discomfort felt by nurses who might be having to systematically think for the first time about the reasons for the care which they are giving to patients and having to consider whether it is what the patient wants or needs at that time. (Nurses might lack the in-depth knowledge of the nursing process and nursing care plans as a whole concept).

Patient care planning is the systematic assessment and identification of patient's problems, the setting of objectives and the establishment of methods and strategies
for accomplishing them.

From the above statements it would seem that care planning is not new but needs to be taken positively by nurses. It also means abandoning some old ideas about ward routine. Such thinking involves change and usually change is uncomfortable.

So what are the purposes of nursing care plans?

1. Individual Care:

Since illness affects each person in a unique way, care plans must be directed to the responses and needs of each patient. Even if two patients are suffering from the same disease (e.g. malaria), each should have his or her own care plan.

2. Continuity of Care:

Care plans enhance continuity of care as clients are being cared and transferred between wards and hospitals. Nursing staff and other health personnels can benefit from the comprehensive information found on the nursing care plan. This information clearly communicates the client's needs and effective ways to manage them.

3. Communication:

Written nursing care plans reduce fragmentation of nursing care plans by helping to assure consistent, methodical communication of nursing activities between nurses on the same shift, during shift changes, with other
departments and including all aspects of hospital care and discharge planning. Also competent nursing care planning requires the nurse to set priorities and communicate with the patient regularly.

Therefore, nursing care planning enables the nurse to evaluate the patient's outcome of nursing care resulting in personal growth because a well-developed written nursing care plan gives direction, guidance and meaning to professional nursing.

Regardless of the setting in which they are written, nursing care plans have four desirable characteristics.

1. Written by a registered nurse

Many nurses' associations in the world have addressed the development of nursing care plan. They have defined the role of registered nurse as including responsibility for initiation of the care plan.

Based on educational preparation, the registered nurse is the most qualified person to complete this function, together with the patient and other staff. Specific nursing activities may be delegated to other nurses or other health personnel, but the responsibility and accountability for initiation of care plan rests with the registered nurse.

2. Initiation following first contact

The nursing care plan is most effective when it is
initiated after the nurse's first contact with the client. Immediately after obtaining the data base, the nurse should begin to document actual, or potential diagnoses, outcomes and interventions.

A partially developed plan will assist the nurse to focus on the client's needs. Additional communication with the patient may result in further development and refinement of the plan of care.

The nurse who obtains the data base has the most information about the patient. It is important that this nurse develop a comprehensive data base. However, complete data may be not collected because of time constraints, the condition of client, or the initiation of treatment regime. In this case the nurse should develop a preliminary plan based on the available information, gather the absent data during subsequent contacts with the patient, refine the preliminary plan and delegate the responsibility for obtaining the absent data and assign the preliminary plan to another registered nurse.

The trend toward decreasing the length of stay for hospitalized patients emphasizes the importance of initiating the collection of data concerning the clients needs at the time of admission. The nurse thus promotes efficient coordinated care and facilitates timely discharge planning.
3. **Readily available**

The nursing care plan should be available to all personnel involved in the care of the patient/client. It is better if it is placed at patient's bedside because of the following reasons; it improves nurse-patient communication and leads to more personalized care. Most patients like the bedside hand-over report and some even give their own reports on their nursing care. Patients feel that they are more informed because they have access to information about the measures taken and their progress. Relatives might read the care plans and like the idea of access to their patient's information. It might also make it easy (or easier) for night staff that have been off duty for a while to get to know the patients and to become familiar with their nursing care.

Therefore, placing patients nursing care plans at the end of their beds would encourage doctors as well as nurses to see patients more as an individual with social and psychological as well as physical and spiritual needs. Patients will feel more of an individual, rather than as "the man with the hernias in bed 3."

4. **Current (up to date)**

Since the nursing care plan is the guideline for directing the client's care, it must contain current information. Therefore, it is essential that all components
of nursing orders that are no longer valid be either eliminated or revised.

N.B. The continuity and individuality of care plans may be jeopardized when it is not carried out well, and this may cause the client to lose confidence in the nurse's ability to deliver appropriate care.

**COMPONENTS OF A NURSING CARE PLAN**

1. **Problem**

An actual problem is one that has been clinically validated as being present; something that has been altered in patient's body, e.g.

- Altered body heat higher than body temperature related to hyper-pyrexia.
- Nutrition: less than body requirements related to difficulty in swallowing (loss of body weight, sore mouth, sore throat), signs of marasmic and kwarshiokor, anaemia, dehydration and wrinkled skin etc.
- Altered nutrition related to loss of appetite.

**Potential problems** are altered states that may occur if certain nursing interventions are not ordered or implemented, e.g.

- Potential for trauma related to body weakness or related to dizziness.

**Possible problems** are problems that may be present but that require additional data to be confirmed or ruled out, e.g.
- Possible fear related to operation or possible pain related to upcoming effects of surgery.
- Lack of communication related to inability to speak words.
- Fluid volume deficit or less body fluid volume related to decreased fluid intake.
- Potential impairment in skin integrity related to complete bedrest or related to traction equipment.
- Nutritional alteration: less than body requirement related to chewing and swallowing difficulties.

Outcomes

Development of outcomes (results) is considered to be an important element of the planning process and it is a blueprint for the evaluation component. These are concise, measurable outcomes that are also reasonable to evaluate the client's progress towards the desired outcome as well as the effectiveness of nursing interventions. Outcomes also help to define specific patient/client behaviours that demonstrate that the problem has been corrected, minimized or prevented.

Guidelines for writing outcomes

a. Outcomes should be related to the problem statement (nursing diagnosis)

   e.g. Altered nutrition: less than body requirement related to decreased appetite (nursing diagnosis).

   Outcome: Weight loss does not exceed 3 lbs during
hospitalization.
Or: I want my patient to be able to gain weight from 100-110 lbs after six months.
Or: Potential impairment of skin integrity related to altered nutritional status (nursing diagnosis or problem statement).
Outcome: Skin remains intact. Or no signs of malnutrition.
b. Outcomes are written to focus on the behaviour of the client.
c. The outcome should address what the client will do, when and what extent it will be accomplished.

N.B. Nursing activities should not be the focus of the outcome.

d. Outcomes should be clear and concise (avoid abstract wording since it will serve to confuse rather than help the staff caring for a patient/client).
e. Outcomes should be observable and measurable, e.g.
- Selects food from menu consistent with 1,800 calorie diet.
- Drinks 1,000 mls. of fluids in 24 hours.
f. Outcomes should be time limited, and the time for achievement of the outcome should be stated, e.g.
- By the time of discharge I want my patient to be able to talk.
- Throughout hospitalization I want my patient to be able
to walk.

These suggest the time frame for evaluating the achievement of each outcome, e.g.

Problem statement:
- Chronic pain related to effects of chronic disease

Outcome:
- Expresses comfort within 30 minutes after initiation of comfort measure.

g. Outcomes should be realistic (the outcome should be achievable with the resources, the client, nursing staff and hospital).

Client's readiness to achieve the outcome will be affected by many factors, such as level of intelligence and level of illness. Examples:

By the time of discharge the client will:
- Demonstrate proper foot care.
- Describe signs of infections.
- State the course of action to follow if infection occurs.

3. NURSING INTERVENTIONS

Interventions are specific actions (orders) approaches or activities designed to assist the client to achieve outcomes. They may be either dependent, interdependent, or independent.

Dependent interventions are those related to the implementation of medical orders e.g.
- Weigh a client 3 times weekly (medical order).
  
  The nurse will write:

  - Weigh the patient on Monday, Wednesday and Friday.

Interdependent interventions are the activities that the nurse carries out in cooperation with other health staff members.

For example, if a medical order states "Restrict fluids to 600 ml by mouth plus 720 ml 5% dextrose in 0.45 sodium chloride solution I/V every 24 hours," the nurse and the dietitian will calculate the amount of fluids the client will receive.

  The nursing interventions will be

  - Run I/V fluids via pump @ 30 ml/hrs.
  - Restrict per oral fluid intake.

  Day shifts administer 315 ml. Evening shift 195 ml; Night shift 100 ml.

Independent interventions are the activities that may be performed by the nurse without a physician's direct order. They are the responses that the nurses are licensed to treat by virtue of their education and experience.

Example:

  An 82-year-old lady who fell and broke her hip says to the nurse, "I am going to have to watch myself when I go home."
The nurse will write:
- Assist the client to identify potential hazards at home.
- Notify patient’s son to help to correct the potential home hazards.

Guidelines for writing interventions

a. Nursing orders should be dated, helps the nurse to evaluate the client’s progress towards achieving the outcome.

b. Nursing interventions should include a precise action verb at the beginning of the sentence.

   All verbs should clearly communicate the expected activities, e.g.
   
   describes, walks, performs, identifies, sleeps, etc.

   Example:
   
   Ambulates from bed to chair bid. 10 am. and 6 pm.

c. Nursing interventions should be consistent with the plan of care, e.g.

   - Reinforce dietitian’s teaching by monitoring client food selection from daily menu.

d. Nursing interventions should be based on scientific principles.

   Example:

   - Teach client to rotate insulin injection

   Scientific principles or rationale:
   - repeated use of same injection site may cause fibrosis,
scarring and decreased insulin absorption.

e. Nursing intervention should be individualized to the client, e.g.

   Jane aged 17 yrs.   Bet aged 84
   Apply foam mattress to bed   Apply air mattress to bed

   Rationale (Reasoning) and logical: employing treatments based on reasoning or generalized scientific principles, to justify behaviour or belief of a certain process.

Example: Nursing Interventions

- Administer analgesics every 4 hours during the first 24 hours.
  - Rationale: Pain relief makes coughing less uncomfortable and more effective.

Nursing Intervention:

- Assist or help the patient in taking her or his food.
  - Rationale: Taking food relieves patient’s hunger.

Nursing intervention:

- Perform dressing daily.
  - Rationale: To promote quick healing of wound.

4. EVALUATION

Evaluation is a concurrent, terminal and continuous process. It is concurrent in that the nurse normally evaluates the patient’s care during the assessment, planning and implementing phase of the process. Terminal evaluation
is done at the end of the process.

How is the client reacting to this nursing action? Is the reaction expected or not expected?
Through evaluation, the nurse accepts responsibility and accountability for her/his actions and shows her/his interest and involvement in enhancing the effectiveness of actions directed towards solving the client's problem.

Evaluation determines whether and to what extent the client's goals have been met or how the client responded to the planned action. The evaluation must continue in a purposeful, goal-directed manner. For example, if relief of pain is to be expected from implementing the nursing action, the results would be known within a short period of time. The client will tell the nurse that her/his pain was or was not relieved.

The nurse could compare the client's behaviour prior to nursing action, noting his posture, facial expression, pulse, respiratory rates, and colour and his ability to focus on other topics and other persons rather than on the pain. Therefore, the nurse could conclude that "No pain relief or limited pain relief was obtained."

It is important for the nurse to review the nursing care plan process and replan, reimplement and reevaluate whenever necessary. This is because nursing care plan is considered to be a continuous process.
NURSING CARE PLAN FORMAT

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Problem Statement</th>
<th>Patient Goals</th>
<th>Nursing Interventions</th>
<th>Rationale</th>
<th>Eval.</th>
</tr>
</thead>
</table>

Hospital: _______ Hospital Reg. No. _______  
Surname: _______ Sex: _______ Ward: _______  
Other names: _______ Religion: _______ Clinic: _______  
Postal address: _______ Nationality: _______  
Date of birth: _______ Medical Diagnosis: _______  
Date of admission: _______ Diagnostic tests: _______  
Date of discharge: _______ Hypersensitivity and special observations: _______