

**A STUDY ON AN EVALUATION OF THE COURSE
FOR THE DIPLOMA IN NURSING
ADMINISTRATION IN ZIMBABWE**

by

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SUMMARY

The purpose of this study was to evaluate the course for the Diploma in Nursing Administration (DNA) in Zimbabwe with a view to identifying strengths and weaknesses in the course and making necessary changes. The study sought to determine the adequacy of resources such as course facilitators, teaching aids and reference materials. Stufflebeam's Evaluation Model was the evaluation design used for the study.

Questionnaires were sent to 228 nurses who completed the DNA course between 1978 and 1997 and were practising in Zimbabwe. One hundred and sixty-five nurses responded giving a response rate of 74%. All six nurse tutors and all sixteen guest lecturers involved in teaching the DNA course were interviewed. A total of 34 matrons who supervised nurses who completed the DNA course were interviewed from hospitals throughout Zimbabwe. Descriptive statistics were used to analyse data.

Components indicated as relevant for inclusion in the DNA course content were management of health finances, labour relations, health sector reforms such as decentralisation, patient/client rights, health care personnel rights and computer literacy. Topics such as human growth and development of children under five years, basic principles of good nutrition, nutritional disorders, family planning and infectious diseases were indicated as irrelevant.

The nurse tutors and the majority of the matrons were satisfied by the general performance of nurses who completed the DNA course. However, there were no aspects in nursing management where all the respondents who completed the course indicated that they were sufficiently prepared. Aspects such as unit budgetary control measures in hospitals need especially to be emphasised when teaching the students.

Respondents who completed the course indicated that the content in the DNA course was too much and suggested lengthening the training period to fifteen months. There is a need to develop a teaching guide for the DNA course. Resources required in the DNA course include a purpose-built school, at least six permanent nurse tutors, current textbooks and journals, a vehicle, computers, fax facility and E-mail to improve communications in the school.

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CHAPTER 1: BACKGROUND INFORMATION

1.1 INTRODUCTION

This study is an evaluation of the course for the Diploma in Nursing Administration in Zimbabwe. The course is conducted at the Post Basic School of Nursing in Harare. Students enrolled in the course come from all parts of Zimbabwe. Occasionally, students from other countries are admitted to the course.

Lock (1984: 252) points out that due to the increasing complexity of hospital management in Rhodesia (now Zimbabwe), it became apparent in the early sixties that leaders in the field of nursing must be well prepared for their management role. This preparation was necessary if the nurse leaders were to function effectively and also if they were to contribute significantly to the policy and planning procedures of the future. Nurses were, therefore, sent from Zimbabwe to the United Kingdom and the Republic of South Africa for training in nursing management. These nurses subsequently formed the nucleus of the nurse managers who provided the expertise in this field. These nurses were able to contribute to the teaching programmes in Zimbabwe when the course for the Diploma in Nursing Administration was introduced in 1978. The objective of the course was to qualify persons to act in a supervisory and administrative capacity in any nursing service within the health services of Zimbabwe, so as to ensure the best possible provision of patient care. The course content is completed within a period of one year (Appendix: 1).

The Post Basic School of Nursing in Harare is the national training school for the course for the Diploma in Nursing Administration. The intake of students in the course for the Diploma in Nursing Administration has risen from six students in 1978 to an average of about twenty-five students per annum for the current intakes. From 1978 to 2000, 378 students have enrolled in the course for the Diploma in Nursing Administration. The Post Basic School of Nursing is also a national training school for the Diploma in Community Nursing which was

instituted in 1975. The current intake of students in this course is also twenty-five students per annum.

The Post Basic School of Nursing has an establishment of six tutors. A principal tutor is in charge of the school. The principal tutor is responsible to the Deputy-Chief Nursing Officer at the Ministry of Health and Child Welfare headquarters. In addition to the nurse tutors there are a number of guest lecturers who teach specialist subjects such as microbiology, pharmacology, sociology, psychology, statistics and epidemiology.

Students enrolled in the course for the Diploma in Nursing Administration must be holders of the General Certificate of Education with passes in at least five subjects at Ordinary Level. One of the subjects at Ordinary Level must be the English Language. The students must also be registered general nurses with midwifery training or any other additional nursing qualification. The students must have a minimum of five years nursing experience exclusive of any period of training to be a nurse.

In addition to the theoretical components, the students are seconded to hospitals for practical experience in nursing management. These students are also seconded to Provincial Health Institutions for community health nursing practical experience. During the course, students are given assignments, written tests and oral presentations as means of assessment. The students have a final examination, consisting of two three-hour papers, which is conducted by the Health Professions Council of Zimbabwe. At the end of the year, students are given questionnaires to evaluate the course.

1.2 THE RESEARCH PROBLEM

Although students complete questionnaires to evaluate the course at the end of their studies, which result in some changes in the school curriculum, there has not been a comprehensive and systematic evaluation of the course since its inception. The current Training Regulations and Syllabus of the course for the Diploma in Nursing Administration were gazetted under the Rhodesia Government Notice

Number 110 of 1978. Ganga-Limando (2001: 32) reports that nurse educators on the African Continent agree on the need for change in the educational system of nurses. Sohn (1987: 27) points out that, although programme-evaluation is an integral component of the educational process in both nursing and education, a review of nursing literature indicates wide agreement that most nursing programmes are not evaluated by means of a comprehensive and systematic approach. Since the course for the Diploma in Nursing Administration has never had a comprehensive and systematic evaluation, the Health Professions Council of Zimbabwe requested an evaluation of the course.

A number of problems have been noted within the Post Basic School of Nursing. Due to financial constraints, the library experiences a shortage of current textbooks and journals. Tutors and students have found it a problem to secure current reading materials. Students have complained about inadequate classroom-facilities such as discussion rooms. Although the Post Basic School of Nursing has an establishment of six tutors, it has not always been possible to secure relief staff when a tutor goes on study leave or resigns. This has often resulted in a shortage of teaching staff. Some students have complained of an excess workload in the course and inadequate time to complete assignments. The inclusion of more topics to be covered by the teaching staff has left less time for students to be involved in self-directed learning. Barnum (1991: 59) points out that whilst teaching staff may want to give students all the information they think the students will ever need, this may not be possible even with a ten-year curriculum. What is necessary is to conduct research and identify the *essential* content to be taught and the amount of time required for it.

Some of the course participants who completed the course have not performed to the satisfaction of their supervisors. According to Di Marco (1989: 57) one of the major problems the nursing profession faces is a lack of effective leadership training, training that can enable head nurses or charge nurses to enhance the effectiveness of their individual units. Mathews (1988: 181) notes that first line nurse managers are increasingly accountable for all aspects of nursing care delivery and resource management in a unit. However, traditional methods of

training nurse managers may not adequately prepare them to meet their increasing responsibilities. It is necessary to determine from the supervisors whether the course prepares the participants to function adequately in the working environment. MacLeod and Farrell (1994: 208) point out that the central theme of curriculum change is the preparation of graduates with new and different perspectives and abilities, graduates who are able to function well in a rapidly changing health care environment. Crookes and Davies (1998: 2) acknowledge that basic professional training provides only an initial platform of knowledge and skills and that it is essential for every practitioner to update himself/herself and keep abreast of the latest developments.

According to Laing (1987: 1) the health care system in Zimbabwe, before Independence in 1980, was designed to serve the privileged communities in the urban areas. This was to the exclusion of the majority of Zimbabweans who lived in the rural areas. The Alma Ata Declaration of 1978 declared the aim of Health for All by the year 2000 through Primary Health Care. The Ministry of Health and Child Welfare (1994: 1) states that the Ministry's overall purpose is to promote the health and quality of life of the people of Zimbabwe. In pursuing this, the Ministry of Health and Child Welfare is committed to the Primary Health Care approach as the main strategy for health development.

The adoption of the Primary Health Care approach by the Ministry of Health in 1980 led to some changes in the curriculum for the course for the Diploma in Nursing Administration. The content for the community health nursing in the Diploma in Nursing Administration course gradually increased over the years. The amount of time spent on rural secondment by the course participants increased. If the major role of nursing education is to prepare professional nurses for practice in order to meet the health care needs of people, nurse educators suggest that the complex nature of economic, cultural, political and social changes require a reassessment of the education system of nurses (Ganga-Limando 2001: 32).

Since independence in 1980, the Zimbabwean Government has consistently increased expenditures on the health sector from 3.6% to 5.3% of the gross domestic product. This increase in expenditure was an effort to address the inequalities in health care provision which existed before independence (Ministry of Health Zimbabwe 1992a: 1), now called Ministry of Health and Child Welfare. However, Chatora (1995:i) reveals that politicians have complained about the spiralling costs of providing health care. Johnston and Herman (1995: 12) observe that resources available for allocation to health care are shrinking and some degree of health care reform appears to be certain. In 1991 Zimbabwe started implementing the Economic Structural Adjustment Programme which resulted in a decrease in expenditure on health services. According to Mark (1990: 186) economic forces have been the primary impetus for change in health care. The changes in health care demanded more effective management skills on the part of the nurse managers in Zimbabwe.

Pratt (1993: 6), Reimels and Alexander (1993: 276), and Schultz (1993: 4) agree that cost-containment is one of the biggest challenges facing nurse managers in today's health care environment. Dunne (1988:11) points out that in an economically oriented, competitive health care environment, middle level nurse managers must now perform their roles with a higher level of managerial and leadership skills than previously required. A systematic, consistent approach to the development of nurse managers will assist them in meeting their role-responsibilities. Poteet (1987: 73) observes that all the changes in society have forced nursing educators as a professional group to re-examine what management skills are needed and wanted. It is necessary to determine whether the course for the Diploma in Nursing Administration in Zimbabwe prepares the participants to function adequately in the changing social and economic environment.

According to Gillmore (1993: 15) changes in health care delivery are adding to the complexity of care and making a considerable impact on nursing. In response to the changing social and economic environment, Chatora (1995:i) notes that many countries are embarking on various forms of health sector reform. The general trend is towards managing services closer to the point at which they are delivered.

This makes services more responsive to consumer needs and preferences. One of the objectives of Zimbabwe's Economic Structural Adjustment Programme is to decentralise operational and management functions from the Ministry of Health and Child Welfare Head Office to the Provincial and District Offices. The Ministry of Health (1992b:6) emphasizes that the decentralised general management system empowers the operational units to investigate and make their own informed decisions about how they can best manage their resources and procure services and supplies. This should lead to increased efficiency and better use of resources, along with greater accountability. Del Bueno (1990: 5) confirms that decentralised authority, contracted chains of command, and changes in management-philosophy have affected both the scope and focus of all nursing management positions. Decentralisation has increased the management scope of the nurse manager. There is, therefore, a need to identify changes which may be necessary in the content of the course for the Diploma in Nursing Administration in Zimbabwe.

Hardy (1990: 33) emphasizes that massive changes occurred in the nursing profession. Technology boomed and changes in illness patterns have occurred. Del Bueno (1989: 118) points out that computer literacy is a necessary intellectual management skill. Nurse managers must understand what data can be collected, stored, generated and analyzed by computers. Although computer literacy is an essential management skill, it has not been possible to teach this skill in the course for the Diploma in Nursing Administration in Zimbabwe, due to financial constraints. Changes in illness patterns have occurred mainly as a result of the human immunodeficiency virus and the resulting acquired immuno deficiency syndrome. These changes have been addressed in the course content of the Diploma in Nursing Administration in Zimbabwe.

To add to changes in illness patterns, Hardy (1990:33) points out that there is a heightened consumer awareness and knowledge of health care matters. Chatora (1995: 15) indicates that in Zimbabwe complaints about health services have been made in the media by the public. According to the Ministry of Health and Child Welfare and the Consumer Council of Zimbabwe (1996:1), clients have the right

to be accorded courtesy and to be treated with respect. The challenge to the nurse manager in Zimbabwe is to provide good quality care. Nondo (1995:viii), reporting on the proposed credentialling system for the nursing profession in Zimbabwe, notes that such a system would clearly direct nursing practice towards achieving excellence. However, to achieve nursing excellence, adequate preparation for the nurse manager would be necessary.

In order to achieve nursing excellence, it is also necessary to set standards of desired performance. The Ministry of Public Service in Zimbabwe introduced a performance appraisal system in 1995, based on the concept of management by objectives. The Government of Zimbabwe (1995: 3) reports that performance appraisal helps in setting clear targets and performance standards for each and every individual. Nurse managers who are responsible for writing reports on subordinates need training in the identification of key result areas and setting of performance targets.

Although the concept of management by objectives is supposed to improve the relationship between subordinates and supervisors, there has been labour unrest in the health services of Zimbabwe. It is important for nurse managers to know what causes labour unrest. The nurse manager should also have skills to deal with labour unrest. Bezuidenhout (1994: 233) recommends a training course in industrial relations for all nursing staff prior to their appointment in a supervisory position. Scalzi and Anderson, cited by Hardy (1990: 33), point out that all changes in the health care environment demand changes in the preparation of nurse managers. It is, therefore, necessary to evaluate the course for the Diploma in Nursing Administration in Zimbabwe, so as to effect the necessary changes.

1.3 PURPOSE OF THE STUDY

The purpose of the study was to evaluate the course for the Diploma in Nursing Administration in Zimbabwe, with a view to identifying the strengths and weaknesses of the course and making recommendations for necessary changes.

1.4 OBJECTIVES OF THE STUDY

The study sought to:

- identify changes which may need to be made in the course content;
- determine the adequacy of human and material resources for the course, such as course facilitators, teaching aids and reference materials;
- identify strengths and weaknesses in the teaching strategies of the course facilitators;
- identify problems faced by the course participants whilst on the course;
- determine from the graduands, supervisors and tutors whether the course prepared the participants to function adequately in the working environment; and,
- identify problems which the course participants may be facing in implementing what they have learnt in the course.

1.5 ASSUMPTIONS OF THE STUDY

The following were the assumptions of the study:

- adults are interested in learning course content, which relates directly to improvement of themselves in the present or future working environment;
- the course content is determined in such a way that it links learning experience to solving problems in the working environment;
- teaching strategies in nursing education, which involve adults in self-directed inquiry, produce the best results; and,
- a learning environment for adults which is characterized by physical comfort and mutual respect, is conducive to learning.

1.6 SIGNIFICANCE OF THE STUDY

The significance of the study is presented in this section.

- The Health Professions Council of Zimbabwe requested a review of the course for the Diploma in Nursing Administration. The findings of the study and the recommendations will be communicated to the Health Professions Council of Zimbabwe and the Post Basic School of Nursing in order to make the necessary changes in the course.
- During the study, the strengths and weaknesses of the course will be identified. Necessary changes will be effected, so that the course content addresses the learning needs of the participants. The participants will, therefore, learn content directly related to improvement of their ability and skills in the working environment.
- The study will identify the problems which the participants experienced in the course and find out ways of overcoming them. If the problems can be overcome, this should result in an environment for participants which is conducive to learning.
- The study will determine the adequacy of resources such as course facilitators, teaching aids and reference materials. Recommendations will be made to the Ministry of Health and Child Welfare to address resources identified as inadequate. The provision of adequate resources should result in improvement of the programme.
- The course facilitators will be interested in knowing what they did well and what the participants liked about the course. The facilitators will also get feedback on any identified deficiencies in their teaching strategies. The feedback will assist the facilitators to improve on the design and implementation of the course.

- ❑ The supervisors will be able to make comments on the performance of the course participants in the working environment. This information will be used to determine relevant course content so as to improve nursing practice.
- ❑ Problems which the course participants may be facing in implementing what they learnt in the course will be identified. The problems will be addressed in order to improve the quality of patient care.
- ❑ The findings of the study will be used to make the necessary changes in the course, in order to keep abreast of developments in the field of Nursing Management.
- ❑ The findings of the study will also be used to develop a relevant teaching guide for the course facilitators. The teaching guide will assist the facilitators to deliver and teach consistent content so as to meet the learning needs of the participants.
- ❑ Improvements in the course should result in the production of a cadre of personnel who should effectively execute nursing management duties. This should benefit the patient, the community and the country at large.

1.7 DEFINITION OF TERMS

This section presents definition of terms.

Nursing Administration

Swansburg (1990: 5) sees **nursing administration** as the application of the art and science of management to the discipline of nursing.

Mellish and Lock (1992: 4) define **nursing administration** as a collection of human activities which enables the practice of nursing (the common goal) to be carried out, during which service is given to people in need of it. This is carried out, in accordance with predetermined policies, plans and relevant legislation, when two or more people work together to provide the component of health care.

In summary, in this study administration will be viewed as a process enabling nursing to be rendered.

Evaluation

Stufflebeam, in Yeaw (1987:125) defines **evaluation** as the process of delineating, obtaining, and providing useful information for judging decision alternatives. In this study, the evaluation process will be used to make decisions on the necessary changes in the course for the Diploma in Nursing Administration.

Management

Grohar-Murray and DiCroce (1992:116) define **management** as a process with both interpersonal and technical aspects through which the objectives of an organisation (or part of it) are accomplished efficiently and effectively by using human, physical, financial, and technological resources.

Swansburg and Swansburg (1999:36) state that in nursing, **management** relates to performing the functions of planning, organizing, staffing, leading (directing) and controlling (evaluating) the activities of the nursing enterprise or division of nursing departments and departmental units.

Most of the definitions on **management** highlight the point that work is done through other people. In this study, **management** will be seen as the process whereby the nurse manager works with, and through nursing staff to provide care to patients and clients.

Supervisors

The term **supervisor** in this study refers to matrons who supervised nurses who completed the course for the Diploma in Nursing Administration. The matrons were either grade one, grade two, or grade three supervisors.

Grade one matrons were in charge of all nurses in the central hospitals and were also referred to as principal nursing officers. The grade two supervisors were

responsible to the grade one supervisors. The grade three supervisors reported to grade two supervisors.

1.8 SCOPE OF THE STUDY

The study was conducted in all eight provinces of Zimbabwe. The study was limited to nurses who completed the course for the Diploma in Nursing Administration since 1997 and were practising their nursing profession in Zimbabwe. All nurse tutors and guest lecturers involved in teaching students were included in the study. Current supervisors of nurses who completed the course, were also included in the study.

1.9 THE PURPOSE OF PROGRAMME EVALUATION

Mitchell, Watts, Whyte, Blatz, Norman, Southwell, Hunsberger, Peas and Pinelli (1995:286) highlight that programme evaluation is essential for the development and maintenance of quality education programmes. Thompson (1992:S67) points out that programme evaluation is used for assessing programme effectiveness and/or efficiency, for improving programmes and service delivery. The quality of the course for the Diploma in Nursing Administration in Zimbabwe was assessed by determining whether it prepared the course participants to function adequately in the working environment.

According to Hamilton (1993:148), evaluation-research is used for accreditation and programme analysis. Eriksson (1992:480) notes that the purpose of the evaluation process is to guarantee that policies and objectives that have been set by society, are achieved. With this study an attempt was made to assess whether the objectives of the course for the Diploma in Nursing Administration were being achieved. Hart and Waltz in Grigsby and Becker (1992:415) point out that the systematic, comprehensive evaluation of programmes in schools of nursing facilitates accountability to the nursing profession, the public and the organization itself.

As noted by Hogg (1990: 105), the purpose of curriculum evaluation has been described as enabling value judgements to be made and to identify strengths and

weaknesses to facilitate ongoing course improvements. Similarly, the purpose of this study was to evaluate the course for the Diploma in Nursing Administration in Zimbabwe with a view to identifying strengths and weaknesses of the course and making recommendations for necessary changes.

1.10 CONCEPTUAL FRAMEWORK OF THE STUDY

Sohn (1987:27) points out that since the late 1960s, many educational authors have developed evaluation models for the purpose of proposing different ways of conceptualizing the manner in which systematic educational evaluation should take place. In this study, Stufflebeam's decision-making model was used as the conceptual framework, because it is composed of a comprehensive form for evaluation, which includes context, input, process and product evaluation.

Nugent and Lambert (1997:30) give details on the elements of Stufflebeam's model. Context-evaluation which is required for planning decisions, examines the relevant *environment* in which the programme exists. Unmet contextual needs of the programme are thus identified. Input-evaluation is necessary in making *structural* decisions. During this stage, one determines *actual* and *potential resources, facilities* and *strategies* available to the system. Process-evaluation directs implementing decisions by describing the actual functioning of the system and *identifying areas of weakness*. Any problems which develop and were not anticipated in the original plan are identified. Product evaluation determines if the *outcomes* produced, have met the *programme's goals*.

1.11 ORGANIZATION OF THE STUDY

Chapter 1 introduces the research problem. It also incorporates the purpose, objectives, assumptions and significance of the study and definition of terms.

Chapter 2 covers the literature review on organisational theories, the role of the nurse manager, the training needs of the nurse manager and an outline of the courses for the Diploma in Nursing Administration in Zimbabwe and South Africa.

In **chapter 3**, the literature review continues. A review of teaching strategies in nursing education is covered.

In **chapter 4**, literature on programme-evaluation is discussed and the conceptual framework of the study is described.

Chapter 5 focuses on the research methodology of the study.

Chapter 6 covers the presentation, analysis and discussion of data pertaining to the course content of the Diploma in Nursing Administration, resources pertaining to the course, strengths and weaknesses in the teaching strategies of the course facilitators, problems faced by the course participants, the extent to which graduands were prepared for their positions and suggestions made by the respondents to improve the training of nurses in the course.

Chapter 7 presents the summary of the findings of the study, the conclusions, recommendations based on the findings, recommendations for further research and limitations of the study.

CHAPTER 2: APPROACHES TO NURSING MANAGEMENT

2.1 INTRODUCTION

The review of literature regarding approaches to nursing management presented, covers the following aspects:

- organizational theory;
- role of the nurse manager;
- training needs of the nurse manager; and,
- courses for the Diploma in Nursing Administration in Zimbabwe and South Africa.

Cuthbert and Duffield (1992: 7) highlight that, to be a good nurse manager, one must have a solid understanding of organizational theories. Swansburg and Swansburg (1999: 37), indicate that nurse managers manage the organizational environment to provide a climate optimal to the provision of nursing care by clinical nurses. According to Booyens (1998a: 125) the nurse manager is faced with the reality of managing or directing a diverse group of health workers. It is, therefore, necessary to review a number of organizational theories in order to supply the nurse manager with the information necessary to handle a diversity of management problems.

Cuthbert and Duffield (1992: 12 - 14) suggest that a familiarity with organizational theories can be extremely helpful to the nurse manager in creating an individual management style. Although no single organizational theory can guide every action, drawing from the most applicable of these theories is useful in directing the nurse manager to take appropriate action. The introduction of new theories, does not, however, render previous theories invalid. Rather, the effect is cumulative, adding to a body of knowledge and contributing further to an understanding of the managerial role in a complex changing environment, as well as offering to nurse managers guidelines for practice. In this chapter, classical organizational theories and modern organizational theories are reviewed, as these have direct relevance to the role of the nurse manager.

A review of literature on the role of the nurse manager was conducted in order to identify the nurse manager's numerous responsibilities in the health care services. Training needs of the nurse managers were reviewed in order to identify areas

necessary for preparation for the management role. A brief description of the courses for the Diploma in Nursing Administration in Zimbabwe and South Africa was presented. Details of the courses are presented in Appendix: 1. The information was extracted from the 1978 Medical Council of Rhodesia, Diploma in Nursing Administration training regulations. Reference was also made to the 1985 South African Nursing Council regulations and directives for the course for the Diploma in Nursing Administration. A description of these courses is of relevance to this study.

2.2 ORGANIZATIONAL THEORIES

The following session presents the classical organizational theory.

2.2.1 Classical School of Management

According to Grohar-Murray and DiCroce (1992: 91) classical organizational theory is divided into the following three categories:

- scientific management;
- management process school; and,
- the bureaucratic model.

2.2.1.1 Scientific Management

Stoner, Freeman and Gilbert (2001: 34) note that Frederick W. Taylor (1856-1915), who was an engineer and management expert, together with others, formulated the scientific management theory. This theory sought to determine scientifically the best methods for performing any task, and for selecting, training and motivating workers. Stoner, Freeman and Gilbert (2001: 34) go on to note that Taylor established his philosophy on the following four basic principles:

- **The development of a true science of management**, so that the best method for performing each task could be determined. The best method for performing each task has relevance to the nurse manager as this promotes quality nursing care.
- **The scientific selection of workers so that each person would be given responsibility for the task for which he/she is best suited.** The nurse manager currently has a role to delegate responsibility to subordinates after assessing their capability in relation to the task.

- **The scientific education and development of the worker.** The nurse manager is involved in the continuous education and training of subordinates.
- **Intimate, friendly cooperation between management and labour.** Cooperation between the nurse manager and subordinates, helps to improve the morale of staff.

Cuthbert and Duffield (1992: 14) indicate that Taylor conducted time and motion studies on workers to determine the most efficient way of completing a task. Time and motion studies are useful to the nurse manager as they determine the time taken to complete nursing procedures. This helps the nurse manager to determine the number of staff required in various hospital units. Cuthbert and Duffield (1992: 14) go on to indicate that scientific management developed a rational approach to solving organizational problems and also pointed the way for the professional nurse manager.

2.2.1.2 The Management Process School

According to Grohar-Murray and DiCroce (1992: 92) the management process school looked at the whole organization from top to bottom. One of the leaders in the management process school was a French industrialist by the name of Henri Fayol (1841-1925). Sullivan and Decker (1997: 72) report that in 1916, Henri Fayol first described the functions of management as planning, organizing, directing and controlling. These are still relevant today. In relation to nursing, Gillies (1994: 1) indicates that the nurse manager's task is to plan, organize, direct and control available financial, material and human resources in order to provide effective, economic care to groups of patients.

Sullivan and Decker (1997: 72) state that nurse managers plan and develop specific goals and objectives for their areas of responsibility. During the process of organizing, the nurse manager coordinates the work to be done. The nurse administrator coaches and counsels subordinates in order to achieve the organization's objectives. The controlling functions of the nurse manager involve establishing standards of performance, determining the means to be used in measuring performance, and providing feedback to the subordinates.

Fayol's Principles of Management

Swansburg and Swansburg (1999: 30), note that Fayol listed the principles of management as follows: division of work, authority, discipline, unity of command, unity of direction, subordination of individual interests to the general interest, remuneration, centralization, scalar chain of command (line of authority), order, equity, stability or tenure of personnel, initiative and *esprit de corps*. Fayol's principles of management are relevant to nursing management. The nurse manager assigns duties to subordinates, taking into consideration their areas of specialization. The nurse managers are in charge of hospital units and they have to ensure that there is order within the units and that all subordinates are treated fairly. The nurse managers are also responsible for maintaining unity and good interpersonal relationships within the units.

Mellish and Lock (1992: 4 - 10) discuss the principles of investigation, reality and order which were derived from Fayol's pattern of management. The need to apply the principle of investigation before any action is taken, is important to the nurse manager. A very good aid to the procuring of facts in the daily management situation, is the use of Rudyard Kiplings "six honest serving men" which are: what, why, when, who, where and how. If these are properly utilised, it should be possible to elicit a number of facts. In the application of the principle of reality, the nurse manager has to be realistic in terms of available personnel to carry out tasks, material resources and availability of the necessary funds. The nurse manager has a role to enable nursing care to be given in an orderly and systematic manner.

2.2.1.3 The Bureaucratic Model

According to Gillies (1994: 37) the prominent contributor to the bureaucratic model was a German sociologist by the name of Max Weber (1864-1920). Weber advocated bureaucracy as the ideal form of organization for a complex institution. He described a bureaucracy as having a well defined hierarchy of authority, division of work based on specialization, highly specific rules governing workers' duties and rights, detailed work procedures, impersonal interpersonal relationships, and promotion based on technical competence. Bureaucracy is currently viewed as too rigid to respond to today's rapid societal change. However, Nyberg (1993: 12) observes that often hospitals are clearly still run according to bureaucratic tendencies.

In the health institutions, the nurse manager works within a hierarchical structure. He/she is responsible to executive health managers for the acts and omissions of subordinates. He/she operates within rules and regulations, although it is known that unnecessary rules and regulations can be counter-productive. The nurse manager delegates responsibility to subordinates according to their areas of specialization, and recommends competent subordinates for promotion. Although a number of characteristics of this model are applicable to nursing management, its weakness lies in its emphasis on the task to be performed as opposed to the needs of the employee. On the disadvantages of the bureaucratic approach, Booyens (1998b: 189) notes that the long lines of delegated authority and decision-making often make it impossible for an employee or outsider to identify exactly who was responsible for making a certain decision or who created a certain unpopular rule.

2.2.2 Modern Organizational Theories

According to Grohar-Murray and DiCroce (1992: 96) modern organizational theory has its origin in the late 1920s and continues through today. Modern theory is so designated because of its organizational thought rather than its chronological era. It is also referred to as behavioural, or humanistic theory. These theories represented a new way of viewing people in organizations, turning the emphasis towards individuals, rather than concentrating on the work or the organizational structure.

Cuthbert and Duffield (1992: 15) report that the behavioural school emerged, in part, because managers found frustrations in the classical approach, as people did not always follow predicted, rational behavioural patterns. The major impetus for this line of thought came from a series of experiments conducted by Elton Mayo (1880-1949) and his associates from Harvard University. Mayo found that special attention, such as being selected by top management to participate in experiments, often caused workers to increase efforts. Sullivan and Decker (1997: 15) note that a major assumption of this theory is that people desire social relationships, respond to group pressures, and search for personal fulfilment. One important assertion of this school of thought was that individuals cannot be coerced or bribed to do things they consider unreasonable; formal authority does not work without willing participants.

Workers were observed while working. Mayo and Roethlisberger in Gillies (1994: 38) concluded that factors other than environmental conditions have

greater influence on worker productivity. Support from peers, work group norms, participative decision making and recognition from managers increase productivity by enhancing workers' social and psychological satisfactions. The nurse manager has a role in creating a conducive working environment for subordinates in order to enhance the quality of nursing care. Roos (1996: 136) emphasises that the he/she must understand the informal and formal structures of health care organizations. He/she should foster group cohesion, loyalty and participation in decision-making in order to reduce resistance to necessary changes.

Booyens (1998a:125-129) gives an account of the following contributors to modern organizational theory: Douglas McGregor, Frederick Herzberg, Chris Argyris, Rensis Likert, Robert Blake and Jane Mouton. Grohar-Murray and DiCroce (1992: 97) note that this group of contributors shared a common optimistic view of the worker in the work place. They believed that the individual had the potential to be self-directed and capable of enhancing productivity. Gillies (1994: 39) reports that, according to McGregor, the traditional manager in a bureaucracy operates on a set of assumptions about human nature that he called Theory X. These assumptions are that the average individual dislikes work and must be controlled, threatened, and coerced to put forth enough effort to meet organizational objectives. McGregor questioned the validity of these assumptions and suggested that a different set of assumptions, namely Theory Y, provides a more accurate assessment of human nature. The assumptions of Theory Y are that people are capable of self-direction, have interest in work and have the capacity to apply creativity in solving organizational problems.

Authors like McGregor, Maslow, Herzberg and Argyris tried to change organizations from being impersonal and domineering to the human spirit. They focused on the needs of employees as well as the needs of the business. They defined theories of motivation and emphasised that employees need to meet their own needs within the organizational climate (Nyberg 1993: 11). It is important for the nurse manager to maintain a balance between the needs of subordinates and the needs of the organization, so that high morale is maintained in the working environment.

According to Grohar-Murray and DiCroce (1992: 97) the behavioural school of management stimulated the development of the social systems theory which integrates the worker and the work. Within a social system, people, work,

purpose, outcome and procedures are interrelated. Roos (1996: 137) indicates that the systems approach tries to solve problems by looking at the interrelationships between the system's input, throughput or process, output and environment. Sullivan and Decker (1997: 16) states that in the systems theory, the manager is the catalyst for the input-throughput-output process. The nurse manager therefore has a role in coordinating and facilitating the work of the organization.

Shortly after World War II, the management science school emerged. Cuthbert and Duffield (1992: 15) report that this approach evolved from mathematical and statistical methods which were developed to help solve military problems of World War II. Management science techniques include the application of statistics and computer simulations in management decisions. This approach has contributed most directly to management decision-making, particularly in the area of strategic planning which is relevant to the nurse manager. Strategic planning enables him/her to prioritize long-term objectives of the organization and to develop strategies for implementation.

Researchers observed that the views expressed in the classical, behavioural and management science schools did not work consistently in every work situation. According to Nyberg (1993: 11) contingency theorists, including Burns and Stalker, Woodward, Lawrence and Lorsch, and Mintzberg, wrote about the need for flexibility in making decisions based on the organizational context. They believed that effective management style is dependent on the organizational structure in relation to the goals, tasks, and environment of the organization. Cronje, Hugo, Neulands and Van Reenen (1991: 79) cited by Roos (1996: 138) indicate that the contingency approach tries to integrate the ideas of the different schools of organizational thinking. In a particular situation, management will decide which school's principles should be applied. The significance of the contingency approach to nursing, is that the nurse manager should use a situational approach to management.

Roos (1996: 138) reports that Theory Z, which tries to integrate the best management approaches from both the American and Japanese organizations, was developed by Ouchi during the early 1980s. Some of the aspects of Theory Z include group decision-making, decentralized control of performance quality and a concern for both the employee's and the organization's welfare. The nurse manager has to involve subordinates in decision making and consider their needs in order to maintain high morale within the working environment.

Kellert, cited by Sullivan and Decker (1997: 17), observes that the work of industrial theorists focused on linear cause-and-effect relationships. But as the proponents of the Chaos Theory maintain, the universe is not an orderly place: instead, it is filled with chaos, unpredictability and uncertainty. The Chaos Theory proposes that nature's work does not follow a straight line. This notion challenges traditional thinking regarding the design of organizations. The Chaos Theory suggests that the drive to create permanent organizational structures is doomed to fail.

Drucker, cited by Sullivan and Decker (1997: 18) suggests that managers should abandon attachment to any particular model of design and to reflect instead on creative and flexible formats that can be quickly adjusted and changed as the organization's realities shift. Booyens (1998a: 130) indicates that there is no universal organizational theory of management which is useful to all nurse managers in all settings. A nurse manager should become knowledgeable about the different management theories being developed, make a careful analysis of the problems in his/her organization and adapt his/her managerial style to fit the circumstances.

2.2.3 Generic Processes of Administration

Mellish and Wannenburg (1993: 179) state that administration can be divided into six generic processes, identified as follows: policy making; financing; organization; providing and utilising personnel; determining work procedures and control.

Mellish and Lock (1992: 10 - 20) elaborate on the role of the nurse manager in relation to the generic processes of administration. In nursing management, policy making occurs at several levels besides the national level. Policy making determines the type of service given, the method of providing nursing care, job descriptions and the number of personnel required. The nurse manager has a responsibility to ensure that provision is made for nursing needs in the estimate of revenue and expenditure. His/her task is to ensure that the best use is made of available finance and that equipment and supplies are used economically. A great deal of expertise is required from the nurse management in personnel utilisation to enable staff to achieve the objectives of service and also to allow the various members to develop and obtain true job satisfaction. Work procedures are necessary so that members of the team charged with policy implementation may proceed in an orderly and constructive manner. The nurse manager has to

constantly evaluate established work procedures. The nurse manager uses the process of control to check that subordinates achieve predetermined goals. As the size of an institution or service grows, another form of organization called decentralization is brought into play.

According to Trevizan and Mendes (1995: 156) most organizations are being pressured to intensify the decentralization of power, and this provides an opportunity for social and political reform. Decentralization lessens the load at the central level and confers stability to the democratic process. Booyens (1998a: 133) indicates that decentralization of authority increases morale and promotes interpersonal relationships. There is a greater feeling of individuality and informality in a decentralized system and employees become more creative in, and enthusiastic about, their jobs. Decisions may be more effective because people who make them know the situation and have to implement the decisions. Decentralization also implies a great change in the role of the nurse manager in that he/she will usually become responsible for the budget of his/her unit and sometimes the staffing of the unit. Nagaike (1997: 68) emphasizes that empowering first-line nurse managers is one of the keys to success in restructuring in addition to empowering staff who directly provide care.

2.3 ROLE OF THE NURSE MANAGER

Swansburg and Swansburg (1999: 36) indicate that the nurse manager performs the functions of **planning, organising, leading** and **controlling** the activities of nursing departments. Planning is a major function of nursing management that is primary to all other activities.

Koch (1996: 83) points out that in the planning process the vision, mission, philosophy, goals and objectives are crucial in giving a purposeful direction at all levels in the organization. In Zimbabwe the nurse manager involves the subordinates in coming up with the mission, philosophy and goals of the nursing units.

According to Du Preez (1998: 4), in strategic planning the mission of the organization is formulated, the external and internal environments are analysed, objectives are set, and strategies devised. Action plans are drawn up for achieving the objectives in terms of the mission statement. The nurse manager implements the plans, monitors the progress and conducts an evaluation.

Stamps (1999: iii) reports that the national health strategy for Zimbabwe emphasizes the important role of human resources planning, projection and development and continued development of appropriate technical and managerial capacities at all levels to anchor the process of decentralization. Litwin, Beauchesne and Rabinowitz (1997: 12) see the nurse manager as a manager of human resources. According to Du Preez (1998: 23), the nurse manager in human resource planning is involved in planning of establishment, monitoring financial aspects, recruiting, interviewing, selection, retention, providing policy and procedure manuals to staff. The nurse manager is also involved in orientation, induction and training, and industrial relations.

Lemire (2000: 204) states that there is agreement within the profession that the expanding nurse manager's role requires competent financial knowledge and skills. Rowland and Rowland (1997: 148) indicate that the nurse manager plans, prepares and demonstrates accountability for the budget. Nurse managers in Zimbabwe are involved in coming up with budgets for their departments. According to Shaw (1998: 5), budget preparation requires familiarity with zero-based budgeting and simple costing. Where income is related to the number of patients treated, some informed forecasting and market sensitivity is needed.

With the escalation in the cost of health care, Edwards and Roemer (1996: 16); Parsons (1997: 47); and Woodward (2000: 3) indicate that nurse managers face problems in providing services to patients whilst remaining within the confines of their budget. The nurse managers in Zimbabwe definitely face similar problems.

Mellish and Lock (1992: 137) note that the application of good organizational principles can contribute to cost containment. Haynor (1996: 61) suggests a revision of the training of nurse managers since nurse managers are being asked to do more with less and also to continually improve care. An evaluation of the course for the Diploma in Nursing Administration in Zimbabwe has also been necessitated by factors affecting the delivery of health care.

Nurse managers have a role in the commissioning of health institutions. According to Du Toit (1998: 55), the involvement of nurse managers in preparing the completed building for operation has always been accepted as essential. However, it is essential for nurse managers to be involved during the planning stage if they are to make any significant impact on the design and facilities that will be provided.

The nurse manager has an important role as a member of the disaster and emergency preparedness committee of health institutions. Perold (1996: 105 – 115) emphasizes that the nurse manager is involved in forecasting the effect of different types of disasters on the health services. In the management of the disaster the nurse manager is involved in communication with other key figures, delegation of tasks to subordinates and planning of resources.

According to Booyens (1998b: 185), when the planning function has been completed, it is necessary for the nurse manager to organise resources and manpower to accomplish the goals which were set during the planning phase. Swansburg and Swansburg (1999: 37) point out that organizing is a second major function of nursing management. In the process of organizing, the nurse manager has a role in team building and ensuring that effective communication strategies are implemented in the health care institutions. Roos and Booyens (1998: 289) highlight the importance of communicating effectively in order to save time.

Davidson (1996: 52) sees the nurse manager as a spokesperson representing the organization on outside professional and health care industry boards and committees. According to Mellish and Lock (1992: 70), a good nurse manager can help promote good public relations by ensuring good interpersonal relations with the public at large and all members of the health care team. The role of the nurse manager requires communication on daily basis with patients, nurses, and the greater organization.

The nurse manager has a leading role in the health services. According to Swansburg and Swansburg (1999: 37), leading is a third major function of nursing management empowering employees and improving the quality of care. Edmonstone (2000: 259) points out that the nurse manager empowers subordinates by assisting them to achieve their own ends creatively by helping them to discover their own potential. In the leading role nurse managers motivate subordinates resulting in job satisfaction and excellence of production.

Swansburg and Swansburg (1999: 446) highlight some of the following activities in the leading role of the nurse manager:

- facilitating the achievement of organizational mission, vision, goals and objectives;

- providing and maintaining resources such as people, supplies and equipment;
- coordinating among disciplines;
- facilitating group dynamics;
- counselling and coaching; and,
- resolving conflict.

In order for nurse managers to be competent in performing the activities in the leading role, they need to be sufficiently prepared.

Nurse managers are often involved in conflict management. According to McElhaney (1996: 49), a study done by the American Management Association revealed that managers spend an average of 20% of their time dealing with conflict. The management of conflict is rated as of equal or slightly higher importance than planning, communication and decision-making. In addition to conflict management, nurse managers are also involved in initiating change and managing changes, orientation, counselling and disciplining unit staff.

Gilmartin (1996: 22) indicates that the work of nurse managers within organizations is to foster an environment that values and supports change, skill development, and continual improvements in the delivery of health care services. According to Curtin (1994: 26), the nurse manager is not only responsible for delivery of safe care, but also for the development of the profession and for the professional growth of nurses. Jones (1996: 31) indicates that if the nurse manager uses delegation properly, this can foster the growth of workers, because involving people tends to increase their motivation and commitment.

Swansburg and Swansburg (1999: 37) indicate that controlling is the fourth major function of nursing management. Controlling includes the process of evaluating plans, comparing performance with standards, and correcting deficiencies. The nurse manager has a responsibility for the quality of nursing care in the nursing departments. Muller (1998: 597) explains that quality improvement implies that a formal programme to monitor, measure and evaluate the quality of services delivered is put in place. The nurse manager has a role to take remedial steps in order to maintain improvements.

The nurse manager has a role to prevent the occurrence of nosocomial infections. Booyens and Minnaar (1996: 337) indicate that if there is a high rate of nosocomial infections, the standard of care is regarded as of inferior quality. In a descriptive study to investigate infection control and prevention in nursing practice in selected hospitals in Malawi, Zulu and Chalanda (2001: 46) identified lack of knowledge on infection control. Promotion of training programmes on infection control and monitoring of nosocomial infections were recommended. The nurse manager has the responsibility to ensure that nurses are aware of measures to prevent nosocomial infections.

Kalo and Jutte (1996: 87) see the nurse manager's management role as maintaining and promoting patient-centred, patient-valued care and being responsible and accountable for personnel, fiscal, and material resources of the department. The nurse managers in Zimbabwe implement the nursing process in the care of patients. Potgieter and Minnaar (1996: 204) recognise the use of the nursing process as an effective method of meeting the physical, psychological and spiritual needs of the patient. In order to provide holistic care to patients it is necessary for the nurse manager to be able to apply relevant concepts of microbiology, pharmacology, psychology and sociology in the care of the patients. The nurse manager should also effectively combine clinical practice and research knowledge in order to provide quality care to patients.

Matrone (1996: 5) indicates that the nurse manager has a role in creating an environment that enhances professional practice in the organization in concert with organizational goals. Such an environment should lead to client satisfaction which, according to Taccetta-Chapnick (1996: 60) is an important element in maintaining future referrals and hospital revenues.

In order to promote quality care to patients nurse managers must teach by example. Kalo and Jutte (1996: 87) indicate that a nurse manager should be a role model who advocates, exhibits and demonstrates shared governance, who sets mutual goals and promotes team work. Current nurse managers, according to Kitson (1997: 35) must demonstrate openness and generosity to develop ways of supporting talent. Nurse managers are also facilitators in the promotion of quality patient care. Nagaike (1997: 66) observes that nursing management is shifting from controlling to mentoring, coaching or facilitating.

Nurse managers have a role in stress management since the environment in health institutions is usually stressful to nurses. Booyens (1998a: 149 – 151) suggests measures which nurse managers could adopt in order to lessen stress levels of subordinates. Some of these measures include developing effective two-way communication systems, counselling, constructive resolution of conflicts and following clear procedures regarding discipline and handling of grievances.

Performance evaluation of nurses is performed by nurse managers. Troskie (1998: 551) sees evaluation of work performance as an essential control measure. In performance evaluation the strengths and developmental needs of subordinates are identified by the nurse manager. Swansburg and Swansburg (1999: 694) states that performance evaluation may be used for promotions, counselling, training and development, staff planning, retention, termination, selections and compensations. In Zimbabwe the Ministry of Public Service introduced merit rating linked to performance evaluation. The intention was to improve the performance of civil servants who include nurses.

It is the role of nurse managers to ensure that nurses comply with the legal issues pertaining to patient care. If nurses do not comply with the legal obligations when caring for patients they may be sued or prosecuted in a court of law. Caulfield (2001: 13); and Sullivan (2000: 159) observe that there is an increasing emphasis on the rights of patients/clients and it is important for nurses to understand their legal obligations and responsibilities to patients/clients in order to provide effective nursing care. Nurse managers should be conversant with legal issues in patient care. They should ensure that nurses provide patients undergoing treatment with sufficient information to enable them to give informed consent.

Mintzberg, in Gilles (1994: 41–42) indicates that the typical manager portrays ten roles; three are interpersonal, three are informational, and four are decisional. The interpersonal roles are those of figurehead, leader, and liaison officer. As figurehead, a nurse manager represents his/her institution at ceremonial events. As leader, a nurse manager directs subordinates toward the organizational goals. As liaison person he/she communicates with persons outside his/her vertical chain of command, to give or receive information and maintain goodwill.

The informational roles of the manager are those of monitor, disseminator and spokesperson. As monitor, a nurse manager obtains job-related information through informal contacts with subordinates. As disseminator, a nurse manager

transmits information to supervisors, peers, subordinates, or clients. The decisional roles of the manager are that of entrepreneur, disturbance handler, resource allocator and negotiator. As entrepreneur, a nurse manager develops new projects or programmes to enhance the image and welfare of the institution. As a disturbance handler, a nurse manager is involved in conflict resolution. As a resource allocator, a nurse manager determines what portion of the institution's financial, personnel, and equipment should be allocated to each unit. As a negotiator, a nurse manager represents interests of the work group in negotiations. Bezuidenhout (1998: 663) emphasizes the need for the nurse manager to understand labour management. The nurse manager is involved in solving disagreements regarding service conditions between unions and hospital management. It is noted that nurse managers have a wide range of responsibilities within the health services.

2.4 TRAINING NEEDS OF THE NURSE MANAGER

Whilst the responsibilities of nurse managers are numerous, Nowell cited by DiMarco, Goodson and Hauser (1993: 60) indicates that inadequate preparation for their management role has created a sense of frustration and dissatisfaction among nurse managers. The dissatisfaction has produced unsatisfactory results for hospitals. In order for nurse managers to effectively execute their roles, Cuthbert and Duffield (1992: 7); and Mellish and Lock (1992: 65) recommend training. The training for nurse managers must be constantly updated to meet the ever changing needs.

Care (1996: 27) recognises the importance of accurately identifying a learner's needs as paramount to the success of any staff development endeavour. The course for the Diploma in Nursing Administration in Zimbabwe is being evaluated in order to meet the training needs of nurse managers. According to Watt, cited by Walker (1993: 81), the evolving roles and functions of nurses require them to address issues such as health policy, planning and resource allocation.

Henry, Lorensen and Hirschfeld (1992: i) conducted an exploratory comparative survey involving 172 nurse managers from 76 countries. They found that there was comparatively little involvement by nurses in health planning and policy activities, especially at national level. This problem in part derives from nurses not being adequately prepared for management. Henry *et al* (1992: 62-63) suggest that the following topics should be included in nursing management programmes: policy making, decision making, problem solving, human relations, face-to-face

and electronic communication, negotiation, philosophy, psychology, financing, concepts in economics such as supply and demand, and resource analysis.

According to Simpson (1996: 88) advanced computing and communication tools can permeate the entire nursing organization and health care institution to help achieve the larger goals of empowered nursing and better patient care across the continuum. It is therefore necessary for nurse managers to be computer literate.

Christophie (1989: 283 - 285) sent questionnaires to all heads of midwifery services in England and Wales. Ninety-six questionnaires were completed and returned from 186 districts. One of the objectives of the survey was to identify deficiencies in management personnel at the beginning of their appointment in their grade. The identified deficiencies are shown in table 2.1.

Table 2.1 Deficiencies Identified in Management Personnel

HEADS OF SERVICES	SUBORDINATE MANAGERS		
Identified Need	Response	Identified need	Response
Finance/Budget	51%	Finance/Budget	41%
Industrial Relations	39%	Industrial Relations	30%
Manpower Planning	12%	Manpower Planning	15%
Quality Assurance Methods	8%	Quality Control Methods	11%
Planning	8%	Planning	7%
Team/Group skills	6%	Chairing Meetings	6%
Everything	9%	Everything	1%
Nothing	3%	Research Statistics	20%
		Interviewing	16%
		Counselling	15%
		Communication	7%
		Teaching	7%

Troskie (1994: 40 - 44) conducted a quantitative survey to determine the need for management training in students registered for the subject Nursing Management. The target population was first-year students in Nursing Management at the University of South Africa registered for 1992. Questionnaires were sent to 1000 students and 262 responded. Areas in which the respondents experienced problems and needed more practice were identified. These areas included teaching subordinates, handling conflict, problem solving, budgeting and research.

Chirwa (2000: 7) conducted a qualitative study of twenty middle-level managers from governmental and non-governmental hospitals in Malawi. The results demonstrated that middle-level managers in Malawi experienced problems in ensuring quality care and required management training in resource management, setting nursing standards and financial management skills. Lemine (2000: 199) reports that changes and expansion in the nurse manager's role indicate a need for a specialized body of financial knowledge and skills in order to make focused decisions that integrate clinical and business aspects of health care.

According to Rotkovitch (1993: 53) it is regrettable that most nursing programmes designed to prepare nurses for management positions have not included in their curricula a sufficient number of courses related to the role of nurse managers. Instead of courses in finances, budgeting, labour relations, legal aspects of practice, statistics, computer technology and theory of organizations, these programmes have an abundance of courses that deal with pathophysiology of illness and modes of therapy.

Belcher (2000: 315) argues that nurse managers need expert critical thinking skills to make the best decisions in rapidly changing complex health care organisations. Henry *et al* (1992: 63), suggest a life commitment to learning for nurse managers. Programmes for continuing education, on-the-job training and retraining, home study and distance learning techniques are recommended for nurse managers.

2.5 COURSES FOR THE DIPLOMA IN NURSING ADMINISTRATION IN ZIMBABWE AND SOUTH AFRICA

The Diploma in Nursing Administration courses in Zimbabwe and South Africa are presented in this section.

2.5.1 Conditions for the Approval of Schools

In both Zimbabwe and South Africa before a school is approved for training the facilities available for training must be satisfactory to the regulatory Councils. The heads of the training schools and the lecturers in both countries are expected to hold qualifications approved by the councils. The approval of training facilities and lecturers in the schools is necessary in order to maintain high standards in the training of students.

2.5.2 Training Centres

Whilst there are a number of training centres for the diploma in nursing administration in South Africa, the Post Basic School of Nursing in Harare, is currently the only training centre for the course in Zimbabwe. The Post Basic School of Nursing is not able to train all the nurses who are in need of the training course. The opening of more training centres will require training facilities and lecturers with qualifications approved by the Health Professions Council of Zimbabwe.

2.5.3 Admission to the Course

In Zimbabwe, candidates eligible for admission to the course must be holders of the General Certificate of Education with passes in five subjects at Ordinary Level. The five subjects must include English Language and a science subject. Candidates with an equivalent or higher certificate may also be admitted on the course. In South Africa, a senior certificate or equivalent qualification is required by the Council. In both countries the Councils may approve admission of candidates without the stated academic qualifications. The stating of minimum academic qualifications for admission to the courses is necessary so as to ensure that candidates admitted on the courses can cope with the academic requirements of the courses.

Candidates admitted to the course in Zimbabwe are registered nurses who possess at least one additional qualification in nursing. The candidates should have had at least five years' nursing experience, exclusive of any training to be a nurse. In South Africa, candidates admitted to the course should also be nurses registered with the Council. Although the candidates in Zimbabwe are required to have had at least five years' experience, most of the candidates who come for training have much more than five years' experience. This is because of the limited number of vacancies available for training.

2.5.4 Duration of the Courses

In both Zimbabwe and South Africa, the course of training extends for a period of at least two hundred days excluding days off. The Council in Zimbabwe may in a particular case reduce the period of two hundred training days. The Council may also permit the course of training to be more than one year. In South Africa the two hundred days of training should be completed within a period of two years unless the Council determines otherwise, this is in accordance with the Council's 1985 regulations. In Zimbabwe, students who complete the course in more than a

year do this as a result of failing some part of the course or as a result of absence from the course due to reasons such as illness.

2.5.5 Assessment During Training

During the course the students in Zimbabwe are to complete tests and assignments required by the tutors of the course. Some of the assignments are presented to the class. This enables the tutors to assess the public speaking skills of the students. The students are also required to conduct a research study during the course. In South Africa, the students are given tests and assignments and also conduct research projects. The giving of assignments to students enables them to actively participate in their own learning. The imparting of research skills to the students will enable them to conduct research studies in nursing practice which should lead to improvement of services to clients.

2.5.6 The Examinations

According to the Council's 1978 regulations, the final examination in Zimbabwe consists of two three-hour written papers, each carrying one hundred marks. In South Africa, the final examination consists of four three-hour written papers in accordance with the 1985 Council's regulations. Considering the number of subjects covered under part one and part two of the syllabus in Zimbabwe, it may be necessary to increase the number of three-hour written papers. In both countries, in order for the students to pass the examination, they must obtain not less than fifty marks in each paper.

2.5.7 Admission to the Examination

In both countries, students should have covered the prescribed syllabus of training by the date fixed for the commencement of the examinations in accordance with the regulations of the respective Councils. If the students were to enter for the examination before completing the syllabus, this would limit their chances of being successful in the examination. In both countries students apply to the respective Councils in order to be admitted to the examinations. The applications are accompanied by certificates from the person in charge of the school indicating the date on which the prescribed course will be completed. The applications and certificates are also accompanied by examination fees stipulated by the respective Councils.

2.5.8 Readmissions to the Examinations

In Zimbabwe, a student who fails the examination may be permitted by the Council to sit a supplementary examination according to the 1978 regulations. The supplementary examination is held not less than two and not more than four months after the examination. The period of about three months between the examinations is to allow the candidates time to revise their work. In South Africa, candidates who fail, sit for the supplementary examinations within a period of one year according to the 1985 Council's regulations. A period of one year gives candidates plenty of time in which to revise their work. In both countries, students retain credit for any subject passed. In both countries, examination fees are paid to the Councils for readmission to the examinations.

2.5.9 Registration of Additional Qualification

In Zimbabwe and South Africa, candidates who pass the examinations are issued with certificates. In both countries, fees are charged for registration of additional qualifications. This is one of the ways in which the Councils generate their funds.

2.5.10 Syllabi of the Courses

The syllabi of the courses are guided by the programme objectives. The South African syllabus consists of four subject areas which include: the scientific foundations of the nursing administration process, the health care system in South Africa, fundamentals of nursing administration I and fundamentals of nursing administration II. The outline of the course content emphasizes correlation of theory to practice throughout. This is important because the students need to see the relevance of the theoretical input to their work. Most of the topics which are covered in the South African syllabus are also covered in the syllabus in Zimbabwe. In the Zimbabwean syllabus the topics covered are itemised under a number of subjects. Details of the course content are covered in Appendix: 1.

2.6 SUMMARY

In the classical organizational theory, it was noted that Frederick Taylor's scientific management approach focused on jobs of individual workers. Henri Fayol's management process school focused on the whole organization. Whilst the application of Max Weber's bureaucracy is observed in hospitals, it is currently viewed as too rigid to respond to today's rapid societal change. The classical organizational theory thus met some resistance from workers. This resistance together with other challenges to the classical approach gave rise to the development of modern organizational theories. These theories view people in

organizations in a new way. The individual is viewed as having potential to be self directed and capable of enhancing productivity. However, views expressed in classical, behavioural and management science schools do not work consistently in every situation. This gave rise to the contingency approach which suggests that the managerial approach should vary according to the particular circumstances. The nurse manager therefore has to analyze the situations and adopt an appropriate managerial style.

Nurse managers have a wide range of responsibilities within the health services. Fayol's functions of management which include planning, organizing, leading and controlling have relevance to the role of the nurse manager to date. The nurse manager implements and evaluates plans and policies of the organization with the help of other professionals. Weaknesses of nurse managers were noted in health planning and policy making. Identified training needs for nurse managers included financing, budgeting, economics, industrial relations, handling conflict, legal aspects of practice, research, statistics, and computer technology. Other training needs for nurse managers include theory of organizations, decision making, problem solving, quality assurance methods and teaching subordinates. Training for nurse managers which meet the ever changing needs in the health care arena is recommended.

A number of similarities were noted in the Diploma in Nursing Administration course in Zimbabwe and South Africa. Similarities exist in course content. The training period of at least two hundred days excluding days off is identical in both countries. The similarities are due to the fact that the nucleus of nurse managers who contributed to the planning of the course in Zimbabwe were trained in South Africa. Whilst South Africa has a number of training centres for the course, Zimbabwe only has one training centre which is not able to train all the interested registered nurses. The opening of more training centres will require adequate reference materials, teaching aids, classroom space and course facilitators with qualifications approved by the Health Professions Council of Zimbabwe.

CHAPTER 3: TEACHING STRATEGIES IN NURSING EDUCATION

3.1 INTRODUCTION

This chapter delineates a number of teaching strategies in nursing education. It was thought necessary to review these strategies since the study sought to identify strengths and weaknesses in the teaching strategies of the course facilitators. A review of literature on assumptions about learners and principles of adult learning was conducted since these provide guidelines for facilitators in the organization of learning experiences for adults. The study sought to determine the adequacy of human and material resources such as facilitators, teaching aids and reference materials for the Diploma in Nursing Administration course in Zimbabwe. A review of literature on resources which are needed in order to enhance the quality of nursing education is therefore necessary. This chapter also reviews literature on the correlation of theory with practice. The review is essential since the study sought to identify problems which the course participants may be facing in implementing what they have learnt in the Diploma in Nursing Administration course.

3.2 THE ASSUMPTIONS OF PEDAGOGICAL AND ANDRAGOGICAL MODELS OF LEARNING

According to Knowles (1992: 12) the body of theory and practice on which teacher - directed learning is based is often given the label "pedagogy", from the Greek words *paid* (meaning child) and *agogus* (meaning guide or teacher), thus being defined as the art and science of teaching children. The body of theory and practice on which self directed learning is based is labelled "andragogy", from the Greek word *aner* (meaning adult), thus being defined as the art and science of helping adults learn. Cherem (1990: 24) observes that until the 1970s, pedagogical practices used with children were also those used with adults. Savicevic (1991: 198) and Richardson and Lane (1993: 16) acknowledge that andragogy was adopted in the United States by instructors working with adults, particularly Malcolm Knowles.

Knowles (1992: 12) and Skelton-Green (1995: 10) give a comparison of the assumptions of pedagogical and andragogical models of learning as follows:

Table 3.1 The Assumptions of the Pedagogical and Andragogical Models of Learning

Assumptions about Learners	Pedagogical Model	Andragogical Model
Concept of the learner	- the learner is a dependent personality	- the learner is self-directing
Role of learner's experience	- learner enters into educational activity with little experience that is of much value.	- adult's experience becomes a source of the adult's self-identity, which must be used, valued and accepted
Readiness to learn	- uniform by age-level and curriculum	- adults become ready to learn when they experience a need to know or do something in order to perform more effectively in some aspect of their lives
Orientation to learning	- students see learning as a process of acquiring prescribed subject matter content	- adults learn in order to be able to perform a task, solve a problem, or live in a more satisfying way
Motivation to learn	- students are motivated primarily by external pressures from parents and teachers	- adults' most potent motivators are internal: self-esteem, better quality of life, recognition, etc.

Balfour and Marini (1991: 481) argue that the term "pedagogy" is problematic for several reasons. Much of the adult education literature implies that what it terms pedagogy is not a very good strategy even for the schooling of youngsters. According to Knowles (1992: 12) the pedagogy and the andragogy models do not represent bad/good or child/adult dichotomies, but rather a continuum of assumptions to be checked out in terms of their rightness for particular learners in particular situations. If a pedagogical assumption is realistic for a particular situation, then pedagogical strategies are appropriate. For example, if a learner is entering into a totally strange content area, he or she will be dependent on a teacher until enough content has been acquired to enable self-directed inquiry to begin.

Newstrom and Lengnick-Hall (1991: 43) recognise that while widely used, the andragogical approach is not the most effective method for training. Instead, a method called the contingency approach might be more suitable to meet the needs of trainees. The contingency approach suggests moving away from characterizing trainees as homologous adult learners who require a uniform and singular approach to training and development. Instead, adult learners are a heterogeneous group requiring different approaches to training and development depending on individual differences across important characteristics. The participants for the course for the Diploma in Nursing Administration in Zimbabwe are a heterogeneous group of adults who would benefit from a contingency approach to training.

3.2.1 Concept of the Learner

Nielsen (1992: 148) states that as a person matures, his or her self concept moves from one of the dependent personality toward one of a self-directing human being. Brockett, cited by Majumdar (1996: 43) defines self-directed learning as a set of activities where primary responsibility for planning, carrying out, and evaluating a learning endeavour is assumed by the individual learner. Brookfield (1993: 233) points out that the one consistent element in the majority of definitions of self-direction is the importance of the learner's exercising control over educational decisions. The learner decides on the goals of a learning effort, resources to be used, methods which will work best and the criteria for judging the success of any learning effort. The participants in the Diploma in Nursing Administration course in Zimbabwe are mature students who come on the course with their own goals and expectations.

The focus of learning is on the individual and self-development with learners expected to assume primary responsibility for their own learning. The most important role of educators involved in the learning process is to act as facilitators or guides as opposed to content experts. Brookfield (1993: 229) states that adult educators argue that through self-directed methods adults gain an increasing sense that they are in control of their own lives.

Cravener (1997: 23) argues that student's self-direction must increase as the teacher's imposed structure decreases. At the same time, it is essential that students have

enough guidance to direct them towards effective learning activities. Garrison (1992: 143) states that a learner may be ready to accept responsibility for learning, but be incapable of proceeding due to lack of resources or difficulty with the subject matter. The participants of the course for the Diploma in Nursing Administration in Zimbabwe often face problems in accessing current textbooks and nursing journals. A successful learning experience, therefore, normally requires more than personal responsibility and independence.

3.2.2 Role of Learner's Experience

According to Colgrove, Schlapman and Erpelding (1995: 9), the concept of experiential learning is often defined as a series of learning methods that focus on the role of experience in the learning process. Experiential learning occurs when students reflect on personal experiences, discuss their thoughts with others, and re-evaluate what is known and understood. Specific characteristics distinguish experiential learning from other types of learning. These characteristics include:

- an emphasis on the process of learning as opposed to a focus on the outcomes;
- knowledge continuously derived from experiences;
- learning that results from resolving conflicts between concrete experiences and abstract concepts;
- learning as a holistic activity;
- transactions that occur between the learner and the environment; and,
- the process of creating knowledge.

Nielsen (1992: 148) states that experience should be the starting point for organizing adult learning activities. An adult accumulates a growing reservoir of experience, a rich resource for learning. For an adult, personal experiences establish self-identity and as such are highly valued. Brookfield cited by Richardson and Lane (1993: 17) recommends that educators dealing with adults must build on the experiences of

adult learners. For adult education to be effective, all learning must be built on the learner's experience, because the adult learner is a total composite of his/her past experiences. If professionals working with adults belittle or overlook the learner's experience, the adult learner perceives personal failure, and the anticipated learning becomes impossible. Lowe and Kerr (1998: 1030) highlight that learning by experience, involves being able to reflect on a personal happening and through a process of analysis, come to understand it. Such an activity should result in deep learning when carried out in a structured way.

The students who study for the Diploma in Nursing Administration course in Zimbabwe are experienced registered general nurses with an additional nursing qualification. The students have a minimum of five years experience in nursing, excluding training periods. They come with valuable knowledge which can be shared with other students and the tutors. Skelton-Green (1995: 11) points out that most practising nurses demonstrate some of the characteristics of adult learners: they want their experience to be credited and used in any new learning they undertake. On the other hand, these nurses have only experienced learning in the pedagogical mode, and they often balk at a more andragogical approach, viewing it as an attempt by the teacher to dodge his/her responsibilities and dump those responsibilities onto the students.

Colgrove, Schlapman and Erpelding (1995: 10) acknowledge that experiential learning methods are not viewed as replacements for more traditional techniques, but rather as alternative approaches when appropriate. Examples of experiential learning include, but are not limited to, group discussions, role-playing, simulations, problem-solving exercises, structured learning activities, games, apprenticeships, internships, clinicals, and laboratory field studies. Whilst the students studying for the Diploma in Nursing Administration course in Zimbabwe are given lectures when imparting new information, they are also involved in group discussions, problem solving exercises, role-playing and clinical assignments.

3.2.3 Readiness to Learn

According to Nielsen (1992: 148) the readiness of an adult to learn is closely related to the developmental tasks of his or her social role. Knowles (1992: 12) points out

that adults become ready to learn when they experience a need to know or do something in order to perform more effectively in some aspect of their lives. Needs from their social roles, especially involving life transitions, frequently triggered adults' return to school (Cherem 1990: 25). The students who study for the Diploma in Nursing Administration course in Zimbabwe are experienced nurses who recognise the need to enhance their knowledge and skills in the management of the health services.

3.2.4 Orientation to Learning

Knowles, cited by Nielsen (1992: 150) states, that as individuals mature, their time perspective changes from one of postponed application of knowledge to immediacy of application. Accordingly their orientation towards learning shifts from one that is subject-centred to one that is performance-centred. Knowles (1992: 12) points out that adults learn in order to be able to perform a task, solve a problem, or live in a more satisfying way. Adults in learning settings require something applicable to their lives (Cherem 1990: 25). Therefore, it is necessary to evaluate the course for the Diploma in Nursing Administration in Zimbabwe so as to come up with a course which satisfactorily addresses the role needs of the participants on completion.

3.2.5 Motivation to Learn

Norland (1991: 24) believes that motivation comes from within the individual student. Hoff (1995: 5) states that most individuals have more than one reason for learning. Adults will be motivated by those things that have personal meaning for them. The nurse adult learner is most frequently motivated by a pragmatic desire to use or apply some newly available knowledge. The participants in the course for the Diploma in Nursing Administration in Zimbabwe are motivated to do the course since they apply for the course on their own initiative.

Like Norland (1991: 24), Newstrom and Lengnick-Hall (1991: 44) also point out that adults are largely intrinsically motivated; the dominant unsatisfied needs in their lives are self-esteem, achievement, competence, self-confidence, and self-actualization. Krupp (1991: 15) suggests ways of nurturing self-esteem: facilitators have to give earned positive feedback to the learners, focus minimally on negatives

and acknowledge the things the learner does that meet expectations. Facilitators have to set measurable and achievable goals with each learner and help the learners to reach these goals. Facilitators can help learners feel special and unique by asking them to share an area of their expertise or openly complimenting the individual.

3.3 PRINCIPLES OF ADULT LEARNING

Hoff (1995: 5) reports that principles derived from research of the learning process by Darkenwald and Merriam serve as guidelines for adults. Hoff goes on to report that these principles were identified earlier by Gibb, Kidd, Knox, Brundage and Macher and are as follows:

- ❑ Adults' readiness to learn depends upon their previous learning.
- ❑ Intrinsic motivation produces more pervasive and permanent learning.
- ❑ Positive reinforcement is effective.
- ❑ Material to be learned should be presented in an organized fashion.
- ❑ Learning is enhanced by repetition.
- ❑ More meaningful tasks and materials are more fully and easily learned.
- ❑ Active participation in learning improves retention.
- ❑ Environmental factors affect learning.
- ❑ Adults learn throughout their lifetime.
- ❑ Adults exhibit learning styles, such as:
 - having personal strategies for coding information;
 - using cognitive procedures-learning in different ways;
 - liking learning activities to be problem-centred and relevant to life;
 - desiring some immediate appreciation;
 - having a concept of themselves as learners;
 - being self-directed.

In order to enhance the learning of adults, it is essential for facilitators to apply the principles of learning appropriately. In the planning of the course for the Diploma in Nursing Administration in Zimbabwe, the previous knowledge and experience of the participants is taken into account. The participants are also given a number of assignments which actively involve them in learning and problem solving.

3.4 TEACHING METHODS

The various teaching methods are presented under this section.

3.4.1 The Lecture

Nehls (1995: 208) defines lecturing as a situation where the teacher stands in front of a room and delivers prepared remarks while there is minimal or no discussion among teacher and students. The goal of this form of teaching is typically to impart or transfer knowledge, skills, and information. Woodring (1995: 357) identifies the lecture as the most frequently utilized teaching method regardless of the negative overtones that surround it.

Quinn (1991: 127) and Woodring (1995: 359) identified a number of advantages in using the lecture method. In a lecture, one teacher can communicate with a large number of students. A lecture is good for introducing new knowledge which may not yet be in textbooks. The information in a lecture can be presented in little time and the students are provided with common core content. This enables the teachers to know what has been taught. The lecture is useful for giving a framework upon which students can build.

The lecture method also has a number of disadvantages as identified by Quinn (1991: 127) and Woodring (1995: 359). Lectures do not cater for individual student's needs and students do not learn at the same pace. The classes tend to be too large for personalized instruction. Teachers attempt to teach all they have learned in a lifetime about a subject in a very short time. The lecture method is not suited to higher levels of learning. Students get material second-hand rather than from primary sources. Some students may view the lecture as a complete learning experience and feel that the lecturer presented all they need to know. In a lecture the students are largely passive and their attention may wane.

Siberman, in Moffett and Hill (1997: 44) notes that most teachers speak at a rate of 100 to 200 words per minute, but students hear about 50 to 100 words per minute. With this approximate 2: 1 ratio of speaking to hearing, it is logical that lecture methods tend to promote a lower level of learning factual information. Bevis and

Watson, cited by Kesseninch (1992: 371) recommend that nursing curriculum must be restructured to permit the learner to be actively engaged in scholarly pursuits. They support abandoning the dominance of lectures in nursing education. Woodring (1995: 361) reports that when a lecture is used in the andragogical context it is accompanied by other teaching methodologies such as lecture-discussion. Whilst the lecture method is widely used in the Post Basic School of Nursing in Zimbabwe, it is often accompanied by a discussion and questions and answers.

3.4.2 Group Discussion

Mellish and Brink (1990: 136) state that a group discussion is a valuable teaching strategy, especially when dealing with more senior students. Since the emphasis in group discussion is participation, the group must not be large and the average size suggested is between ten and fifteen people. The larger the group, the less time there is for group members to making meaningful contributions. Quinn (1991: 150) views the function of an educational small group as putting the student at the centre of things; allowing opportunities for face-to-face interaction with other group members in order to exchange ideas and feelings so as to expand the student's universe of awareness. During the group discussion, Mellish and Brink (1990: 136) state that seating in a circle of comfortable chairs is ideal. This type of seating arrangement prevents one person from dominating the others. Sitting in a circle gives the group members a sense of equality. In tutor-led discussions, Quinn (1991: 158) suggests the semi-circle sitting arrangement as this will enable participants to see any material which the tutor may want to present. This is applicable in tutorial groups.

Group discussions are used as a teaching strategy in the Post Basic School of Nursing in Zimbabwe. The discussions give the students an opportunity to share their knowledge and experience with others. The students sometimes present case studies and assignments to the others and this is followed by a group discussion. According to Fuszard (1995a: 82) case studies motivate the student with active involvement in the learning process and provoke critical thinking. Quinn (1991: 163) identifies some common problems in small group teaching. Very often there

are vocal members of the group who tend to monopolize the session whilst some members may not contribute to the discussion.

3.4.3 The Demonstration

Quinn (1991: 143) defines a demonstration as a visualized explanation of facts, concepts and procedures. The purpose of demonstration is to show the learner how to perform certain psychomotor skills. The most important aspect of the demonstration is the provision of immediate practice for the learners. Mellish and Brink (1990: 129) identified advantages and disadvantages of demonstration. A demonstration will cater only for a small group of learners since everybody attending should be able to see and hear what is said. If the group of learners is large, a good deal of repetition will be necessary so as to cater for all the learners. If demonstrations are done on patients, this encroaches on their privacy and, therefore, the patient's consent and cooperation must be obtained. It takes longer to demonstrate than to give patient care and it may thus be more tiring for the patient. Procedures which must be taught to learners may not be readily available. Demonstrations have the advantages of allowing discussion and questioning whilst they are being carried out. It is also possible to repeat the demonstration or to stop in order to illustrate a point. Demonstrations can produce a practice area where learners can become more familiar with handling equipment before actually attempting to carry out a technique on a patient.

Kesseninch (1992: 371) reports on a survey conducted on students and faculty at the Husson Eastern Maine Medical centre baccalaureate nursing programme. The survey provided data to support the opinion that demonstration together with lecture and discussion are effective teaching methods which should not be abandoned in the trend towards a curriculum revolution. Cowman (1995: 130) conducted a study on the teaching - learning preferences of 678 student nurses in the Republic of Ireland. In this study demonstration and practice was the most popular choice of teaching - learning strategy, with 65% of the respondents choosing it as either their number one or number two choice. This finding illustrates that students perceived the importance of clinical nursing activities in a context of nurse learning. The participants of the Diploma in Nursing Administration Course in Zimbabwe are

given an input on demonstration as a teaching strategy since they are involved in demonstrating nursing procedures to subordinates in the clinical areas.

3.4.4 Role-Play

Lowenstein (1995: 59) states that role-play is a dramatic technique that encourages participants to improvise behaviours that illustrate expected actions of persons involved in defined situations. The drama is usually unscripted. According to Quinn (1991: 180) role-play can be used for almost any social situation and it is an excellent method for exploring interpersonal communication skills. The situation to be acted out is described to the group and students are allocated roles to play and given a briefing as to individual characteristics (Mellish & Brink 1990: 148). Fuszard (1995b: 27) points out that using role-play, students are permitted to practice behaviours without risk. The students get feedback on these behaviours and gain understanding of their own reactions, feelings and perceptions. The students develop their own professional value systems as they study and become more accepting of the behaviours and value systems of others. The class members who are not assigned roles to play participate as observers and contribute to the discussion. When role-play is used in the Post Basic School of Nursing, it is aimed at developing decision making and problem-solving skills of the learners.

3.4.5 Nursing Rounds

Mellish and Brink (1990: 157) describe a nursing round as a planned, organised visit to patients, being in or out of bed, in order to assess the nursing care they are receiving, discuss their progress and make the necessary adjustments or changes to their care. Quinn (1991: 411) states that learners can gain a great deal from a nursing round. Anderson-Loftin (1995: 242 - 3) points out that nursing rounds are used to develop the clinical reasoning skills of critical thinking, problem solving, and decision making in students while they learn basic concepts in nursing. Students are prepared for the real world of nursing because nursing rounds are based on the reality of the practice world. The facilitator leads through questioning and role-modelling (Fuszard 1995b: 31). Nelms, Jones and Gray (1993: 19) report that many studies within the nursing education literature have documented the effectiveness and value placed on role modelling as a teaching-learning method by both nursing faculty and students. One criticism of modelling is that it is imitative and

observational, and is, therefore, a less active form of learning. Lopez suggests that by encouraging students to discuss what they have seen and experienced by observing their facilitators, active participation in the modelling process is invited. The participants of the Diploma in Nursing Administration in Zimbabwe are involved in nursing rounds under the guidance of their supervisors whilst on clinical secondment. After the clinical secondment, the student writes a report on his/her experience.

3.4.6 Computer-Assisted Instruction

David and Dowling (1995: 125) describe computer-assisted instruction as a term that encompasses a variety of teaching situations, the common linkage of which is the use of a computer in the instructional delivery process. An example of a computer-assisted instruction is a tutorial programme presented on a computer. Mellish and Brink (1990: 189) state that like programmed instruction, computer-assisted instruction is designed to elicit active responses from students. Once a response has been given, immediate feedback can be presented to indicate whether it was correct or incorrect. The major advantage of individualized instruction is that the learner can proceed at his or her own pace. David and Dowling (1995: 136) point out that computer equipment is expensive. Enough computers need to be available during the time period in the curriculum that the material is covered. A computer laboratory on the campus, shared by the whole institution can be useful.

3.4.7 Tutorials

Mellish and Brink (1990: 145) describe tutorials as a teaching technique which is used a great deal in tertiary education. It is suitable for senior students who have the capacity for individual work. Individual reading may be allocated and guidelines offered for the study material. Small groups of students come together to discuss the individual reading under the guidance of a tutor and conclusions are drawn. In the Post Basic School of Nursing small groups of students meet with a tutor to discuss their research projects following the lectures and individual reading.

3.5 LEARNING RESOURCES

The quality of nursing education is influenced by human and material resources. Some of the factors affecting the quality of nursing education outlined by Quinn

(1991: 373) include the number of teachers, the teaching methods, audiovisual aids and the physical environment. Shortage of adequately qualified teachers, inadequate audiovisual aids and a poor physical environment are not conducive to learning. Frost (1996: 1051) points out that with large numbers of students there may be practical constraints involving classroom space.

Mellish and Brink (1990: 195) state that in all teaching strategies some form of teaching aid may be suggested. According to Moffett and Hill (1997: 46) teaching aids may be involved when implementing active learning. The teaching aids include the chalkboard, overhead projector, films, film slides, charts, flip charts, real objects, models, printed material and video tapes. Loewenhardt and Bultman (1995: 151) indicate that video recording provides an immediate audiovisual recording on a tape that can be used again. According to Van Parijs and Abraham (1993: 40), teaching aids are a specific group of stimuli. They complement the value of the teacher's activities. The teaching aids bring a variety or change into the teaching situation. A change in stimulus level is essential to learning. Quinn (1991: 196) states that the sense of sight is the most important of all the senses in gathering information and combined with the sense of hearing, it provides almost all of the necessary sensory perception. It follows from this that audiovisual media have an important part to play in facilitating learning, since ideas can be conveyed more easily using pictures than words.

Negraponte (1999: 4) views information infrastructure as the most significant force driving the future health care delivery. Computer technology will become more integrated into care delivery, from planning services to evaluating outcomes. Mills and Stagers, in Hulsko, Pahoulis and Branson (1998: 31) suggest that health care employers should explore different methods and visual aids for computer learning and consider the learner's age, spatial memory, and visualization skills. They suggest that programmed or self-paced instruction is preferable to traditional classroom methods. Simpson (1998: 22) argues that, unlike many other industries, health care has been unwilling to embrace computers for information processing. Health care for which information is a life and death issue spends less than 2% of its annual budget on system purchase and implementation. By contrast, banking spends more

than 12% of its annual budget on information technology. This is partly due to the focus on cost rather than the value of technology. Garrison (1992: 143) points out that a learner may be ready to accept responsibility for learning but be incapable of proceeding due to lack of resources. Hoff (1995: 4) recommends that to ensure success, the leaders must try and increase learning competence by improving the resources for the learner both in quality and accessibility.

3.6 THE LEARNING ENVIRONMENT

A conducive learning environment promotes the students' capacity to learn. Redmond and Sorrell (1996: 27) agree that establishing caring relationships is the key to creating a caring learning environment for students. This is essential if students are to become caring professionals. Redmond and Sorrell (1996: 21) report that Bergmann (1990) found that the students she studied valued the caring behaviours of faculty who demonstrated respect for, confidence, and interest in their students. Halldorsdottir (1990), in Redmond and Sorrell (1996: 21), identified that caring, from a students' perspective, included professional competency, genuine concern for the student, a positive personality, professional commitment, mutual trust, a working relationship, promoting feelings of self-acceptance and self worth, and personal and professional growth. Uncaring behaviours included lack of professional competence or concern for the student, a demand for power and control, destructive behaviour, untrustworthiness, and detachment or emotional distance.

Tennant (1991: 4) reveals that the adult education literature has placed a great deal of emphasis on the importance of establishing an appropriate adult teacher-learner relationship. Because teachers and learners are adult peers, there is a widely held view that the relationship between teachers and adult learners should be participative and democratic and characterised by openness, mutual respect and equality. Although a relationship like this is desirable in all levels of education, the social position of children presents a constraint which is not apparent in the adult context. Redmond and Sorrell (1996: 25) recommend that faculty must convey genuine interest and concern in students as individuals and in their learning needs. Buchanan (1992), cited by Desimone (1996: 111) states that individualizing the learning process promotes relationships that are the very heart of education. In

addition to individualizing the learning process, adults need independence. Anderson-Loftin (1995: 243) points out that one of the most important aspects of facilitating learner independence is creating an environment that requires learners to be actively involved and accept responsibility for their learning. Walton (1996: 400) recommends that contemporary educational systems must provide opportunities for, and support students as they practise and use a critical and creative process within their nursing education framework. In the clinical areas it is essential to provide opportunities for students to correlate theory and practice.

3.7 CORRELATION OF THEORY WITH PRACTICE

McCaugherty (1992: 44) recognises that a general theory-practice gap exists throughout nursing, and it is evidenced in the way in which many written documents such as procedure manuals, textbook care plans, standards and quality assessment tools relate to practice. Ferguson and Jinks (1994: 687) report that several research studies have identified discrepancies between what students learn in the classroom and what is practised in clinical areas. According to Rolfe (1993: 172), most nurses will have had some experience of this so-called theory-practice gap. It is probably felt most acutely by student nurses who often find themselves torn between the demands of their tutors to implement what they have learnt in theory and pressure from practising nurses to conform to the constraints of real life clinical situations. The participants of the Diploma in Nursing Administration Course in Zimbabwe often experience problems when they want to implement what they learnt after completing the course due to shortage of staff.

McCaugherty (1992: 44) argues that theory and practice are different and are naturally set apart. Theory can never provide a fully comprehensive and accurate description of practice. When practice is reduced to theory, a number of important elements are lost. Bradshaw (1995: 211) identifies the purpose of clinical instruction as giving the students opportunities to bridge didactic information with the realities of nursing practice. In guided situations students blend theoretical knowledge with experiential learning. Cook (1991), cited by Ferguson and Jinks (1994: 689) argues that attempts to close the theory-practice gap may be doomed to failure due to the

powerful and often unrecognised influence of the hidden curriculum in the clinical areas.

Ferguson and Jinks (1994: 688) report findings from a number of researchers. Ward and community staff who carry the main responsibility for clinical teaching are reported to experience conflicting pressures in their dual role as educators and carers. Since much of qualified staff's time is spent on administrative work, basic care is often delegated to the lower echelons. Consequently, students frequently learn the practice of nursing from nursing assistants and other students. Reynolds suggests that the mass utilization of clinicians as part-time educators is doomed to fail, since most are not trained teachers and are not aware of the theoretical content of the course and are often unavailable to teach. Liaison between ward staff and tutors is often poor. In Alexander's study, one third of the qualified staff complained of no communication between themselves and tutors, and 70% were unaware of what theoretical preparation the student had undergone before the placement (Ferguson & Jinks 1994: 688).

Ferguson and Jinks (1994: 688) state that nurse tutors explain their lack of involvement in clinical supervision as being due to shortage of time, lack of control in the clinical environment and anxieties about this less predictable type of work. Due to their infrequent visits to clinical areas, tutors tend to be seen as visitors and have limited knowledge of patients. After years of theoretical teaching, doubts have also been raised about their clinical credibility. The visits to the clinical areas by tutors in the Post Basic School of Nursing in Zimbabwe are sometimes impeded by shortage of time, transport problems and financial constraints. Only one hospital is within a walking distance from the Post Basic School of Nursing. Ferguson and Jinks (1994: 690) outline some suggestions for achieving integration of what is taught with what is practised. The hidden curriculum could be addressed by joint standard setting and formalizing liaison links between the college and clinical areas. Service staff could be offered courses involving the updating of theory and teaching skills. Staff responsible for classroom teaching should be closely involved in clinical supervision of students. Assessment criteria should reflect the students' ability to

integrate what is taught with what is practised. There should be proper sequencing of content taught with clinical practice.

Frost (1996: 1051) recommends problem-based learning as this aids the integration of theory and practice through dealing with real life situations, encouraging the student to reflect on prior experience and knowledge. The notion of reflection as a significant concept in nursing education has been influenced by a developing awareness on the part of nurse educators of the need to encourage students to become thoughtful individuals capable of critical and innovative thinking (Pierson 1998: 165). Conger and Mezza (1996: 11) point out that the thinking and reasoning skills needed to make clinical decisions are closely related to the cognitive ability called critical thinking.

3.8 CRITICAL THINKING

Daly (1998:322) indicates that critical thinking is commonly cited as a desirable educational outcome particularly in relation to professional and higher education. Daley, Shaw, Balistreri, Glasenapp and Piacentine (1999: 42) report that following a Delphi research project, the American Philosophical Association (1990) published a consensus definition of critical-thinking based on 46 published critical thinking theorists from numerous disciplines. This definition states that critical thinking is the process of purposeful, self-regulatory judgement. This process gives reasoned consideration to evidence, contexts, conceptualizations, methods and criteria. Dobrzykowski (1994: 272) states that after Walters (1986) examined five textbooks discussing critical thinking skills, four general characteristics of critical thinking were identified. These are:

- ❑ a method of problem solving;
- ❑ an essential component is analysis;
- ❑ opinions or problems amenable to analysis; and
- ❑ purposeful mental activity that helps to formulate or solve problems, make decisions, or fulfil a desire to understand.

Beeken, Dale, Enos and Yarbrough (1997: 37) point out that critical thinking includes the ability to challenge previous assumptions and analyze their validity and utility rather than accepting facts at face value.

Schank (1990), cited by Daly (1998: 328) emphasizes that critical thinking skills are crucial for nursing practice due to an inherent need for nurses to think, analyze, synthesize and evaluate. Once nurses learn to think critically by questioning practice issues in an organized manner, they have learned the process of clinical decision making (Lipman & Deatrck 1997: 47). According to Walton (1996: 400) nurse graduates must be able to use and apply creative and critical thinking skills in order to survive in highly complex, challenging, and rapidly changing care arenas. Furthermore, nurses are expected to be able to think critically in order to process complex data and to make intelligent decisions concerning the planning, management, and evaluation of health care for their clients (Saarmann cited by Shin 1998: 415). Snyder (1993), cited by Dobrzykowski (1994: 272) states that effective critical thinking skills are vital in order to provide competent, safe care of clients and families, manage shorter hospital stays, use increasing sophisticated technologies and implement changing and challenging care philosophies. Critical thinking skills are necessary in the participants of the Diploma in Nursing Administration course in Zimbabwe since they are participating in health care reforms and have to compete for health care jobs.

Lewis, Brand, Duckett and Fairbanks (1997: 12) point out that nursing faculty members are challenged to provide learning experiences that prepare students to keep up with, and set the pace in health care. Shin (1998: 415) states that learning how to think critically is regarded as a major goal of nursing education. According to Doborzykowski (1994: 272) the challenge is to select appropriate strategies to teach critical thinking skills to all staff regardless of their level of expertise. Garrison (1991: 300) identifies the role of a teacher as encouraging the learner respectfully to challenge ideas, assumptions, norms and rules through collaborative dialogue. Critical thinking requires a learner to accept responsibility to examine ideas and issues and make worthy judgements. Conger and Mezza (1996: 11) propose a number of approaches that can promote critical thinking in the clinical setting:

- ask challenging questions appropriate to the level of the students;
- press students to justify or clarify their assertions;
- encourage students to generate original and unconventional ideas, explanations, or solutions to problems; and
- model thoughtfulness when talking with students.

3.9 SUMMARY

It was noted that whilst pedagogy is teacher-directed learning, andragogy is self-directed learning. The ideal approach to learning is the contingency approach which uses appropriate strategies after evaluating each particular learner's situation. The assumptions about adult learners are that they are self-directing and that they come into the learning situation with wide experience which must be shared with others. Adults become ready to learn when they experience a need to know or do something in order to perform more effectively in some aspects of their life. The adult's orientation to learning is performance centred rather than subject centred. The adult's most potent motivators are internal and these include: self esteem, achievement, recognition, competence, self confidence and self actualization. Positive reinforcements for adults such as praise, social approval and attention are good motivators. The principles of adult learning provide guidelines for facilitators in the organization of learning experiences for adults.

Despite some disadvantages, the lecture remains one of the mostly utilized teaching methods. The lecture method becomes more effective when combined with discussion and demonstration. The emphasis in group discussions is participation. Discussions give learners the opportunity to share their knowledge and experience with others. The most important aspect of demonstration as a teaching method is provision of immediate practice for the learners. The role-play may be used to develop decision-making and problem-solving skills of the learners. Nursing rounds are used to develop clinical reasoning skills of critical thinking, problem solving and

decision making in students. The advantage of computer-assisted instruction is that learners can learn at their own pace.

Shortage of adequately qualified tutors, inadequate audiovisual aids, inadequate reference materials and a poor physical environment are not conducive to learning. Several research studies have identified discrepancies between what students learn in the classroom and what is practised in the clinical areas. Joint standard setting and formalizing liaison links between the schools and clinical area may be helpful. Staff responsible for classroom teaching can help improve the situation by being closely involved in the clinical supervision of the students. Critical thinking skills are crucial for nursing practice due to an inherent need for nurses to think, analyze, synthesize and evaluate. The challenge to nurse educators is to select appropriate strategies to teach critical thinking to nurses. Active learning strategies such as group discussion and problem solving can promote critical thinking skills in nurses.

CHAPTER 4: PROGRAMME EVALUATION

4.1 INTRODUCTION

Since the aim of this study is the evaluation of the course for the Diploma in Nursing Administration, aspects of evaluation will be covered in this chapter. The aspects will include types and models of evaluation. The conceptual framework of the study is also covered in this chapter.

In broad terms Cronbach, cited by Ackroyd (1991: 231) defines **evaluation** as the collection and use of information to make decisions about an educational programme. Evaluation means simply to assess the value of something (Feuerstein 1994: 2). According to Nugent and Lambert (1997: 29) programme evaluation is a process of describing and judging a programme through the systematic identification, collection and interpretation of specific information to assist decision makers when choosing among available alternatives.

4.2 TYPES OF EVALUATION

There are basically two kinds of **evaluation**, namely **formative** and **summative evaluation** which were introduced by Scriven in 1967 (Whiteley 1992: 317). Wannenburg and Kotze (1991: 26) describe **formative evaluation** as a process of constant ongoing evaluation of programme and curriculum design, student's learning and the tutor's teaching. Dumas, Villeneuve and Chevrier (2000: 252) report that **formative evaluation** can assist in identifying gaps in the process of learning while the experience is still proceeding. MacDonald (1992: 102) notes that **formative evaluation** also provides feedback to the teachers on their performance. In this study, strengths and weaknesses in the teaching strategies of the course facilitators will be identified.

Summative evaluation takes place at the completion of a programme to determine what learning has been achieved or to sanction graduation or retention (Sarnecky 1990: 26). According to Dick and King (1994: 3) **summative evaluation** determines exactly what has been accomplished following a specified set of instructions. In nursing education, Mellish and Brink (1990: 289) highlight that

summative evaluation measures the student's ability to practice nursing at a safe level at the end of her course.

4.3 PROGRAMME EVALUATION MODELS

An evaluation model is an analytic plan or framework which guides the evaluator. Models provide a general framework on which to organize evaluation activities. Their purpose is to help evaluators view aspects of their particular programme in terms of broad categories for evaluation. Frameworks and models enhance understanding. They provide the mechanism through which concepts are clarified, relationships are shown, and areas of inquiry become more evident (Herbener and Watson 1992: 27).

Popham, cited by Sohn (1987: 27) reveals that since the late 1960s many educational writers have developed evaluation models for the purpose of proposing different ways of conceptualizing the manner in which systematic educational evaluation should take place.

4.3.1 Tyler's Behavioural Objectives Evaluation Model

Sconce and Howard (1994: 281) acknowledge that possibly the earliest attempt at curriculum evaluation was provided by Tyler in the 1930s. Tyler approached curriculum design through the development of objectives and their concomitant evaluation, the purpose being to see how far these objectives are actually being realized. According to Guba and Lincoln (1985: 4) objectives were important to Tyler because they provided an explicit guide to teachers, served as criteria for selection of materials, outlining content, development of instructional procedures, and preparation of tests and examinations. Objectives also served as the basis for the systematic and intelligent study of an educational programme.

It can be noted that through the use of objectives, Tyler's model has the advantage of measuring the programme's outcomes. Although Tyler's model has the advantage of measurability through the use of objectives, it also has a number of limitations. Evaluation has a much broader scope than just assessing whether a programme's objectives have been achieved or not. Programme evaluation also includes

identifying problems encountered, determination of the adequacy of human and material resources and identification of any other unintended outcomes. Sarnecky (1990: 26), observes that as a result of the Tyler model's limitations, a number of other evaluation models were introduced. These models included Stake's Countenance Model, Provus' Discrepancy Model, Stufflebeam's (context, input, process, product) Model and Scriven's Goal-Free Model.

4.3.2 Stake's Countenance Evaluation Model

Sconce and Howard (1994: 281) point out that in 1967 Stake proposed the Countenance Model in an effort to widen the basis for evaluation. According to Guba and Lincoln (1985: 12) the model proposed by Stake involves completing two data matrices: the so-called Description Matrix and Judgement Matrix.

Stake, cited by Sarnecky (1990: 26) refers to judgement and description as the two countenances of evaluation. Sohn (1987: 28) explains that in descriptive evaluation, an evaluator makes informal observations of both intended and actual performances and describes information derived from his observations. In judgemental evaluation, an evaluator compares this information to standards to make formal judgements. Both descriptive and judgemental evaluations study the antecedents (inputs), transactions (processes) and products (outcomes) phases.

It can be noted that Stake's Countenance Evaluation Model expanded the concept of objectives. It also includes contextual factors and unintended outcomes. Although Stake's Countenance evaluation model expanded on Tyler's Behavioural Objectives Evaluation Model, Whiteley (1992: 318) and Sarnecky (1990: 26) observe that as a framework the model is rather complex to operationalize. Guba and Lincoln (1985: 13) note that Stake left the means for deriving standards largely unspecified, providing little operational guidance to the evaluator on this important point. Stake also failed to issue guidance on how to recognise and deal with unintended outcomes.

4.3.3 Provus's Discrepancy Model

Stewart and Hluchyj (1987: 79) report that in Discrepancy Evaluation, the intent of the programme is compared to what actually happens (performance outcome). The difference, or discrepancy, between the two is used to influence programme revision decisions. The discrepancy may be positive in which case the outcomes exceed expectations. If the discrepancy is negative, the intent is not accomplished. If there is no discrepancy, the intent match the outcome. It is noted that the main use of Provus's Discrepancy Model is to acquire data for decision making. The model emphasises summative evaluation.

4.3.4 Scriven's Goal-Free Evaluation Model

Sconce and Howard (1994: 282) report that in 1972 Scriven suggested the concept of Goal-Free Evaluation. This concept was based on the belief that pre-specified objectives would inhibit the acknowledgement of arising issues and militate against the full utilization of available information. According to Scriven, cited by Whiteley (1992: 319), in Goal-Free Evaluation the evaluator is not told the purpose of the programme, but enters into the evaluation with the purpose of finding out what the programme actually is doing without being cued as to what it is trying to do. If the programme is achieving its stated goals and objectives, then these achievements should show up. If the programme is not achieving its goals and objectives, it is argued that they are irrelevant.

Scriven's model demonstrated that evaluation of the outcome of a training programme can be conducted even in the absence of programme objectives. Using Scriven's model, intended and unintended outcomes can be evaluated. The model widened the scope of programme evaluation from Tyler's model which focused only on evaluation of stated programme objectives.

Sarnecky (1990: 27) observes that the level of abstraction and lack of guidelines for practical application, make it difficult to implement Scriven's Goal-Free Evaluation model. Whiteley (1992: 319) reveals that Scriven acknowledged the limitations of his model and suggested that the model is best used as an auxiliary parallel activity to goal based evaluation.

4.3.5 Parlett and Hamilton's Illuminative Evaluation Model

According to Sconce and Howard (1994: 282) evaluation as illumination was first proposed by Parlett and Hamilton in 1972. The Illuminative Evaluation Model uses description and interpretation rather than measurement as its base. Whiteley (1992: 320) also highlights that in Illuminative Evaluation, attempted measurement of educational products is abandoned for intensive study of the programme as a whole. The rationale, operations, achievements and difficulties of the programme are studied. Observation, interviews and questionnaires are used to obtain information from people involved in the programme being evaluated. This is in an effort to illuminate problems, issues and significant programme features.

The Illuminative model allows for information to be extracted from all people involved in a programme. Sconce and Howard (1994: 282) acknowledge that the Illuminative Model is of particular importance for a strategy intended for everyday use on a wide variety of courses. However, the inability of the model to measure the quality of the curriculum renders it unsuitable for use in contractual situations.

4.3.6 Hammond's Goal-Attainment Model

Brady (1983: 176) reports that in 1973 Hammond came up with a Goal-Attainment Model for programme evaluation. The model emphasizes the interaction of instructional and institutional factors in achieving objectives. It is more concerned than Tyler's Objectives Model with determining the influence of the institutional and instructional factors on the attainment of objectives.

Hammond's Goal-Attainment Model, like Tyler's Model, is not comprehensive because it is limited to comparing student performance with behavioural objectives. The model becomes very useful in situations where the primary and immediate concern is to assess whether the programme objectives have been attained by the students.

4.3.7 Kirkpatrick's Evaluation Model

According to Kaufman and Keller (1994: 372) Kirkpatrick's Evaluation Model consists of four types of evaluation. The types are reaction, learning, behaviour and

results evaluation. Kaufman and Keller (1994: 372) reveal that while Kirkpatrick's types of evaluation are useful, they are also incomplete. They have encouraged many to focus too narrowly on the evaluation of training alone.

4.4 CONCEPTUAL FRAMEWORK OF THE STUDY

Polit and Hungler (1995: 101) explain that conceptual frameworks help to stimulate research and the extension of knowledge by providing both direction and impetus. This study will be guided by Stufflebeam's Evaluation Model.

4.4.1 Stufflebeam's Context-Input-Process-Product (CIPP) Evaluation Model

Stufflebeam, cited by Nugent and Lambert (1997: 29) defines evaluation as the process of delineating, obtaining and providing useful information for judging decision alternatives. Sarnecky (1990: 27) observes that Stufflebeam's Evaluation Model contains three evaluative components which include delineating, obtaining, and applying information concerning the programme. Guba and Lincoln (1985: 15) explain that **delineating** involves face to face encounters with decision makers to whatever extent may be necessary to identify the information that will be needed. **Obtaining** involves the physical collection and processing of information. **Applying** involves furnishing the collected and processed information to decision makers in ways that will render their decision making more rational.

Hamilton (1993: 150) reports that in 1971, Stufflebeam developed one of the most comprehensive models of programme evaluation which included context, input, process, and product. The goal of context evaluation, according to Clark, Goodwin, Mariani, Marshall and Moore (1983: 55) is to describe the relevant environment in which the curriculum exists. Its goal is also to collect data to provide a rationale for the determination and revision of educational objectives. Context evaluation also includes the contents of the curriculum. Barrett, Arklie and Smillie (1996: 1072) and Hogan (1992: 913) highlight that Context Evaluation identifies the strengths and weaknesses of the programme and provides direction for improvement. In this study, strengths and weaknesses of the course for the Diploma in Nursing Administration will be identified.

Input Evaluation is concerned with the resources required to achieve the curriculum objectives and involves the acquisition of information about various strategies proposed (Sconce & Howard 1994: 281). In this study the adequacy of human and material resources in the course, such as course facilitators, teaching aids and reference materials will be determined. Yeaw (1987: 125) points out that process evaluation provides feedback to the person implementing the procedures.

Its aims are:

- ❑ to detect defects in the design and implementation;
- ❑ to provide information for decisions; and,
- ❑ to monitor the procedure as it occurs.

Nugent and Lambert (1997: 30) point out that process evaluation detects any problems which develop and were not anticipated in the original plan. This study is going to identify strengths and weaknesses in the teaching strategies of the course facilitators in the course for the Diploma in Nursing Administration. Barrett *et al* (1996: 1072) point out that product evaluation is the final component of Stufflebeam's model and involves the assessment of outcomes. Its purpose is to measure, interpret and judge to what extent a programme has met the needs of the group for which it was intended. In this study, an assessment was made to ascertain whether the course for the Diploma in Nursing Administration meets the needs of the nurses who completed the course, as well as the needs of their work places.

It can be noted that Stufflebeam's evaluation model is systematic and comprehensive. The model builds on the concepts of Tyler and Stake. It can be used for both formative and summative evaluation and can thus help decision makers to make decisions effectively. In figure 4.1, the model as it was utilized for this study is portrayed.

4.4.2 Objectives of the study

Using Stufflebeam's Evaluation Model as a conceptual framework to guide this study, the objectives of this study under context, input, process and outcome evaluation are as follows:

Context

- Identify changes which may need to be made in the course content.

Input

- Determine the adequacy of human and material resources for the course such as course facilitators, teaching aids and reference materials.

Process

- Identify strengths and weaknesses in the teaching strategies of the course facilitators.

- Identify problems faced by the course participants whilst on the course.

Product

- Determine from the graduands, supervisors and tutors whether the course prepared participants to function adequately in the working environment.

- Identify problems which the course participants may be facing in implementing what they learnt in the course.

4.5 CONCLUSION

The models which have been presented in this chapter provide a framework which includes elements of context, input, process and outcome evaluation. Stufflebeam's Evaluation Model is comprehensive in the sense that it includes all the elements of context, input, process and product evaluation. This model was, therefore, used as a conceptual framework to guide the study.

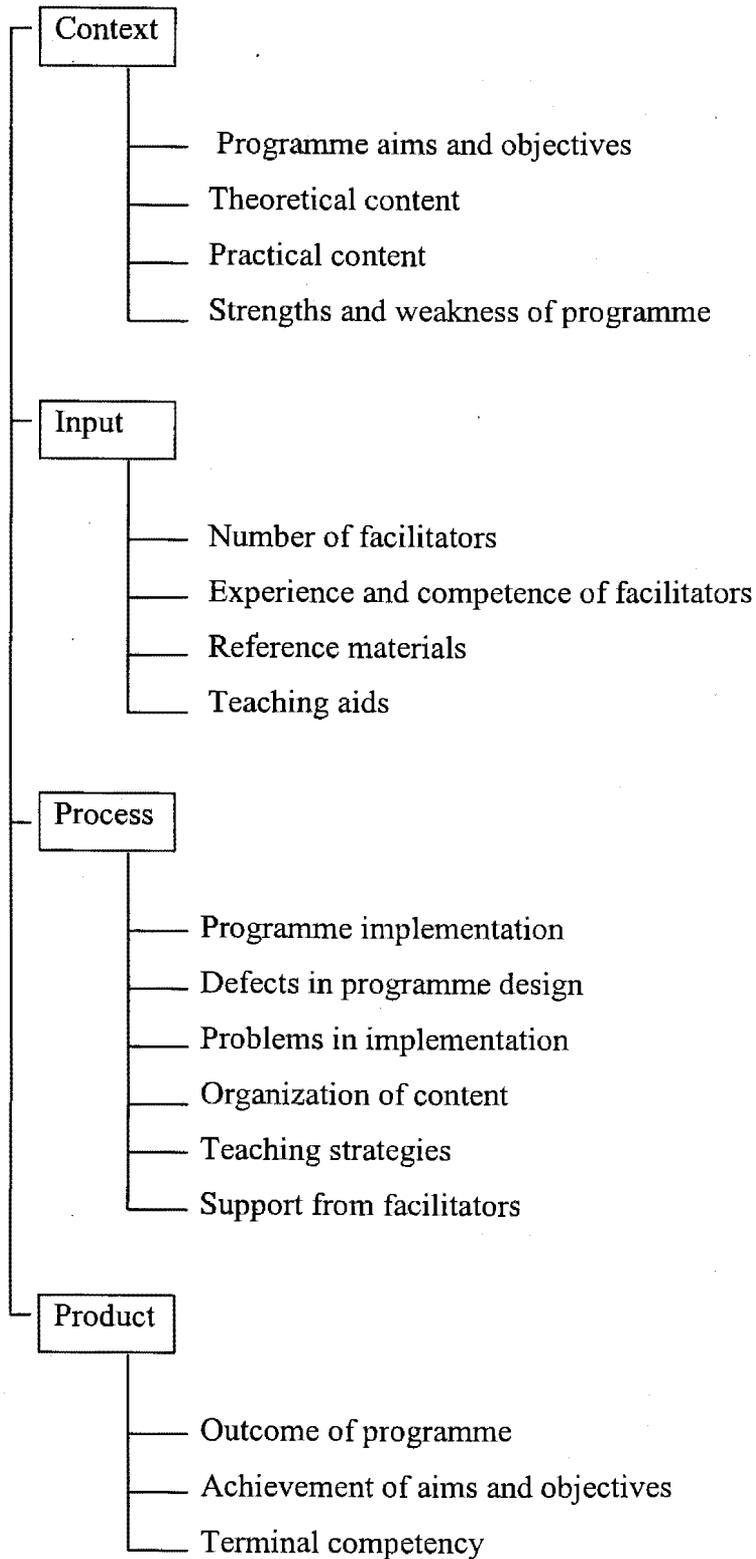


Figure 4.1: Model for Programme Evaluation
(Adapted from Stufflebeam's Evaluation Model)

CHAPTER 5: RESEARCH METHODOLOGY

5.1 INTRODUCTION

The purpose of this study was to evaluate the course for the Diploma in Nursing Administration in Zimbabwe. The research methodology used to accomplish this purpose is set out in this chapter.

5.2 RESEARCH DESIGN

The choice of a research design is determined by the purpose of the study. Since this study was evaluating a training programme, an evaluation research design was found to be appropriate for the study. Carnwell (1997:148) and Grey (1998a:188) define evaluation research as the utilization of scientific research methods and procedures to establish the value of a programme, treatment, practice or policy. This study sought to evaluate the course for the Diploma in Nursing Administration in Zimbabwe. Grey (1998a:188) and Polit and Hungler (1995:189) state that evaluation research can use an experimental design, a quasi-experimental design or a non-experimental design. A non-experimental design was used for this study since there was no control group. Massey (1995: 53) indicates that, in a non-experimental design, the researcher collects data without introducing interventions. In using the non-experimental design a large amount of information about a problem can be collected in a realistic setting in an efficient and effective way.

Roe (1998:318) points out that evaluation research is mainly concerned with establishing whether desirable goals have been achieved. It is possible to evaluate both process and outcomes. Evaluation research can be used to determine the reasons for specific successes and failures. According to Bond (1991: 186) evaluation research should provide relevant information for decision makers and so contribute to setting priorities, guiding allocation of resources, and guiding the modification and refinement of project structures and processes. This study sought to identify any weaknesses and strengths within the course for the Diploma in Nursing Administration in Zimbabwe so as to give feedback to the decision makers. This is a quantitative study using a descriptive approach.

5.3 RESEARCH INSTRUMENTS

The research instruments for this study consisted of the following:

- a questionnaire for respondents who completed the course for the Diploma in Nursing Administration in Zimbabwe;
- an interview schedule for nurse tutors involved in teaching students in the course;
- an interview schedule for guest lecturers involved in teaching students in the course; and
- an interview schedule for matrons (grade one, two and three) who supervise nurses who have completed the course.

The respondents who completed the course for the Diploma in Nursing Administration in Zimbabwe constituted the largest population of the four relevant groups for this study. These respondents were scattered in various parts of the country. Questionnaires were, therefore, found to be appropriate for these respondents.

Questionnaires are reported to have a lower response rate in comparison with interviews (Abramson 1993:166; Bailey 1994:149; Mulhall 1998:145). In this study the respondents were supplied with a stamped and addressed envelope in order to enhance the return rate. The respondents were also informed that the questionnaires took about thirty minutes to complete.

Although conducting interviews is time consuming and costly, it was appropriate to interview nurse tutors, guest lecturers and supervisors, since these constituted small populations for this study. Conducting interviews had the advantage of yielding a better response rate than questionnaires (Brink & Wood 1994:156; Grey 1998b:319). Conducting interviews also had the advantage of ensuring that all questions were answered.

5.3.1 Design of the Research Instruments

The research instruments were developed after conducting the literature review. The objectives of this study were developed using Stufflebeam's Evaluation Model as a conceptual framework to guide the study. The model consists of context, input, process and product evaluation (Hamilton 1993:150). The objective under **context evaluation** was to identify changes which may need to be made in the future course content. The objective under **input evaluation** sought to determine the adequacy of human and material resources for the course, such as course facilitators, teaching aids and reference materials.

The objectives under **process evaluation** were to identify strengths and weaknesses in the teaching strategies of the facilitators, and to identify problems faced by the course participants whilst on the course. The objectives under **product evaluation** were to determine, from facilitators, supervisors and graduands, whether the course prepared participants to function adequately in the working environment, as well as to identify problems which course participants might be facing in implementing what they have learnt in the course. The questions for the instruments were developed using these stated objectives as a guide.

5.3.2 Content of Research Instruments

This section presents the content of the research instruments.

Table 5.1 Sectional Content of Research Instruments as Indicated by the Specific Questions

Sectional Content	Questions in the instruments			
	Questionnaire for graduands	Interview schedule for nurse tutors	Interview schedule for guest lecturers	Interview schedule for supervisors
Biographical data	1 – 10	1 – 6	1 – 5	1 – 5
Context evaluation	11 – 13	7 – 12		6 – 8
Input evaluation	14	13	6	
Process evaluation	15 – 21	14 – 22	7 – 12	9 – 12
Product evaluation	22 – 27	23 – 25		
Suggestions for improving the course	28	26	13	17

Biographical Data

The first section of all the research instruments contained the biographical data of the respondents. This included age of the respondents, years of service, professional qualifications, employment position and place of work.

Context Evaluation

Context evaluation identifies strengths and weaknesses of the programme and provides direction for improvement (Barrett, Arklie & Smillie 1996:1072; Hogan 1992:913). In this study, context evaluation included evaluation of the course content. The respondents were asked to rate the relevance of the Diploma in Nursing Administration's course content. The respondents rated the course content using a Likert-type scale which included: response alternatives such as irrelevant; minimally relevant; relevant; and very relevant.

The respondents were also asked to rate the relevance of some suggested topics to be included in future courses. The topics included some identified training needs in nurse managers, for instance management of health finances (Christophie 1989:283-285; Henry, Lorensen & Hirschfeld 1992:62-63; Tebbitt 1993:85); health sector reforms, such as decentralisation (Poulin 1991:204; Snyder-Halpern & Cannon 1993:14); negotiation skills to solve disagreements regarding service conditions between unions and hospital management (Bezuidenhout 1994:233; Everson-Bates 1992:33; Rotkovitch 1993:53); and computer literacy (Rotkovitch 1993:53; Simpson 1996:88).

Input Evaluation

Input evaluation was concerned with the resources required to achieve curriculum objectives (Sconce & Howard 1994:281). Human and material resources affect the quality of nursing education (Garrison 1992:143; Quinn 1991:373). The respondents were asked to rate the adequacy of the number of nurse tutors, reference materials, classroom space, audiovisual aids, telecommunication and transport for follow up purposes of students on field secondment.

Process Evaluation

The aim of process evaluation is to detect defects in the design and implementation of a programme (Nugent & Lambert 1997:30). In this section the respondents were required to indicate their personal views on the design and implementation of the Diploma in Nursing Administration course. The respondents were asked whether theory was correlated with practice (Frost 1996:1051; Ferguson & Jinks 1994:687; Rolfe 1993:172). The respondents were also asked whether the learning environment was conducive to learning (Anderson-Loftin 1995:243; Redmond & Sorrelle 1996:27).

The respondents were required to rate the adequacy of time allocated to the course activities and were also asked to indicate the problems faced during programme implementation. The nurse tutors and guest lecturers were required to indicate the frequency with which they used a number of teaching strategies and teaching aids to teach the students.

Product Evaluation

The purpose of product evaluation is to measure, interpret and judge to what extent a programme has met the needs of the group for which it was intended (Barrett, Arklie & Smillie 1996:1072). The respondents who completed the course were asked to rate the extent to which they were prepared for their positions. The respondents were asked to rate the extent to which they thought the aims of the course were achieved by the participants (Nugent & Lambert 1997:29).

The respondents indicated their views regarding implementation of some aspects learnt on the course. From a checklist on aspects of nursing management, the respondents were asked to indicate additional assistance required from supervisors after completion of the course. These aspects included: planning; communication skills; teaching subordinates; performance appraisal of subordinates (Christophie 1989:283-285). The nurse tutors and the supervisors were asked to indicate in general the extent to which they were satisfied with the general performance of graduands produced in the course (Dick & King 1994:3; Samecky 1990:26).

Finally the respondents were asked to suggest ways of improving the course in order to improve the general performance of graduands.

5.3.3 Validity and Reliability of the Data Collection Instruments

This section presents the validity and reliability of the data collection instruments.

5.3.3.1 Validity

Validity refers to whether a measuring instrument accurately measures what it is supposed to measure. When an instrument is valid, it truly reflects the concept it is intended to measure (Best & Kahn 1993:208; Lobiondo-Wood & Haber 1998:331; Mathers & Huang 1998:145, Notter & Hott 1994:119).

Lobiondo-Wood and Haber (1998:332), classify **face validity** as a subtype of **content validity**. **Face validity** refers to whether items on an instrument superficially appear to make sense, and can be easily understood (Jenkinson 1998:175; York 1998:70). According to Mutchnick and Berg (1996:80), **content validity** assesses whether each item of the measurement instrument accurately measures the concept it was intended to measure. Burns and Grove (1993:343), point out that evidence of content-related validity is obtained from the literature, representatives of the relevant populations and content experts.

To determine the criterion-related validity of a measuring instrument, one must compare scores obtained on that instrument to scores for the same persons produced by a highly regarded external instrument that is sometimes called a gold standard (Knapp 1998:120). However, Jenkinson (1998:178), points out that few studies can truly claim to have evaluated criterion validity as gold standards are hard to find.

It was decided that **face validity** and **content validity** would be appropriate for this study. The concepts in the data collecting instruments were developed after reviewing literature relevant to this study. The data collecting instruments were given to four senior nurse tutors involved in teaching students in the Diploma in Nursing Administration course and a principal tutor of a nurse training school to comment on whether the items were clear and made sense. **Face** and **content**

validity of the data collecting instruments were further assessed by two consultants in programme evaluation and the two promoters of the study. A number of adjustments to the instruments had to be made following the comments of the validators. These included addition of extra items related to the DNA course, omitting some irrelevant items and correcting some ambiguous items.

5.3.3.2 Reliability

Reliability is concerned with how consistently the measurement technique measures the concept of interest (Burns & Grove 1993:339; Sindhu 1998:99; York 1998:69). Reliability is concerned with accuracy, precision, stability, equivalence and homogeneity. The **stability** of an instrument refers to the instrument's ability to produce the same results with repeated testing. The **homogeneity** of an instrument means that all the items in a tool measure the same concept or characteristic. If the tool produces the same results when equivalent or parallel instruments are used this is referred to as **equivalence** (Lobiondo-Wood & Haber 1998:337).

Cronbach's alpha coefficient is the test most frequently used to establish internal consistency. This test correlates each individual item with each other item and the overall score (Brink & Wood 1994: 185). The higher the intercorrelations between pairs of items, the higher the item-to-item consistency of the test (Knapp 1998:130). The items in the instruments of this study were not designed to contribute to a single underlying construct. The items were designed to elicit specific information in relation to the course for the Diploma in Nursing Administration. In consultation with the statistician it was agreed that no specific tests for construct reliability were applicable for this study. Knapp (1998:125) emphasizes that for reliability, the bottom line is not expert judgement but rather empirical verification. Reliability is strictly an empirical phenomenon.

5.3.4 Pretesting of the Data Collection Instruments

The purpose of the pretesting of the data collection instruments was to check whether the questions were clear, easily understood and valid. The instruments which had been reviewed by nurse tutors and experts on programme evaluation were

examined by the statistician regarding their feasibility for computer analysis. Some changes were made in the layout of the instruments, such as regrouping of items.

Pretesting the data collection instruments was done in the following way: five respondents who completed the course were given questionnaires to complete; two nurse tutors, two guest lecturers and two supervisors of nurses who completed the course were interviewed.

The five respondents who completed the course and the two supervisors were conveniently selected from a hospital. Permission to conduct the pretesting was granted by the director of health services (Appendix: 9). The two nurse tutors and guest lecturers were randomly selected for the interviews. All the respondents who took part in pretesting of the instruments were excluded from the main study.

The respondents did not experience problems in understanding the questions. Following the pretesting it was established that the questionnaire took about thirty minutes to complete. The space provided for respondents to write comments in the questionnaires was adequate. In some of the questions where respondents were expressing their views, some were uncertain about the aspects under consideration. One respondent was uncertain as to whether the hospital environment was conducive to learning. The rating scale for such questions was modified to read: strongly disagree, disagree, uncertain, agree and strongly agree. The response alternatives on some of the other questions were also modified in order to give the respondents a wider choice of responses. All the modifications were made prior to conducting the main study.

5.4 POPULATION AND SAMPLE

This section presents the population and sample.

5.4.1 The Population

A population is the entire group of elements that meets a well-defined set of eligibility criteria (Haber 1998:248; Massey 1995:71). The target population for this study consisted of the following:

- nurses who completed the course for the Diploma in Nursing Administration in Zimbabwe from 1978 to 1997;
- all the nurse tutors involved in teaching the course;
- all the guest lecturers involved in teaching subjects on the course;
- supervisors (matrons) in hospitals who supervise nurses who completed the course.

Nurses who completed the course are employed in general and provincial hospitals in the eight provinces of Zimbabwe including the five central hospitals. Some of the hospitals in the provinces are mission and private hospitals. The central hospitals are referral hospitals which offer specialist services to patients and clients. The inclusion criteria for nurses who completed the course from 1978 to 1997 were that they had to be registered with the Health Professions Council of Zimbabwe. Nurses who completed the course, but were living outside Zimbabwe were excluded from this study.

The supervisors of nurses who completed the course were mainly from provincial and central hospitals. One private hospital and a general hospital with staff who supervise nurses who completed the course were also included in the study. The supervisors from the different hospitals were either grade one, two or three matrons. The grade one supervisors were in charge of the central hospitals and were also referred to as principal nursing officers. The grade three supervisors directly supervised sisters in charge of wards. The grade two supervisors were responsible for the grade three supervisors.

5.4.2 The Sample

Sampling is the process of selecting a portion of the population to represent the entire population (Haber 1998:248; Couchman & Dawson 1995:87). A list of names and addresses of nurses who completed the course from 1978 to 1997 was obtained from the Health Professionals Council of Zimbabwe. The list consisted of

228 nurses who were still actively functioning within the health services of Zimbabwe. No sampling was done as questionnaires were sent to all 223 nurses who had not been involved in the pretesting of the questionnaire. From this census, 165 nurses responded, giving a response rate of 74%. Babbie (1990:182) reports that a response rate of 70% or more from questionnaires is considered to be very good.

Due to their small numbers, all six nurse tutors and all sixteen guest lecturers involved in teaching the course were interviewed. Convenience sampling was used to interview the supervisors of nurses who completed the course.

An attempt was made to interview as many supervisors as possible during the data collection period. The inclusion criterion was that only supervisors who supervised nurses who completed the course for the Diploma in Nursing Administration would be included. Supervisors present at the time of the visits for data collection were interviewed. Repeated visits were made to hospitals with a number of supervisors during the data collection period in order to interview as many of them as possible. Figure 5.1 presents a graphic illustration of sample size and place of work of the supervisors.

A total of 34 supervisors were interviewed from hospitals throughout Zimbabwe. Six supervisors who were away on study leave during the data collection period, were not interviewed. One principal nursing officer was interviewed at a private hospital. All five principal nursing officers in the central hospitals were interviewed. Eighteen matrons were also interviewed from the central hospitals. Two matrons were interviewed at the general hospital. Eight matrons were interviewed from six provincial hospitals. Data were collected at the time the researcher was following up students seconded to provincial hospitals. No students studying for the course had been seconded to the seventh provincial hospital.

5.5 ETHICAL CONSIDERATIONS

Getliffe (1998:118) points out that in any study involving human subjects there are ethical issues that must be considered. Potential subjects must be informed of the study protocol and the extent of their own involvement. According to Knapp

(1998:34) the concepts of anonymity and confidentiality are associated with research subjects' right to privacy. In either case, the object is to ensure that the subjects' identities are not linked to their responses. In this study confidentiality was maintained by keeping obtained information and the subject's identity private.

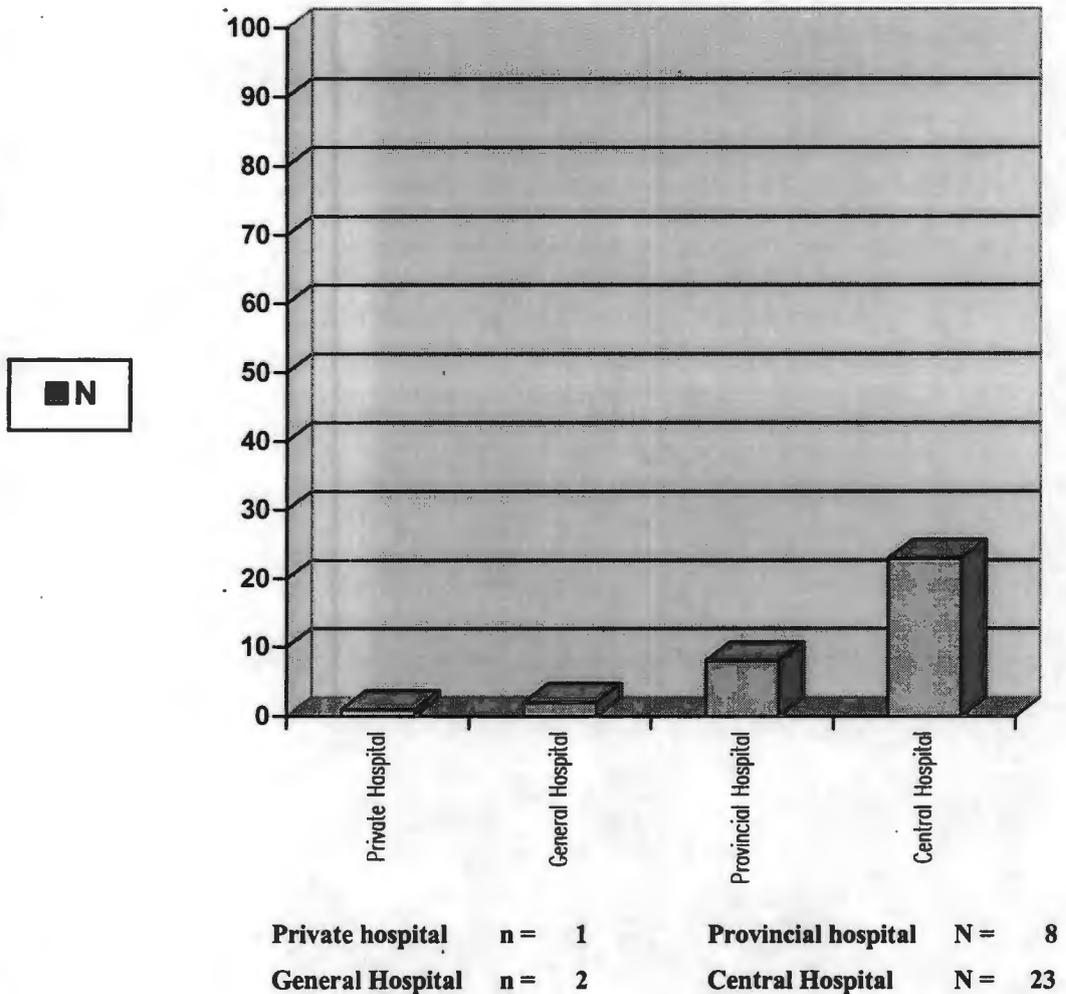


Figure 5.1: Sample Size and Place of Work of the Supervisors (n = 34)

Anonymity of the respondents who received questionnaires was ensured as they were not required to write their names on the questionnaires.

Leedy (1993) in Mutchnick and Berg (1996:217) report that researchers must maintain scientific objectivity. Every person is entitled to the right of privacy and dignity of treatment. Research findings should be presented honestly and without distortion. The researcher must acknowledge assistance, collaboration with others

and sources from which information was borrowed. The respondents for this study participated voluntarily.

5.6 DATA COLLECTION

This section presents data collection.

5.6.1 Permission to Collect Data

Before conducting this study permission was sought from the Medical Research Council of Zimbabwe (Appendix: 10). This permission was granted following submission of the research proposal (Appendix: 19). Permission to gain access and collect data from health institutions in Zimbabwe was sought from the Secretary for Health and Child Welfare (Appendix: 6). The letter was sent to the Director of Nursing Services in Zimbabwe. The purpose of the study was stated. Permission was granted by the Secretary for Health and Child Welfare who maintains the overall responsibility for all the health institutions in Zimbabwe (Appendix: 8). Permission was sought from the Director of Health Services requesting for permission to pretest questions (Appendix: 7). This permission was granted (Appendix: 9). It was also important for the heads of institutions to be consulted on gaining access to the institutions. Permission to collect data was therefore also sought from the eight provincial medical directors and the five medical superintendents of the central hospitals by writing to them (Appendix: 11, 12 & 13). After obtaining the necessary permission, data were collected from April to July 1998 (Appendix: 14, 15, 16, 17 & 18).

5.6.2 Distribution of the Questionnaires

Questionnaires were sent out to all 223 nurses who completed the course for the Diploma in Nursing Administration in Zimbabwe. The questionnaires were accompanied by information which included the purpose of the study and instructions on how to complete the questionnaire. A return date within a month from the date of delivery was included in the information. The respondents were assured that confidentiality and anonymity would be maintained. They were instructed not to write their names on the questionnaires (Appendix: 2).

The respondents were informed that the questionnaires took about 30 minutes to complete, and were provided with a stamped, addressed envelope. Questionnaires were delivered to institutions which had a number of nurses who completed the course. The distribution of the questionnaires was done through the principal nursing officers. The rest of the questionnaires were mailed to individuals who completed the course.

5.6.3 Conducting the Interviews

Structured interview schedules were used to conduct interviews with the six nurse tutors (Appendix: 3) and the sixteen guest lecturers (Appendix: 4) involved in teaching the course. Structured interview schedules were also used to conduct interviews with thirty-four supervisors (matrons) who supervise nurses who had completed the course (Appendix: 5). The respondents were briefed on the purpose and importance of the study. The respondents were reassured by the researcher that all information collected would be treated as confidential.

Appointments were made with nurse tutors and guest lecturers for times to conduct the interviews with them. The interviews with nurse tutors took about one hour and those with guest lecturers about 30 minutes. Appointments were made with matrons who were in charge of the nurses at the institutions. Duty rosters were used to identify matrons who were supervising nurses who completed the course. Appointments were made with these matrons and repeated visits were made at institutions with a number of matrons in order to reach as many as possible. All matrons in charge of nurses at central hospitals were interviewed. Each interview took about 45 minutes.

5.7 DATA ANALYSIS

The data collected for this study were coded and analyzed using the Statistical Analysis system. Descriptive statistics were used to analyze data in relation to each question. Frequencies and percentages for each item pertaining to the questions were computed. Content analysis was used to analyze open-ended questions and determine theme categories. Descriptive statistics were presented in tables, graphs and pie diagrams.

5.8 BIOGRAPHICAL DATA OF THE RESPONDENTS

The biographic data of all the respondents is presented under this section.

5.8.1 Biographical Data of Respondents Who Completed the DNA Course

This section presents the biographical data of the respondents who completed the course for the Diploma in Nursing Administration (DNA) in Zimbabwe.

Table 5.2 Ages of the Respondents who Completed the DNA Course (n = 165)

Age	N	%
30 – 35	5	3.0
36 – 40	29	17.6
41 – 45	44	26.7
46 – 50	49	29.7
51 – 55	30	18.1
56 – 60	7	4.2
61 – 65	1	0.6
Total	165	100.0

In table 5.2 it can be noted that all the respondents were above 30 years of age. Most of the respondents (131 or 79%) were above the age of 40 years. It can thus be assumed that their responses would be reliable, as adults tend to be quite self-assured at age 40 and above.

Although five years working experience is the minimum entry requirement into the DNA course, it can be noted in table 5.3 that the majority (142 or 86%) of the respondents had over 10 years working experience. Because of the limited vacancies

for the DNA course, seniority was taken into account during the selection of the candidates.

Table 5.3 Number of Years Served by Respondents as a Qualified Nurse before Undergoing the DNA Course (n = 165)

Number of years	N	%
5 – 9	23	13.9
10 – 14	59	35.8
15 – 19	48	29.1
20 – 24	27	16.4
25 – 29	16	3.6
30 – 34	2	1.2
Total	165	100.0

Figure 5.2 presents the year in which respondents completed the DNA course. The average intake of students in the DNA course between 1978 and 1982 was 7 and between 1993 and 1997 it was 22. In figure 5.2, it is noted that the majority (77 or 46.7%) of the respondents completed the course between 1993 and 1997. During this period the total intake of students in the DNA course was 109. The 77 respondents represent 70.6% of all the candidates trained between 1993 and 1997.

Most of the respondents (120 or 73.6%) did not obtain any additional qualifications after completing the DNA course. Three (1.8%) obtained a bachelor's degree and 4 (2.5%) obtained a master's degree. Other qualifications obtained by the respondents after completing the DNA course included diplomas in public administration, adult education, business studies, occupational health nursing and a certificate in systematic counselling.

The respondents who completed the DNA course were also asked to indicate any professional courses which they were pursuing at the present time. Twenty-three

(14%) were pursuing a bachelor's degree, six (3.7%) were pursuing a master's degree, one (0.6%) was pursuing a diploma in public relations and another one was busy with a computer course.

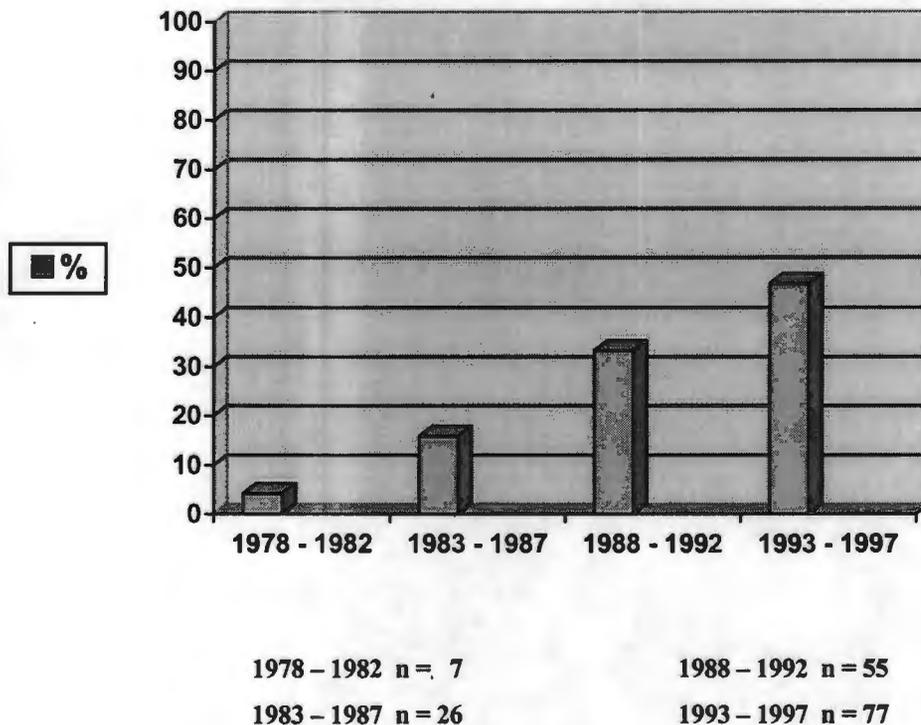


Figure 5.2: Year in Which Respondents Completed the DNA Course (n = 165)

When asked whether they intended to pursue additional courses in future, 85 (51.8%) responded that they intend to pursue a bachelor's degree, 83 (50.6%) intended to pursue a master's degree and 29 (17.7%) intended to pursue a doctoral degree. The majority of the nurses who completed the DNA course thus indicated an interest in continued education.

The majority of the respondents who moved up to higher positions after completing the DNA course were promoted to the grade of matron as can be noted in table 5.4. Other positions held before the DNA course were district nursing officer, reproductive health trainer and station medic officer. Other positions held after the DNA course were chief nursing officer, assistant director of nursing services, health services manager, district nursing officer, occupational health nurse, allocation officer, health education officer, research nurse and university lecturer.

Table 5.4 Respondents' Title of Position before DNA Training and at Present Position (n = 163)

Title of position	Before DNA training		Present position	
	N	%	N	%
Senior Sister	11	6.7	2	1.2
Sister-in-Charge	101	62.0	50	30.7
Clinical Instructor	6	3.7	2	1.2
Matron	37	22.7	83	50.0
Other	8	4.9	26	16.0
Total	163	100.0	163	100.0

Table 5.5 Respondents' Number of Years in Present Position after Completing the Course (n = 164)

Respondents' number of years in present position	N	%
1 – 5	77	47.0
6 – 10	60	36.6
11 – 15	21	12.8
16 – 20	5	3.0
21 – 25	0	0
26 – 30	1	0.6
Total	164	100.0

It was noted from table 5.4 that most of the nurses who completed the DNA course moved to higher positions after completing the course. However, it is evident from table 5.5, that the majority of the respondents, 87 (53%), remained in their present positions for six or more years after their DNA course. Twenty-seven (16%) have

remained in their present positions for eleven or more years. This indicates the limitations in the nursing profession for continued upward mobility.

From table 5.6 it is apparent that the central hospitals employed the largest number, (57 or 34.5%), of the respondents. This is because the central hospitals are referral hospitals with larger staff establishments than other hospitals. Other places of work included municipal health institutions, army medical services, police medical services, Ministry of Health headquarters, research institute, National Family Planning Council and critical care ambulance services.

Table 5.6 Respondents' Classification of Current Place of Work (n = 165)

Place of work	N	%
Central Hospital	57	34.5
Mission Hospital	20	12.1
District Hospital	19	11.5
Provincial Hospital	16	9.7
Private Hospital	13	7.9
General Hospital	8	4.8
Other	32	19.4
Total	165	100.0

Regarding the type of department where respondents were employed at the time of the study (Appendix: 2, item 10), the majority (87 or 53%) of the respondents reported working in administration departments; 48 (29%) within clinical areas of health institutions, and 5 (3%) at schools of nursing. Other departments where the respondents were working included the family and child health department, nursing directorate, research unit, health education unit, occupational health and safety services and community health nursing.

5.8.2 Biographical Data of Nurse Tutors who Teach the DNA Course

All six nurse tutors interviewed were above the age of 40 years. Only one (16.7%) of the tutors was above the age of 60 years. This indicates that all the tutors interviewed had more than twenty years experience in the nursing field.

The six nurse tutors interviewed were all registered general nurses, state certified midwives and in possession of a bachelor's degree. Five of the nurse tutors had a master's degree as their highest professional qualification. Other professional qualifications held by some of the nurse tutors were: diploma in community health nursing; diploma in nursing education; midwifery tutor's diploma; diploma in district nursing; and a registered certificate for the nursing of sick children. It can be noted that between them, the nurse tutors had a wealth of experience in the nursing field.

One of the nurse tutors interviewed held the principal tutor position, three of the nurse tutors held senior tutor positions and two held tutor positions. The nurse tutor who held the principal tutor's post had been in the Post Basic School of Nursing for a period of ten years. Three of the nurse tutors had been employed in the school for periods ranging from four to eight years. Two had been employed in the school for a period of two years. The nurse tutors interviewed thus had wide experience in the Post Basic School of Nursing. Four of the nurse tutors had previous teaching experience in other schools of nursing. The overall teaching experience of the four tutors ranged from ten to twenty years.

5.8.3 Biographical Data of Guest Lecturers Who Teach in the DNA Course

The sixteen guest lecturers involved in teaching the DNA course taught in the following subjects: pharmacology; microbiology; sociology; psychology; psychiatry; health education; nutrition; public administration; statistics; Zimbabwe's Programme on Immunization; family planning; and planning and designing of health institutions. The guest lecturers were specialists in the mentioned subjects areas.

The highest professional qualifications of the guest lecturers were as follows: diploma, four (25%); bachelor's degree, four (25%); masters degree, five (31.3%); and doctoral degree, three (18.8%). The posts held by the guest lecturers from the University of Zimbabwe were: senior lecturer and professor. The posts held by other guest lecturers included: consultant psychiatrist; head of psychological services; principal and senior health education officer; principal dietician; senior nutritionist; under-secretary finance; under-secretary family health projects; statistician; assistant director family planning; and training officer.

Table 5.7 Guest Lecturers' Place of Employment (n = 16)

Place of employment	N	%
Ministry of Health	10	62.5
University of Zimbabwe	2	12.5
Ministry of Public Service	1	6.3
Private sector	1	6.3
Other	2	12.5
Total	16	100.0

In table 5.7 it is evident that the majority (10 or 62.5%) of the guest lecturers were employed by the Ministry of Health. The Post Basic School of Nursing is under the jurisdiction of the Ministry of Health. The policy of the Ministry of Health is to recruit guest lecturers from other places only if none are available within the Ministry of Health. The other 2 (12.5%) guest lecturers were from a parastatal organisation involved in family planning.

The majority (9 or 56.2%) of the guest lecturers had been teaching at the Post Basic School of Nursing for periods ranging from one to five years. Five (31.2%) had maintained interest in teaching in the school and had teaching experience for ten years or more.

Table 5.8 Number of Years Guest Lecturers Have Been Teaching at the Post Basic School of Nursing (n = 16)

Number of years	N	%
1 – 5	9	56.2
6 – 10	3	18.8
11 – 15	3	18.8
16 – 20	1	6.3
Total	16	100.0

5.8.4 Biographical Data of Matrons Who Supervise Nurses Who Completed the DNA Course

All 34 supervisors of nurses who completed the DNA course were registered general nurses. Only one of the supervisors was not a midwife. The majority (27 or 79.4%) of the supervisors had also completed the DNA course. Four had completed the psychiatric nursing diploma, the diploma in community health nursing, as well as a master's degree. Two had completed a bachelor's degree. Other professional qualifications held by the supervisors included diplomas in ophthalmic nursing, intensive care, paediatric nursing, operating theatre nursing, thoracic nursing and health education.

Most of the supervisors (16 or 47.1%) were grade three matrons who directly supervised the sisters-in-charge of wards. Twelve (35.3%) of the supervisors were grade two matrons who, in the provincial hospitals, had overall accountability for all the nurses. In the central hospitals, the grade two matrons were responsible to the principal nursing officers. Six (17.6%) of the supervisors who were interviewed were principal nursing officers. One of the principal nursing officers was employed at a private hospital and the other five were employed at the central hospitals.

5.9 SUMMARY

In this chapter, the methodology of the study was described. Questionnaires were distributed to 223 nurses who completed the DNA course and the response rate was

74%. The majority (57 or 34.5%) of the respondents who completed the DNA course were working in central hospitals, and most (14.2 or 86%) had over ten years working experience before undertaking the DNA course. All six nurse tutors and sixteen guest lecturers who had not been involved in the pretesting of the instruments, were interviewed. Thirty-four matrons who supervise nurses who completed the DNA course, and who were on duty during the data collection period were interviewed. The majority (27 or 79.4%) of the matrons who supervised nurses who completed the DNA course had also completed the DNA course themselves. All six nurse tutors interviewed possessed a minimum qualification of a bachelor's degree. The qualifications of the guest lecturers interviewed ranged from a diploma to a doctoral degree.

CHAPTER 6: DATA PRESENTATION AND INTERPRETATION

6.1 INTRODUCTION

This chapter presents the data obtained from questionnaires completed by the 165 respondents who completed the Diploma in Nursing Administration course as well as the interviews conducted with the six nurse tutors, 16 guest lecturers and 34 supervisors in the clinical areas who were matrons. The data is presented in sections according to the objectives of the study. In some tables and figures where the total cumulative percentages do not add up to exactly 100.00, these have been rounded off to the nearest decimal point to make up 100%. The resultant error is not more than 0.01 percent.

6.2 SECTION A: THE COURSE CONTENT OF THE DIPLOMA IN NURSING ADMINISTRATION

This section presents the data obtained under the objective which sought to identify changes which need to be made in the course content for the Diploma in Nursing Administration (DNA) in Zimbabwe.

6.2.1 Aims of the Course for the Diploma in Nursing Administration in Zimbabwe.

The nurse tutors were asked to indicate the extent to which they felt the existing aims of the DNA course reflected the learning needs of the students (Appendix: 1). The following were the aims:

- apply the principles of management in running the nursing services;
- demonstrate appropriate communication skills in dealing with clients and health care workers;
- apply the principles of sociology in the nursing care of patients, such as respecting the culture and values of individuals;

- apply the principles of psychology in the nursing care of patients, such as reinforcing good behaviour by giving rewards;
- apply the principles of adult learning in the teaching of subordinates;
- demonstrate ability to appraise the performance of subordinates; and
- conduct research studies in nursing practice.

All six (100%) nurse tutors interviewed agreed that these course aims reflected the broad learning needs of the students. The students are also expected to achieve specific objectives similar to those outlined in the DNA course content in South Africa (Appendix: 1). The nurse tutors were asked whether they were clear on what was supposed to be taught in the DNA course, to which everyone interviewed indicated in the affirmative. The sixteen guest lecturers were also asked whether they were clear on what was supposed to be taught in the DNA course. Only one of the guest lecturers appeared to be uncertain. While this guest lecturer had a course-outline for the pharmacology which he taught, he was not sure about the depth at which he had to deliver the information.

The six (100%) nurse tutors were asked whether learning objectives were available for each section of the DNA course content, to which the majority (4 or 66.7%) of the tutors indicated that these objectives were not available for sections of the course they were required to teach. Learning objectives were available only for the sections of the course which were taught by the guest lecturers. While there was a course outline, a teaching guide which provided objectives for all sections of the course was not available.

6.2.2 Relevance of the DNA Course Content to Nurses Who Completed the Course

The students who completed the DNA course, their supervisors and the nurse tutors were asked to indicate the relevance of the DNA course content for

functioning in various positions in the health services. The responses are presented in table 6.1.

There was no doubt among the nurse tutors, supervisors and DNA graduands about the relevance of management of human resources to the nurse manager. The success and functioning of the health care system is influenced by human resources. The nurse manager has to ensure that the health institutions are staffed by adequate and competent nurses in order to provide quality care to patients.

All the nurse tutors and all the supervisors indicated management of equipment as relevant. The nurse manager orders equipment and is responsible for its security. He/she has to ensure that the equipment is always in good working order and that it is placed in a convenient place. The cost of the various types of equipment as well as its replacement costs should be known to the nurse managers as well as the nurses.

Public administration has relevant application to the role of the nurse manager. All the nurse tutors indicated public administration as relevant. It was noted with concern that three (8.8%) of the supervisors and five (3.1%) of the DNA graduands indicated public administration as irrelevant. Public administration enhances the skills of the nurse manager in the management of human and material resources.

Nursing ethics was considered irrelevant for inclusion in the DNA course-content by six (17.6%) of the supervisors and six (3.7%) of the DNA graduands. Although nursing ethics is covered in general nurse training, nurse managers continue to face a variety of complex ethical problems which often require debate. Raines (2000: 36) reports that nurses experience high levels of stress related to ethical situations. In ethical decision making nurse managers are faced with the problem of containing costs and at the same time providing quality care to patients.

It was noted with concern that one nurse tutor, four (11%) of the supervisors and eight (4.9%) of the DNA graduands indicated methods of teaching adults as irrelevant. The nurse managers together with nurse tutors have a role to ensure

Table 6.1 Relevance of the DNA Course Content to Graduands as Indicated by DNA Graduands, Supervisors and Nurse Tutors

Contents	DNA Graduands n = 165				Supervisors n = 34				Nurse Tutors n = 6			
	Irrelevant		Relevant		Irrelevant		Relevant		Irrelevant		Relevant	
	n	%	n	%	n	%	n	%	n	%	n	%
Fayol's principles of management	5	3.1	158	96.9	4	11.8	30	88.2	0	0.0	6	100
Generic principles of administration	4	2.5	157	97.5	2	5.9	32	94.1	0	0.0	6	100
Management of human resources	1	0.6	164	99.4	0	0.0	34	100.0	0	0.0	6	100
Management of equipment	7	4.3	155	95.7	0	0.0	34	100.0	0	0.0	6	100
Public administration	5	3.1	157	96.9	3	8.8	31	91.2	0	0.0	6	100
Nursing ethics	6	3.7	157	96.3	6	17.6	28	82.4	0	0.0	6	100
Principles of adult learning	11	6.7	153	93.3	3	8.8	31	91.2	0	0.0	6	100
Methods of teaching adults	8	4.9	156	95.1	4	11.8	30	88.2	1	16.7	5	83.3
Principles of health education	13	8.0	149	92.0	3	8.8	31	91.2	2	33.3	4	66.7
Role of the community nurse	31	19.0	132	81.0	10	29.4	24	70.6	0	0.0	6	100
Primary health care	11	6.7	154	93.3	7	20.6	27	79.4	0	0.0	6	100
Human growth and development of children under five years	41	25.5	120	74.5	12	35.3	22	64.7	1	16.7	5	88.3
Occupational health	23	14.2	139	85.8	9	26.5	25	73.5	1	16.7	5	88.3
Public health	19	11.8	142	88.2	4	11.8	30	88.2	0	0.0	6	100
Conducting nursing research	7	4.2	158	95.8	4	11.8	30	88.2	0	0.0	6	100

Table 6.1 (Continued)

Contents	DNA Graduands n = 165				Supervisors n = 34				Nurse Tutors n = 6			
	Irrelevant		Relevant		Irrelevant		Relevant		Irrelevant		Relevant	
	n	%	n	%	n	%	n	%	n	%	n	%
Descriptive statistics	26	16.0	137	84.0	3	8.8	31	91.2	0	0.0	6	100.0
Basic principles of good nutrition	44	26.8	120	73.2	11	32.4	23	67.6	2	33.3	4	66.7
Nutritional disorders	51	31.1	113	68.9	12	35.3	22	64.7	4	66.7	2	33.3
Zimbabwe's expanded programme on immunization	27	16.4	138	83.6	12	35.3	22	64.7	0	0.0	6	100.0
Family planning	26	21.6	127	78.4	11	32.4	23	67.6	2	33.3	4	66.7
Infectious diseases in Zimbabwe	35	21.3	129	78.7	10	29.4	24	70.6	1	16.7	5	83.3
Psychology applied to nursing	10	6.1	155	93.9	3	8.8	31	91.2	0	0.0	6	100.0
Management of psychotic disorders	41	24.8	124	75.2	10	29.4	24	70.6	0	0.0	6	100.0
Management of neurotic disorders	41	25.0	123	75.0	10	29.4	24	70.6	0	0.0	6	100.0
Sociology of medicine	20	12.2	144	87.8	4	11.8	30	88.2	1	16.7	5	83.3
Bacterial pathogens	62	37.8	102	62.2	14	41.2	20	58.8	2	33.3	4	66.7
Pathogenic viruses	57	35.2	105	64.8	14	41.2	20	58.8	2	33.3	4	66.7
Rational use of drugs	16	9.8	147	90.2	5	14.7	29	85.3	0	0.0	6	100.0
Drugs acting on systems of the body	33	20.2	130	79.8	9	26.5	25	73.5	0	0.0	6	100.0

correlation of theory and practice so as to avoid discrepancies between what students learn in the classroom and what is practised in clinical areas. Nurse managers often complain of having no time to teach but they may sometimes not recognise teachable moments such as ward rounds. Nurse managers can also promote critical thinking in the clinical areas by asking challenging questions appropriate to the level of student knowledge. Nurse managers can also teach subordinates by example.

In addition to teaching subordinates, the nurse manager has a role in the promotion of health education to patients and clients. Two nurse tutors, three (8.8%) of the supervisors and 13 (8%) of the DNA graduands indicated principles of health education as irrelevant. Ill health is prevented through health education. Through health education, patients are motivated to continue the necessary treatment after they are discharged from hospital. This prevents relapse of the illness and reduces the cost of health care.

Nearly one third (10 or 29.4%) of the supervisors and 31 (19%) of the DNA graduands indicated the role of the community health nurse as irrelevant. This is disheartening as the current view of health care is primary basic community health care. It indicates that the respondents in this case only see hospital care as important. The community health nurse has the role of preventing ill health and promoting the well-being of the community he/she serves. Discharged patients from hospital in need of continued health care may be referred to the community health nurse. Collaboration between the nurse manager and the community health nurse is necessary. It is, therefore, important for the nurse manager to understand the role of the community health nurse.

Approximately a fifth (7 or 20.6%) of the supervisors and 11 (6.7%) of the DNA graduands indicated primary health care approach as irrelevant for inclusion in the DNA course content. It is possible that these respondents associated the primary health care approach only with services delivered at community health level. In the primary health care approach, patients are referred from primary health care centres to hospitals. The highest level of referral in Zimbabwe are the central

hospitals. It is necessary for the nurse managers to become acquainted with the referral system so that they will be able to advise patients accordingly.

Human growth and development of children under five years was indicated as irrelevant by one nurse tutor, approximately a third (12 or 35.3%) of the supervisors and about a quarter (41 or 25.5%) of DNA graduands. This aspect is covered in general nurse training and has greater relevance in the role of the community health nurse than the nurse manager. It can be reconsidered for omission in future courses.

Just over a quarter (9 or 26.5%) of the supervisors indicated occupational health as irrelevant for inclusion in the DNA course content. These respondents probably associated occupational health with industry only and did not recognise the importance of maintaining a safe working environment in health care institutions.

The need to conduct nursing research in order to improve the quality of patient care cannot be doubted. However, four (11.8%) of the supervisors and seven (4.2%) of the DNA graduands indicated conducting nursing research as irrelevant. Nurses in the clinical areas in Zimbabwe often complain of lack of time to conduct nursing research. It is possible that some of these nurses may not see the need to acquire research skills if they are not going to be used.

Knowledge of descriptive statistics is useful, especially when the nurse manager has to present research findings or for that matter any other statistics in reports or memoranda in order to state his/her case forcefully and in a businesslike matter. Despite this usefulness 26 (16%) of the DNA graduands indicated descriptive statistics as irrelevant for inclusion in the DNA course content.

Basic principles of good nutrition and nutritional disorders were indicated as irrelevant for inclusion in the DNA course content by over 26% of nurse tutors, supervisors and DNA graduands. These topics are covered in the general nurse training course and these respondents did not see it necessary for them to be

repeated. In this case the topics could be reconsidered for omission in future courses.

There was a difference of opinion on the relevance of the Zimbabwe expanded programme on immunization between the nurse tutors and some of the supervisors and DNA graduands. Those who disagreed about the appropriateness of including this in the course content probably reasoned that it is more applicable to the role of the community health nurses than that of the nurse managers. However, it is important for the nurse manager to understand the immunization schedule so that he/she may identify patients who missed immunizations. Admitted patients who are due for immunizations, could then be immunized in the hospitals.

More than 20% of all the respondents indicated family planning as irrelevant for inclusion in the DNA course content. Some of these respondents felt that nurses requiring courses in family planning could attend the courses which are conducted by the Zimbabwe National Family Planning Council. Family Planning could be considered for omission in future courses. Approximately a fifth of the DNA graduands indicated infectious diseases in Zimbabwe as irrelevant. They considered this to be irrelevant content as it is covered in general nurse training. Infectious diseases could also be considered for omission in future courses.

All the nurse tutors agreed that the management of psychotic and neurotic disorders was relevant as an insight into these conditions was necessary to nurse managers. Approximately 30% of the supervisors and about 25% of the DNA graduands disagreed with the nurse tutors on this issue. They probably viewed management of psychotic and neurotic disorders as aspects which should be covered in a specialist course in psychiatry. Moreover, the management of these disorders is covered in the current general nurse training programme. They could therefore be reconsidered for omission in future courses.

A substantial number of respondents, over 30%, considered bacterial pathogens and pathogenic viruses as irrelevant for inclusion in the DNA course content. Although these aspects are covered in general nurse training, there have been

advances in microbiology which the nurse managers need to know about. Current knowledge in microbiology is useful in disease prevention, control and treatment. It is also useful in prevention and control of hospital infections. Inclusion of microbiology in future courses seems to be appropriate.

The cost of procuring drugs continues to rise; rational use of drugs is therefore important. It is disconcerting to note that supervisors and DNA graduands considered this as irrelevant knowledge. Approximately a quarter (9 or 26.5%) of the supervisors and a fifth (33 or 20.2%) of the DNA graduands considered an input on drugs acting on systems of the body as irrelevant. Apparently they considered their limited knowledge acquired during general nurse training as sufficient. Since some registered nurses make mistakes on drug administration, inclusion of pharmacology in future courses could be appropriate.

The respondents suggested omitting the following topics from the DNA course:

- role of the community nurse;
- human growth and development of children under five years;
- occupational health;
- basic principles of good nutrition;
- nutritional disorders;
- Zimbabwe's expanded programme on immunization;
- family planning;
- infectious diseases in Zimbabwe;
- management of psychotic disorders;
- management of neurotic disorders;
- bacterial pathogens;
- pathogenic viruses; and,
- drugs acting on systems of the body.

Although the respondents wanted bacterial pathogens, pathogenic viruses and drugs working on systems of the body to be omitted from the course, inclusion of microbiology and drugs is necessary as this impacts on prevention of nosocomial

infections. These topics might be taught in a more refined and delineated manner, pertaining specially to hospital infections.

6.2.3 Suggested Aspects for Inclusion in the Course Content.

This section presents some suggested topics for inclusion in the course content. These topics were identified in the literature review as current important issues.

The DNA graduands, supervisors and nurse tutors were asked to indicate the relevance of aspects presented in table 6.2 for inclusion in the course content. There was agreement among most of the graduands, their supervisors and nurse tutors to include all the aspects listed in table 6.2 in the course content.

Negotiation skills to solve disagreements regarding service conditions between unions and hospital management were found to be relevant for inclusion in the DNA course by more than 91% of the respondents. Bezuidenhout (1994: 233), recommends a training course in industrial relations for all nursing staff prior to their appointment in a supervisory position. Such a course should be useful to participants of the DNA course since there has been labour unrest in the health services in Zimbabwe.

Management of health finances was also indicated as relevant for inclusion in the DNA course. Management of finances is a crucial role for the nurse managers. In Zimbabwe, nurse managers face problems in providing services to patients with limited financial resources. The cost of health care delivery has also risen as a result of changes in illness patterns. These changes have occurred mainly as a result of the human immunodeficiency virus and the resulting acquired immunodeficiency syndrome.

**Table 6.2 Relevance of Suggested Aspects for Inclusion in the Course
Content as Indicated by DNA Graduands, Supervisors and Nurse
Tutors**

Topics	DNA Graduands (n = 165)		Supervisors (n = 34)		Nurse Tutors (n = 6)	
	Relevant		Relevant		Relevant	
	n	%	n	%	n	%
Negotiation skills	155	93.9	31	91.2	6	100.0
Management of health finances	157	95.2	33	97.1	6	100.0
Health sector reforms such as decentralisation	158	96.3	30	88.2	5	83.3
Patient/client rights	159	96.4	32	94.1	6	100.0
Health care personnel rights	163	98.8	33	97.1	6	100.0
Computer literacy	150	92.6	28	82.4	6	100.0
Health assessment	149	90.9	26	76.5	4	66.7

Patients infected with the immunodeficiency virus sometimes require prolonged stay in hospital. This implies that the nurse manager in Zimbabwe must have adequate knowledge and skills in management of financial resources in order to provide efficient and effective care to patients. The nurse manager must allocate financial resources after determining priorities. Improper management of health finances results in deterioration of the quality of care delivered to patients. Haynor (1996: 61) even suggests a revision of the training of nurse managers since nurse managers are being asked to do more with less, to continually improve care.

Computer literacy, an essential skill especially for DNA graduands presently undergoing training was rated relevant by 82% of the respondents. It indicates that there are a number of nurse supervisors and nurses at the top level management who are not aware of this valuable tool for easing their life and expand their efficiency which comes with utilization of a computer. According to Simpson (1996: 88) advanced computing and communication tools can spread through the entire nursing organization and health care institution to help achieve the broader goals of empowered nursing and better patient care across the continuum. The nurse manager can store a lot of information in a computer.

Booyens (1998c: 650) points out that computer information can be used for several purposes. These include staffing, scheduling, personnel administration, financial control, quality assurance, planning the production of reports, and decision making. In order to recover the cost of the care given to patients, accurate records must be maintained. Records must be maintained on treatment given to patients and on procedures and diagnostic tests performed. All these records can be entered into a computer and the cost of patient care can easily be calculated, which again can lead to better financial planning and wise use of scarce available resources.

Health sector reforms such as decentralization were indicated as being relevant for inclusion by more than 83% of all the respondents. This was so because the health services in Zimbabwe are in the process of decentralization. Authority regarding resource management is currently being decentralized to the nurse managers in order to improve cost effective use of resources. Booyens (1998a: 133) indicates that decentralization of authority increases morale and promotes interpersonal relationships. Decentralization empowers the nurse managers to make their own decisions about how they can best manage their resources and procure services and supplies. In order for decentralization to be effective the nurse managers must be adequately trained in management of resources.

In Zimbabwe, complaints about the health services have been made in the media by the public. Consumers of health care are now much more aware of their health needs and rights. Patient/client rights were indicated as being relevant by more than 94% of all the respondents. In 1996 the Ministry of Health and Child Welfare and the Consumer Council of Zimbabwe published the Patient's Charter which gave information on the patient's rights. Through use of the mass media and printed materials, clients and patients can be made aware of their rights. The challenge to the nurse manager is to provide good quality care and reduce the complaints from the consumers of health care.

Nearly all of the respondents, more than 97%, indicated health care personnel rights as relevant. During induction and orientation, health care personnel should

be made aware of their rights. In order to maintain a high degree of motivation and morale, the nurse manager must recognise and respect the rights of the subordinates.

The majority of the respondents (149 or 90.9%) who indicated that health assessment for diagnosis of patient's illness was relevant for inclusion in the DNA course content were DNA graduands. This may be because health assessment has been included in the new general nurses' syllabus in Zimbabwe and these professional nurses realised that their knowledge and skills in health assessment were inadequate. The two (33.3%) nurse tutors and eight (23.5%) supervisors who considered it not necessary to include health assessment thought that this would require a lot of time and may result in overloading the course. They indicated that the nurse managers requiring training in health assessment could attend the in-service courses on health assessment currently being conducted in all the provinces of Zimbabwe.

When asked to suggest other topics for inclusion in the DNA course, the supervisors did not come up with any other topics. One nurse tutor suggested incorporating **business communication** into the DNA course. The DNA graduands suggested the inclusion of business management and conceptual models in nursing. Business management would however be covered on management of health finances.

Some of the suggested topics were already incorporated in the DNA course. These included:

- public relations;
- counselling; and
- epidemiology.

It is possible that the respondents who suggested these topics did not see the relevancy of what was taught regarding these topics to what they themselves needed. A revision of what is taught regarding these topics may thus be necessary.

The following topics were suggested for inclusion in the DNA course:

- negotiation skills;
- management of health finances/business management;
- health sector reforms such as decentralization;
- patient/client rights;
- health care personnel rights;
- computer literacy;
- health assessment; and,
- business communication.

6.2.4 Field Experience in the DNA Course

This section presents the field experience in the DNA course.

The DNA graduands, their supervisors and nurse tutors were asked to indicate the relevance of field experience presented in table 6.3 to the learning needs of the students. Hospital secondment was the most popular field experience, most probably because it is so directly related to the role of the nurse manager. During this period the students conduct their practicals under the supervision of experienced nurse managers. Hospital secondment is still relevant for the course as it prepares the students to assume the role of nurse manager on completion of the course.

The adoption of the Primary Health Care approach by the Ministry of Health of Zimbabwe in 1980 put emphasis on community health nursing services. As a result of this, the provincial health services secondment was included in the DNA course. During this secondment, the students are involved in primary health activities and are supervised by experienced community health nurses. The majority of all the respondents, more than 85% considered this experience to be relevant to the learning needs of students. A few supervisors (5 or 14.7%) indicated that provincial health services secondment was irrelevant. They saw this experience as relevant to community health nurses only. Since some patients who are discharged from the hospitals are referred to the community health nurses, it is

important for nurse managers to become acquainted with the community health services.

Table 6.3 Relevance of Field Experience in the DNA Course as Indicated by DNA Graduands, Supervisors and Nurse Tutors

Field Experience	DNA Graduands (n = 165)		Supervisors (n = 34)		Nurse Tutors (n = 6)	
	Relevant		Relevant		Relevant	
	n	%	n	%	n	%
Hospital secondment	155	94.5	30	88.2	6	100.0
Provincial health services secondment	150	92.0	29	85.3	6	100.0
Visits to children's homes	94	57.3	19	55.9	5	83.3
Visits to schools for the deaf	87	53.0	16	47.1	5	83.3
Visits to institutions for the disabled	99	60.4	17	50.0	5	83.3
Visits to old people's homes	102	62.6	20	58.8	5	83.3
Visits to industrial sites	96	58.5	13	38.2	3	50.0

More than a third of all the supervisors and DNA graduands indicated visits to children's homes, schools for the deaf, institutions for the disabled and homes for the old people as irrelevant. Some of the students had already visited these institutions before coming for the course. During these visits, the students only receive an orientation talk about the place in a few hours. The students are not actively involved in the activities of the institutions. Visits to industrial sites were rated as being least relevant by supervisors and nurse tutors. During the visits to the industrial sites the students are given an orientation on the products produced at the sites. The visits may not be a priority in the learning needs of the students and could be omitted from future courses.

The nurse tutors, supervisors and DNA graduands were asked to suggest other relevant field experiences that should be included in the DNA course. Only a few respondents came up with suggestions.

The following field experiences were suggested by the DNA graduands:

- ❑ Ministry of Health and Child Welfare Head Office;
- ❑ Secondment to private hospitals;
- ❑ Secondment to managers in industry;
- ❑ Social services department;
- ❑ Medical Aid Societies;
- ❑ Pharmaceutical companies;
- ❑ Psychiatric units;
- ❑ Medical stores;
- ❑ Clients on home based care; and
- ❑ Sewage and water purification plants.

The following field experiences were suggested by supervisors:

- ❑ Ministry of Health and Child Welfare Head Office;
- ❑ Public Service Commission Offices;
- ❑ World Health Organization Offices;
- ❑ Finance department of a hospital;
- ❑ Occupational health departments in industry;
- ❑ Psychiatric units;
- ❑ Clients on home based care; and
- ❑ Prison services.

A nurse tutor suggested visits to the Ministry of Health and Child Welfare Head Office. The majority of the respondents did not consider it necessary to include additional field experiences in the DNA course. The suggestions to include a field experience in the Ministry of Health and Child Welfare Head Office came from all groups of respondents. Currently people from relevant departments of the Ministry of Health and Child Welfare are invited to give orientation talks about their departments to the students. Perhaps these orientation talks could be followed up with some more indepth information.

6.3 SECTION B: RESOURCES NECESSARY FOR THE DIPLOMA IN NURSING ADMINISTRATION COURSE

This section presents the information under the objective which sought to determine the adequacy of human and material resources for the course such as course facilitators, teaching aids and reference materials.

Table 6.4 Adequacy of Resources for the DNA Course as Indicated by DNA Graduands and Nurse Tutors

Resources	DNA Graduands (n = 165)				Nurse Tutors (n = 6)			
	Inadequate		Adequate		Inadequate		Adequate	
	n	%	n	%	n	%	N	%
Number of nurse tutors	94	57	71	43.0	3	50.0	3	50.0
Textbooks in the school library	134	81.2	31	18.8	6	100.0	0	0.0
Journals in the school library	111	67.3	54	32.7	5	83.3	1	16.7
Classroom space for number of students	146	88.5	19	11.5	6	100.0	0	0.0

In table 6.4, slightly more than half of the DNA graduands (94 or 57%) and half of the nurse tutors indicated the number of nurse tutors in the course as inadequate. Shortage of teaching staff is experienced when a tutor goes on study leave or resigns because it is not always possible to secure relief staff. There was no doubt among the nurse tutors that the textbooks and journals in the school library were inadequate.

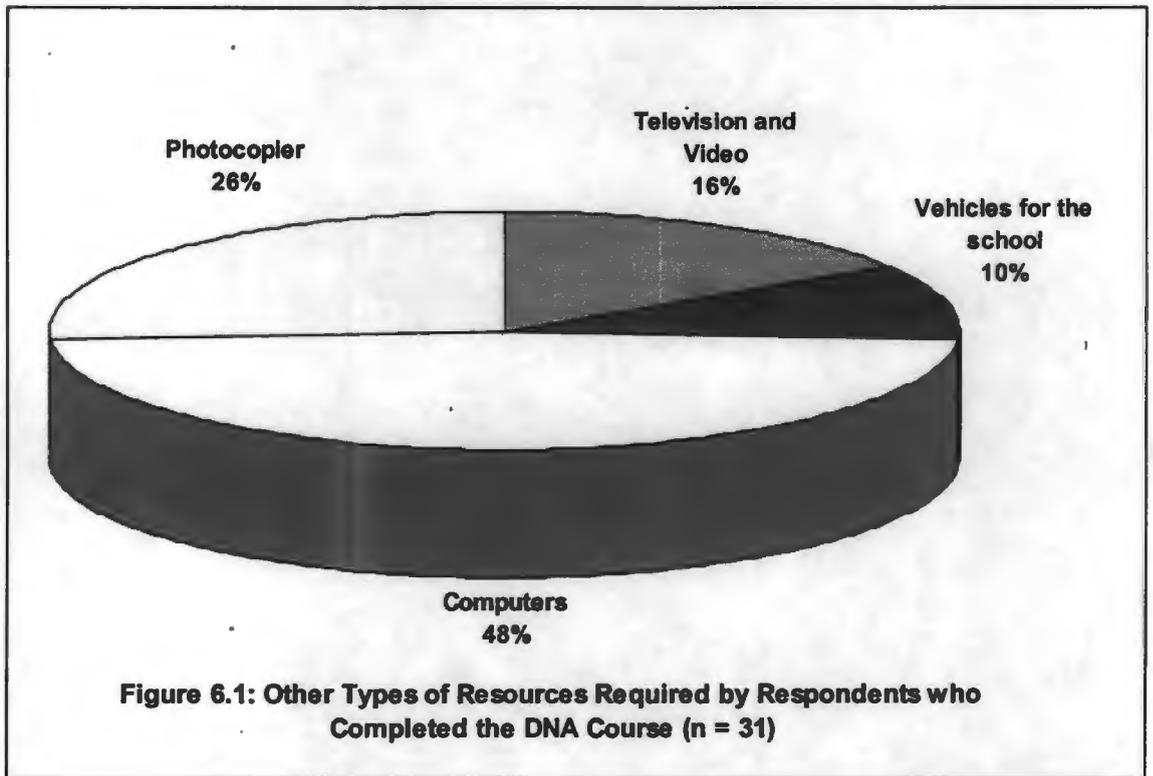
The few DNA graduands who indicated the textbooks and journals to be adequate were mainly using outdated reading materials. Approximately a tenth of the DNA graduands (19 or 11.5%) indicated that the classroom space was adequate. These graduands trained at a time when the intake of students for the course was small. When interviewed, most (13 or 81.3%) of the guest lecturers indicated classroom space for the number of students as problematic.

The nurse tutors interviewed indicated that transport to follow up students on field secondment and telephone lines in the tutors' offices were inadequate. Transport to follow up students is necessary in order to enable the nurse tutors to take part in supervising the students during the secondment period. It is also necessary for nurse tutors to keep up to date with current practice in the clinical areas. Only two telephone lines were available in the secretary's office. Inadequate telephone lines in the nurse tutors' offices become a barrier to effective communication. A lot of time is wasted when nurse tutors leave their offices to either answer or make a telephone call.

There was agreement among most of the interviewed nurse tutors (4 or 66.7%) and guest lecturers (10 or 62.5%) that the audiovisual aids were inadequate. Audiovisual aids stimulate the learning process and they complement the value of the teacher's activities. Moffett and Hill (1977: 46) indicate that audiovisual aids may be involved when implementing active learning. The audiovisual aids bring some change and variety into the teaching activity, which no doubt stimulates the learning experience.

Computers were identified by most of the respondents as really important for their preparation as future managers. Computer literacy would enable the nurse managers to store and retrieve a lot of information in a computer. Negraponte (1999:4) views information infrastructure as the most significant force driving the future's health care delivery. Computer technology will become more integrated into care delivery, from planning services to evaluating outcomes. Through the use of computers, students in the Post Basic School of Nursing can gain access to information necessary for their assignments. This could lessen the need to photocopy information from journals.

The DNA graduands were asked to indicate any other type of resources which they felt were important. Figure 6.1 presents these:



When asked to indicate any other types of resources they felt were important, the nurse tutors came up with the following:

- video camera;
- television and video cassette recorder;
- flip charts and boards;
- overhead projector transparencies and pens;
- fax facility;
- e-mail;
- internet facilities;
- film projector;
- epidiascopier;
- photocopier; and
- duplicating machine.

The guest lecturers also indicated the following resources:

- video camera;
- television and video cassette recorder;
- flip charts and boards; and
- a film projector.

A lack of resources will affect the learning process even if the learners are ready and motivated to learn. Hoff (1995:4) states that, to ensure success, the leaders must try and increase learning competence by improving the resources for the learner both in quality and accessibility.

6.4 SECTION C: STRENGTHS AND WEAKNESSES IN THE TEACHING STRATEGIES OF THE COURSE FACILITATORS AND PROBLEMS FACED BY THE COURSE PARTICIPANTS

This section presents the data under the objectives which sought to identify the strengths and weaknesses in the teaching strategies of the course facilitators and to identify any problems faced by the course participants whilst on the course.

6.4.1 Strengths and Weaknesses in the Teaching Strategies of the Course Facilitators

The DNA graduands, nurse tutors and guest lecturers were asked to rate elements presented in table 6.5. There was agreement among most of the DNA graduands, nurse tutors and guest lecturers that generally the course content was relevant to the participants. Relevance of course content is important in order to maintain the interest and motivation of the students. An assumption of this study is that adults are interested in learning content which relates directly to improvement of themselves in the present or future working environment.

Nearly a fifth (30 or 18.3%) of the DNA graduands were not satisfied with the organization of the course content. One of the principles of adult learning is that material to be learned should be presented in an organized fashion (Hoff 1995: 5).

In order for effective learning to take place, the course content must be well organized. A review of the organization of the course content is necessary.

Two of the nurse tutors expressed that at times guest lecturers delivered content above the level of student knowledge. Examples of subjects such as pharmacology and microbiology were given. This concern was substantiated by the guest lecturer who indicated that he did not know at what depth he should present information. This is a weakness in the teaching strategy of the facilitators. If course content is delivered above the level of student knowledge, it becomes difficult for students to achieve their learning objectives. A discussion between the tutors and guest lecturers on relevant information to be delivered to the students would thus be helpful.

As shown in table 6.5, approximately a tenth (16 or 9.7%) of the DNA graduands did not achieve their learning objectives. An assumption of this study is that a learning environment for adults which is characterized by physical comfort and mutual respect is conducive to learning. As shown in table 6.5, the classroom environment was not conducive to learning. The reason for this was that the classroom space was too small for the number of students. Reducing the intake of students would solve the problem until adequate classroom space is available.

More than a third of the DNA graduands (61 or 37.6%) were not satisfied with the hospital environment for practical experience. Supervisors in hospitals do not always have adequate time to teach the student due to other responsibilities. The shortage of staff and equipment in the hospitals also affects the learning experiences of the students. Identifying the better equipped hospitals for practical experience would be useful in this case. Nurse tutors could also be more involved in the teaching of students during their practical experience.

Table 6.5 Views of DNA Graduands, Nurse Tutors and Guest Lecturers on Aspects of the DNA Course

Aspects	DNA Graduands n = 165						Nurse Tutors n = 6						Guest Lecturers n = 16					
	Disagree		Uncertain		Agree		Disagree		Uncertain		Agree		Disagree		Uncertain		Agree	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Generally the course content was relevant to the participants.	2	1.2	10	6.1	153	92.7	0	0.0	0	0.0	6	100.0	0	0.0	2	12.5	14	87.5
The course content was well organised.	13	7.9	17	10.4	134	81.7	0	0.0	0	0.0	6	100.0	-	-	-	-	-	-
The course content was delivered at an appropriate level of student knowledge.	13	7.9	20	12.1	132	80.0	0	0.0	2	33.3	4	66.7	0	0.0	3	18.8	13	81.2
The students' learning objectives were addressed.	5	3.0	11	6.7	149	90.3	0	0.0	1	16.7	5	83.3	0	0.0	3	18.8	13	81.2
The classroom environment was conducive to learning.	110	66.7	20	12.1	35	21.2	6	100.0	0	0.0	0	0.0	11	68.7	2	12.5	3	18.8
The hospital environment for practical experience was conducive to learning.	31	19.1	30	18.5	101	62.4	2	33.3	1	16.7	3	50.0	-	-	-	-	-	-
The course allowed for correlation of theory to practice.	8	4.8	16	9.7	141	85.5	1	16.7	0	0.0	5	83.3	-	-	-	-	-	-
The academic work of the students was assessed fairly by the facilitators.	8	4.9	17	10.4	139	84.7	0	0.0	1	16.7	5	83.3	-	-	-	-	-	-

In the andragogical model of learning, Skelton-Green (1995: 10) points out that adults learn in order to be able to perform a task or solve a problem. An assumption of this study is that course content is determined in such a way that it links learning experience to solving problems in the working environment. In table 6.5, it is noted that 24 (14.5%) of the DNA graduands were not able to correlate theory and practice. This is unsatisfactory as Bradshaw (1995: 211) identifies the purpose of clinical instruction as giving the students opportunities to bridge didactic information with the realities of nursing practice. Discussions between nurse tutors and supervisors would assist the students to correlate theory with practice.

The supervisors who supervised DNA students on practical secondment were asked to express their views on the points presented in table 6.6.

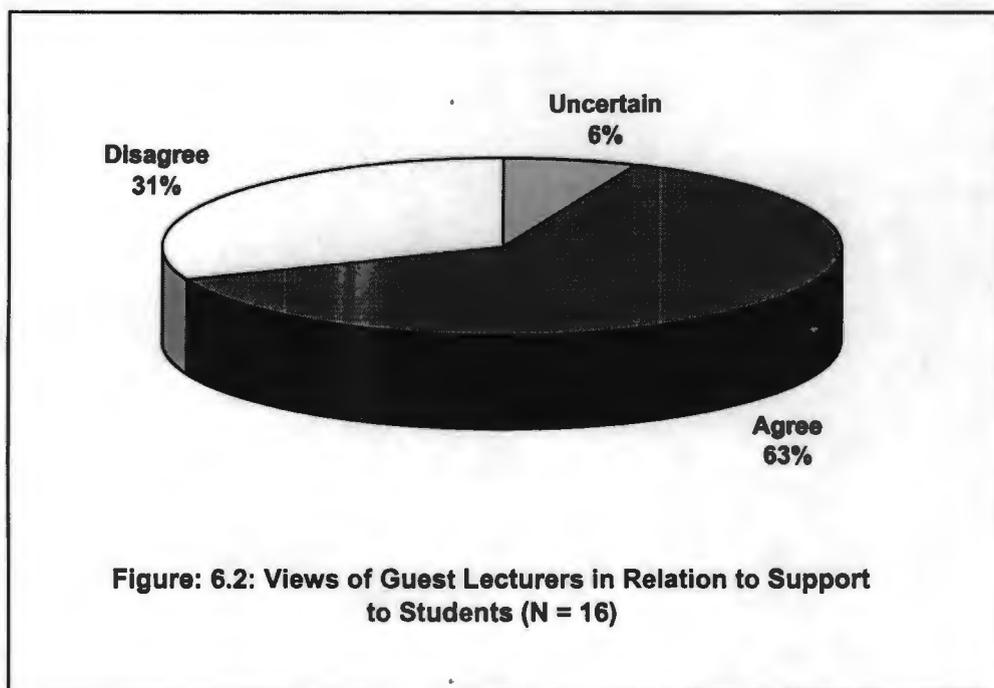
Table 6.6 Views of Supervisors on Aspects of the DNA Course (n = 33)

Aspects	Disagree		Uncertain		Agree	
	n	%	n	%	n	%
During the hospital secondment the student's learning objectives were addressed.	1	3.0	3	9.1	29	87.9
The hospital environment for practical experience was conducive to learning.	5	15.2	1	3.0	27	81.8
The students were able to correlate theory with practice.	3	9.1	9	27.3	21	63.6
I was able to give the students as much support as they needed in relation to their secondment.	3	9.1	2	6.1	28	84.8

It is noted that nearly a fifth of the supervisors did not agree that the hospital environment for practical experience was conducive to learning. In table 6.5, it was noted that more than a third of the DNA graduands and half of the nurse tutors were not satisfied with the hospital environment for practical experience. Shortage of staff and equipment were constraints which were noted as affecting the learning in the hospital environment.

Regarding the unsatisfactory percentage obtained for correlating theory to practice in table 6.6, it is likely that the supervisors who were uncertain about this issue did not know the theoretical content which the students had covered. If students are unable to correlate theory with practice, this results in poor delivery of health care. Liaison between the nurse tutors and supervisor could be useful.

The guest lecturers were asked to indicate whether they were able to give students as much support as they needed in the time allocated for the subjects they taught. In figure 6.2, ten (62.5%) of the guest lecturers agreed that they were able to give the necessary support to the students. The majority (15 or 93.8%) of the guest lecturers agreed that they were clear on what they were supposed to teach. Only one (6.2%) guest lecturer who taught pharmacology indicated that he was uncertain about what he was supposed to teach. It appears that the course outline given to the guest lecturer was not sufficient to guide him on what to teach. Provision of a teaching guide could also assist the guest lecturer.



When the nurse tutors were asked whether they were able to give the students as much support as necessary in relation to their course, most (5 or 83.3%) of the nurse tutors indicated that they were able to give the necessary support. Whilst

nurse tutors give students support in the school, this support should be extended to the clinical areas.

When asked whether there were adequate opportunities for the development of nurse tutors, four (66.7%) nurse tutors indicated that the opportunities were not adequate. Two (33.3%) of the nurse tutors agreed that there were adequate opportunities for development of nurse tutors. Whilst the nurse tutors got the opportunity to attend workshops and enrol for Masters' degrees, two (33.3%) expressed a need for sabbatical leave and exchange programmes. These were not available options. Exchange programmes will have the advantage of broadening the outlook of the nurse tutors thereby giving them ideas on how to improve their programmes.

The supervisors were asked to indicate their views regarding the adequacy of issues presented in table 6.7 when supervising DNA students. Time to supervise the students was found to be inadequate by 15 (45.5%) of the supervisors. In table 6.6, it was noted that not all supervisors were able to give the students as much support as they needed. Since there are adequate learning opportunities in the clinical areas, the students could be actively involved in the activities taking place so that they meet their objectives during the secondment.

**Table 6.7 Views of Supervisors Regarding Issues when Supervising
DNA Students (n = 33)**

Issues	Inadequate		Adequate	
	n	%	n	%
Time to supervise the students	15	45.5	18	54.5
Learning opportunities to meet the objectives of the students during the secondment	7	21.2	26	78.8
Support from the nurse tutors	25	75.8	8	24.2

Most of the supervisors indicated that support from the nurse tutors during the secondment was inadequate. This is a weakness in the teaching strategy of the nurse tutors. However, nurse tutors explain their lack of involvement in clinical

supervision as being due to shortage of time. It is also possible that nurse tutors do not make the time to familiarise themselves with the newer developments and changed circumstances in the health services, and thus give an excuse of not having enough time. The visits to clinical areas by nurse tutors in the Post Basic School of Nursing in Zimbabwe were sometimes impeded by shortage of time, transport problems and financial constraints. Setting aside a budget for visits to clinical areas would ensure availability of funds when they are needed.

When asked to indicate any other issues relating to supervising students, the supervisors came up with the following comments:

- When students are seconded to a hospital for clinical experience, the supervisors should always involve the students in identifying the learning needs in order to meet the secondment objectives.
- At times there is a shortage of suitably qualified supervisors.
- There should be co-ordination between supervisors so as to avoid duplication of information.
- Sometimes students ask to be excused from practical sessions in order to go and sort out social problems but they are not allowed to do this except in emergencies.
- Some students show interest in the secondment and they make suggestions for improvements of the system.
- Accommodation at the hospital is sometimes a problem during the period of secondment.
- Nurse tutors should follow up students in the clinical areas regularly.

Table 6.8 Opinion on the Time Allocated for Each Period in the DNA Course as Indicated by DNA Graduands, Nurse Tutors and Guest Lecturers

Opinion on Time Allocated	DNA Graduands n = 163		Nurse Tutors n = 6		Guest Lecturers n = 16	
	n	%	n	%	n	%
Too short	77	47.2	0	0.0	2	12.5
Adequate	85	52.2	6	100.0	13	81.3
Too long	1	0.6	0	0.0	1	6.2
Total	163	100.0	6	100.0	16	100.0

In table 6.8, it is shown that a substantial number (77 or 47.2%) of graduands found the time allocated for each period a bit on the short side, but the nurse tutors and guest lecturers did not really share this opinion. The nurse tutors and guest lecturers were able to deliver the necessary information in the given time for each period. However, teaching involves a great deal more than delivering the necessary information. The teachers have to ensure that the students understand the information covered. The students must also ask for clarification when they do not understand what was taught.

Table 6.9 Opinion on One Month Hospital Secondment in the DNA Course as Indicated by DNA Graduands, Supervisors and Nurse Tutors

Opinion on One Month Hospital Secondment	DNA Graduands n = 165		Supervisors n = 33		Nurse Tutors n = 6	
	n	%	n	%	n	%
Too short	32	19.4	7	21.2	2	33.3
Adequate	113	68.5	21	63.7	4	66.7
Too long	20	12.1	4	12.1	0	0.0
Don't know	0	0.0	1	3.0	0	0.0
Total	165	100.0	33	100.0	6	100.0

According to table 6.9, it seems that although there appeared to be quite a few problems during the practical secondment period (table 6.7), approximately two

thirds of the DNA graduands (113 or 68.5%), supervisors (21 or 63.7%) and tutors (4 or 66.7%) found the one month to be adequate for practical learning purposes. On the other hand nearly 20% of the DNA graduands, 21% of the supervisors and 33% of the tutors felt that the period was too short. During the hospital secondment period, the students have the opportunity to take part in performing the activities performed by nurse managers whilst under supervision. Lengthening the period of secondment would give the students more time to master the relevant experience.

In table 6.10, 27 (16.6%) of the DNA graduands and 12 (36.4%) of the supervisors considered three weeks provincial health services secondment to be too long. However, in previous years when the secondment period used to be two weeks, the majority of the course participants considered it to be too short. It can also be noted that 29 (17.8%) of the DNA graduands still considered the secondment period to be too short. During the provincial health services secondment, the students participate in the promotion of primary health care activities under the supervision of experienced community health nurses. The students also get acquainted with the referral system of patients from the primary health care centres to district, provincial and central hospitals.

Table 6.10 Opinion on Three Weeks Provincial Health Services Secondment in the DNA Course as Indicated by DNA Graduands, Supervisors and Nurse Tutors

Opinion on Three Weeks Provincial Secondment	DNA Graduands n = 163		Supervisors N = 33		Nurse Tutors n = 6	
	n	%	n	%	n	%
Too short	29	17.8	4	12.1	1	16.7
Adequate	107	65.6	16	48.5	5	83.3
Too long	27	16.6	12	36.4	0	0.0
Don't know	0	0.0	1	3.0	0	0.0
Total	163	100.0	33	100.0	6	100.0

Table 6.11 Opinion on Total Time Allocated for the DNA Course as Indicated by DNA Graduands and Nurse Tutors

Total Time Allocated for the DNA Course	DNA Graduands n =164		Nurse Tutors n = 6	
	n	%	n	%
Too short	105	64.0	2	33.3
Adequate	57	34.8	4	66.7
Too long	2	1.2	0	0.0
Total	164	100.0	6	100.0

In table 6.11, it can be noted that there was a difference of opinion between the majority (105 or 64%) of the respondents who completed the DNA course and the majority (4 or 66.7%) of the nurse tutors. The respondents who completed the DNA course found the time allocated to be too short whilst the nurse tutors indicated that the time was adequate. The nurse tutors found the time to be adequate since they were able to deliver all the course content in the given time. The respondents who completed the DNA course found it difficult to cope with the course content in the given time. There may well be a gap between the expectations of the tutor delivering the content and the student mastering the skill. Irrelevant content should be omitted from the course. If the remaining content is still too much, then lengthening of the training period would be appropriate.

The guest lecturers were asked to indicate their opinion on the total number of hours allocated to the subjects which they taught. Most (13 or 81.3%) of the guest lecturers indicated that the time was adequate. Only three (18.7%) of the guest lecturers indicated that the time was inadequate.

In table 6.12, it can be noted that the majority (115 or 70.1%) of the respondents who completed the DNA course indicated that the workload of the students was too much to handle in the allocated period. The majority of these respondents also indicated that the time allocated for the DNA course was too short to adequately master the content. As noted above, scaling down of the content may be necessary.

Table 6.12 Opinion on the Extent of the Workload of the Students in the DNA Course as Indicated by DNA Graduands and Nurse Tutors

Students' Workload	DNA Graduands n =164		Nurse Tutors n = 6	
	n	%	n	%
Too little	3	1.8	0	0.0
Just right	46	28.1	3	50.0
Too much	115	70.1	3	50.0
Total	164	100.0	6	100.0

Three (50%) of the nurse tutors indicated that the workload of the students was too much whilst the other three nurse tutors indicated that the workload was just right. When the nurse tutors were asked to give an opinion on their own workload, the majority (4 or 66.7%) indicated that it was too much. Two (33.3%) of the nurse tutors indicated that their workload was just right. Most of the nurse tutors found it difficult to write articles for publication and conduct research studies, because of the workload which they considered to be too much. This is a common finding among people in the teaching profession, thus the nurse tutors are on par with others in tertiary education fields. No relief is in sight. The nurse tutors will just have to make more use of computers so as to get through their work faster.

Table 6.13 Frequency with which Nurse Tutors and Guest Lecturers used the Different Teaching Strategies

Teaching Strategies	Nurse Tutors n = 6						Guest Lecturers n = 16					
	Never		Sometimes		Always		Never		Sometimes		Always	
	n	%	n	%	n	%	n	%	n	%	n	%
Lecture	1	16.7	5	83.3	0	0.0	0	0.0	7	43.8	9	56.2
Group discussion	0	0.0	6	100.0	0	0.0	6	37.5	6	37.5	4	25.0
Lecture/Discussion	0	0.0	4	66.7	2	33.3	0	0.0	7	43.8	9	56.2
Demonstration	0	0.0	6	100.0	0	0.0	7	43.8	9	56.2	0	0.0
Role-play	1	16.7	5	83.3	0	0.0	7	43.8	8	50.0	1	6.2
Assignments	0	0.0	4	66.7	2	33.3	8	50.0	8	50.0	0	0.0
Tutorials	0	0.0	5	83.3	1	16.7	12	75.0	3	18.8	1	6.2

In table 6.13, it is noted that there was good use made of the different teaching strategies by nurse tutors and guest lecturers. A combination of lecture and discussion method was obviously the most popular teaching strategy. The use of group discussion gives the students an opportunity to share their experience with others.

Fuszard (1995b: 27) points out that using role-play, students are permitted to practice behaviours without risk. When role-play is used in the Post Basic School of Nursing, it is aimed at developing decision-making and problem solving skills of the learners.

All nurse tutors gave assignments to students at least once a month. An assumption of this study is that teaching strategies in nursing education which involve adults in self-directed inquiry produce the greatest learning. Cravener (1997: 23) argues that student's self-direction must increase as teacher's imposed structure decreases. At the same time, it is essential that students have enough guidance to direct them toward effective learning activities.

Table 6.14 Frequency with which Nurse Tutors and Guest Lecturers Used the Different Teaching Aids

Teaching Aids	Nurse Tutors n = 6						Guest Lecturers n = 16					
	Never		Sometimes		Always		Never		Sometimes		Always	
	n	%	n	%	n	%	n	%	n	%	n	%
Chalkboard	0	0.0	3	50.0	3	50.0	2	12.5	8	50.0	6	37.5
Overhead projector	0	0.0	4	66.7	2	33.3	2	12.5	4	25.0	10	62.5
Film slides	3	50.0	3	50.0	0	0.0	11	68.7	5	31.3	0	0.0
Film projector	2	33.3	4	66.7	0	0.0	12	75.0	3	18.8	1	6.2
Video tapes	3	50.0	3	50.0	0	0.0	11	68.7	1	6.2	4	25.0
Flip charts	1	16.7	5	83.3	0	0.0	10	62.5	4	25.0	2	12.5
Charts	0	0.0	6	100.0	0	0.0	9	56.3	6	37.5	1	6.2
Models	1	16.7	5	83.3	0	0.0	13	81.3	1	6.2	2	12.5

All the nurse tutors and the majority (14 or 87.5%) of the guest lecturers used the chalkboard and the overhead projector at least once every week. The chalkboard and overhead projector were always available. Three (50%) of the nurse tutors never used film slides and video tapes. Most of the guest lecturers never used film slides and video tapes. The limited use of video tapes was due to the unavailability of a television and video cassette player in the school. A television and video cassette recorder were among the types of resources which were indicated as important by the nurse tutors and guest lecturers. Whilst most of the nurse tutors used flip charts, charts and models, at least once a month, the majority of the guest lecturers never used these teaching aids. Moffett and Hill (1997:46) highlight the involvement of teaching aids when implementing active learning. One (16.7%) nurse tutor and a quarter (4 or 25%) of the guest lecturers also included printed handouts as another form of teaching aid which they used at least once a month.

6.4.2 Problems Faced by Guest Lecturers in Relation to Teaching Students in the DNA Course

At times guest lecturers postpone lectures for DNA students. The guest lecturers were asked to indicate whether or not they faced problems of work overload at their work places resulting in postponing lessons for DNA students. Nine (56.2%) indicated that they had work overload whilst seven (43.8%) did not. When asked whether or not they lacked the time to mark tests and assignments for DNA students, a quarter (4 or 25%) responded positively while three quarters (12 or 75%) did not experience a lack of time.

When asked to indicate other problems faced, four (25%) of the guest lecturers sometimes faced the problems of getting transport from the Ministry of Health Head Office to the school. One (6.2%) of the guest lecturers had constraints of time to produce adequate handouts for the students. Another guest lecturer faced the problem of financing handouts for the students.

6.4.3 Problems Faced by the Respondents Whilst on the DNA Course

The respondents who completed the DNA course were asked whether or not they got adequate support from the nurse tutors on difficult course content. Sixty-three

(38.7%) indicated that they did not get adequate support whilst 100 (61.3%) got sufficient support. Whilst most nurse tutors indicated that they were able to give students the necessary support in relation to the course, it is apparent that this support is not adequate for some students. It is therefore necessary for nurse tutors to find out from the students the support they require on a regular basis. On additional comments, four (2.5%) indicated that the negative attitudes of some nurse tutors was demotivating. This is a severe weakness in the teaching environment which is not expected from trained nurse tutors. Nurse tutors who display negative attitudes towards students should be counselled by the head of the school.

There appeared to be problems getting adequate practical guidance from supervisors in the clinical areas, as 77 (47.2%) of the DNA graduands reported that they did not get adequate guidance. In table 6.7 time to supervise the students was indicated as inadequate by 15 (45.5%) of the supervisors. On additional comments nine (5.5%) of the DNA graduands indicated that some of the supervisors were not qualified enough to teach them. Most of the respondents who made this comment trained at a time when there were very few supervisors who had gone through the DNA course themselves.

The respondents who completed the DNA course were asked to indicate whether or not they faced problems of transport to go to the clinical areas. Eighty-two (50%) of the respondents indicated constraints of transport whilst the other half (50%) did not. On additional comments 12 (7.3%) indicated that transport to the clinical areas was expensive. Four (2.4%) indicated that the school should provide the transport. Two (1.2%) indicated that accommodation during the course was a problem. The students who got accommodation usually got shared accommodation in the nurses' residence.

Two (1.2%) of the respondents expressed a concern that the level at which pharmacology was delivered was too advanced for their comprehension. All the students in the course had covered basic pharmacology in the general nurse training course. In the DNA course the pharmacology lectures are given by a guest

lecturer with a doctorate in pharmacology. Pharmacology lectures are included in the course because of the number of mistakes which nurses make in drug administration in hospitals.

6.5 SECTION D: THE EXTENT TO WHICH DNA GRADUANDS WERE PREPARED FOR THEIR POSITIONS AND PROBLEMS FACED WHEN IMPLEMENTING WHAT WAS LEARNT IN THE COURSE

This section presents information obtained from the objectives which sought to determine from graduands, nurse tutors and supervisors, whether the course prepared participants to function adequately in the working environment, as well as identify any problems which course participants faced in implementing what they learnt in the course.

Table 6.15 The Extent to which DNA Graduands Were Prepared in Various Aspects for Their Positions during the DNA Course (n = 165)

Topics	Not at all		Insufficiently		Sufficiently	
	n	%	n	%	n	%
Patient care delivery systems	3	1.9	16	10.3	137	87.8
Infection control practices in hospitals	7	4.3	27	16.5	130	79.3
Effective communication strategies	1	0.6	17	10.4	146	89.0
Public relation strategies	4	2.5	38	23.3	121	74.2
Labour relations	31	18.9	70	42.7	63	38.4
Effective staffing strategies	6	3.6	38	23.0	121	73.3
Recruitment strategies	5	3.0	35	21.2	125	75.8
Retention strategies	9	5.6	53	32.7	100	61.7
Dealing with disciplinary matters	4	2.5	48	29.4	111	68.1
Counselling strategies	3	1.8	40	24.5	120	73.6
Performance evaluation	6	3.7	38	23.3	119	73.0
Staff development strategies	4	2.4	25	15.2	136	82.4
Group processes/dynamics	8	4.9	37	22.8	117	72.2
Interviewing techniques	1	0.6	17	10.4	148	89.0

Table 6.15 (continued) The Extent to Which DNA Graduands Were Prepared in Various Aspects for Their Positions during the DNA Course (n = 165)

Topics	Not at all		Insufficiently		Sufficiently	
	n	%	n	%	n	%
Team building strategies	5	3.0	35	21.3	124	75.6
Nursing process	4	2.4	31	18.9	129	78.7
Management by objectives	3	1.8	24	14.6	137	83.6
Strategic planning	12	7.4	56	34.3	95	58.3
Quality assurance in patient care	8	5.0	38	23.6	115	71.4
Legal issues in patient care	13	7.9	49	29.7	103	62.4
Decision making in management	1	0.6	21	12.8	142	86.6
Power and empowerment of staff	14	8.6	55	34.0	93	57.4
Delegation of tasks	5	4.3	63	54.8	47	40.7
Change process in general	3	1.8	21	12.8	140	85.4
Conflict resolution principles	2	1.2	35	21.3	127	77.4
Problem solving principles	1	0.6	27	16.5	136	82.9
Stress management among nursing personnel	7	4.2	58	35.2	100	60.6
Conducting nursing research	10	6.1	36	21.8	119	72.1
Motivation strategies for personnel management	3	1.8	26	15.8	136	82.4
Organisation of unit's workload	1	0.6	46	27.9	118	71.5
Formulation of policies and procedures of patient care	8	4.8	35	21.2	122	73.9
Staff education through in-service training	2	1.2	27	16.5	135	82.3
Time management by the manager	9	5.5	31	19.0	123	75.5
Interdisciplinary co-ordination in health care	14	8.5	51	31.1	99	60.4
Disaster relief planning in hospitals	5	3.1	30	18.4	128	78.5
Cost containment in health care	15	9.1	72	43.9	77	47.0
Budget forecasting in health care	19	11.5	73	44.2	73	44.2
Cost benefit analysis in health care	36	22.0	77	47.0	51	30.9
Unit budgetary control measures in hospitals	26	15.8	74	44.8	65	39.4
Procurement of financial resources for the hospital	32	19.5	70	42.7	62	37.8
Monitoring of financial resources in individual units	34	21.0	66	40.7	62	38.3

In table 6.15, approximately a fifth (34 or 20.8%) of the respondents indicated that they were either insufficiently prepared or not prepared at all with regard to infection control practices in hospitals. The nurse manager has the role of ensuring that the infection control policies are adhered to by the subordinates. The nurse manager must ensure that patients at higher risk of infection receive special care in order to prevent nosocomial infections. Isolation precautions must be considered for patients with infectious communicable diseases. The nurse manager must ensure that during invasive procedures and wound dressings, sterile equipment is used and that aseptic procedures are adhered to. If patients acquire nosocomial infections, their stay in hospital is prolonged resulting in a rise in the cost of care.

Effective communication strategies are necessary in order for the nurse manager to have good public relations. Approximately a quarter (42 or 25.8%) of the DNA graduands indicated that they were either insufficiently or not all prepared in public relation strategies. In public relations, nurse managers must be good listeners since they are receivers as well as senders of messages. Good interpersonal skills are necessary in public relations. The nurse manager should make time to address the concerns of the public so as to maintain goodwill and ensure the smooth running of the institutions. In public relations the nurse manager also gives information to the media on matters of public interest.

More than half (101 or 61.6%) of the DNA graduands indicated that they were either insufficiently or not prepared at all with regard to labour relations. In table 6.2, negotiation skills to solve disagreements regarding service conditions between unions and hospital management were found to be relevant for inclusion in the DNA course by more than 91% of all the respondents. Nurse managers in Zimbabwe are becoming more and more involved in labour relations as a result of labour unrest in the health institutions. Some nurses are going on strike, bargaining for higher salaries and requesting better conditions of service. The nurse manager must be familiar with the labour laws of Zimbabwe so as to be able to handle labour disputes. Bezuidenhout (1998: 663) emphasizes that, the nurse manager needs an understanding of relevant legislation, the basic principles of

disciplinary action, the solving of grievances, collective bargaining, arbitration and the settlement of disputes.

Approximately a quarter (44 or 26.6%) of the DNA graduands stated that they were either insufficiently or not prepared at all in effective staffing strategies. It is necessary for all nurse managers to be sufficiently prepared in effective staffing strategies. Staffing is an important function of the nurse manager since human resources are a valuable asset for the health services. Staffing activities include such areas as recruiting nursing staff, interviewing personnel and preparing work schedules for the clinical nursing units. The success and failure of the health institutions are determined by the calibre of personnel recruited in the health services. The nurse manager, therefore, has a role to recruit suitably qualified applicants and to examine their credentials in order to produce a short list for the selection procedure.

The nurse managers has to decide on the number and type of personnel required to provide care to patients. According to Booyens (1998d: 337), patients are classified to determine the total number of staff needed. The patients are classified into categories according to their nursing care requirements. The nursing care requirements of each category are quantified and a ratio of professional nurses to sub-professional nurses is established.

Just over a third (62 or 38.3%) of the DNA graduands indicated that they were either insufficiently or not at all prepared in retention strategies. All nurse managers should be acquainted with retention strategies as high turnover of personnel is costly to the health institutions. Costs are incurred in the recruitment, selection, orientation and induction of new staff. Booyens (1998e: 378) suggests a number of ways in which the nurse manager may use in order to reduce nurse turnover. Some of these include maintaining a spirit of cooperation and team work. Involving nurses in decision making regarding their own practice. Making the nurses' jobs as challenging and interesting as possible and providing facilities for staff development are also suggested.

Just over a quarter (44 or 27%) of the DNA graduands were either insufficiently or not at all prepared in performance evaluation. This is of concern since the nurse manager is continuously involved in the performance evaluation of subordinates. Swansburg and Swansburg (1999: 715) state that performance evaluation is used to motivate employees in order to produce high quality patient care. The results of performance evaluation are often used for promotion, selection, termination of service and to improve performance. In performance evaluation the subordinates are provided with an opportunity to know how they are performing. The nurse manager and the subordinate can identify the causes which may have interfered with achieving of some set objectives. Identified learning needs of the subordinates can be addressed through staff development programmes such as in-service training.

In order to retain staff, nurse managers should make time available to subordinates who indicate the need for counselling. Whilst counselling is an important role for the nurse manager, a quarter (43 or 25.3%) of the DNA graduands felt they were either insufficiently or not at all prepared in counselling strategies. When a subordinate approaches the nurse manager with a problem and needs counselling, the nurse manager has to maintain confidentiality. During the counselling process, the nurse manager has to help the subordinate to come to his or her own decisions. The choices open to the subordinate must be clarified. However, when a subordinate violates regulations which affect the quality of patient care, it becomes necessary for the nurse manager to discipline the subordinate.

Nearly a third (52 or 31.9%) of the DNA graduands said they were either insufficiently or not at all prepared in dealing with disciplinary matters. It is necessary for all the DNA graduands to become acquainted with the disciplinary procedures since there are a number of occasions where discipline is necessary. All nurse managers should be conversant with the disciplinary code of their institutions. The nurse managers have a responsibility to ensure that all employees receive orientation on the disciplinary code when they are appointed. It is important to ensure that employees are aware of the standards against which they are measured. Bezuidenhout (1998: 675) indicates that the disciplinary code ought

to list the unacceptable behaviour, describe what is meant by the specific contravention and indicate what sanctions are appropriate if the acceptable behaviour is transgressed.

Bezuidenhout (1998: 678) states that a system of progressive discipline should be applied and generally no disciplinary action is taken before an informal warning has been given. If the nurse manager does not apply the established disciplinary procedures, this results in employees being treated differently. Unfairly treated employees become demotivated, may appeal against judgement or even resign. Dismissed employees may take legal action against the institution. Proper documentation on the disciplinary procedures followed is, therefore, necessary in order to substantiate any undesirable behaviour. If the nurse manager ignores inappropriate behaviour, this will result in a deterioration of the quality of patient care or in creating a precedent.

When there is a serious breach of professional standards, a nurse may not only be disciplined by proceedings within the profession itself but may also be sued or prosecuted in a court of law. If a nurse is found guilty in a court of law, he or she will be struck off the professional register of nurses and will no longer be permitted to practise nursing. Nurse managers should be conversant with legal issues in patient care. More than a third (62 or 37.6%) of the DNA graduands indicated that they were either insufficiently or not at all prepared in this aspect. Lack of knowledge in legal issues in patient care could result in legal action against the nurses and the employing health institutions. Patients have a right to sue the health workers and the institution where they feel that their rights have been violated or that they have not received care of acceptable quality.

Swansburg and Swansburg (1999: 674) emphasize that before a patient signs a consent form, he/she must be provided with enough information to make a rational decision whether or not to undergo treatment. The legal requirement of consent protects the right of patients to determine and control what is done to their bodies except in an emergency situation.

More than a quarter (46 or 28.6%) of the DNA graduands said they were either insufficiently or not at all prepared in quality assurance in patient care. This is of concern since it is the responsibility of the nurse manager to ensure that patients receive quality health care. Chirwa (2000: 7) found that middle-level nurse managers in Malawi experienced problems in ensuring quality care. The middle-level managers required management training in setting nursing standards. Muller (1998: 595) emphasizes that all health care organizations should pay special attention to the quality issue. Patients demand to be informed; they ask questions and challenge the information given to them by health care providers.

If nurse managers are insufficiently prepared in quality assurance, they will be unable to deliver the best possible care to patients. While nurse managers in Zimbabwe are required to supervise subordinates in the implementation of the nursing process, approximately a fifth (35 or 21.1%) of the DNA graduands indicated that they were either insufficiently or not at all prepared in the nursing process. Lack of knowledge in the nursing process affects the delivery of quality care to patients. Inadequate health histories of the patients may be taken resulting in inaccurate nursing diagnoses, inappropriate nursing care goals and care plans and poor standard of care. If human and material resources are adequate and the process of delivering care is good, this should result in improvement in the patient's health status.

Approximately 40% of the DNA graduands indicated that they were either insufficiently or not at all prepared in interdisciplinary coordination in health care. It is the role of the nurse manager to identify the ways in which nurses and other health professionals can plan and coordinate patient care activities so as to improve the quality of care. In the monitoring of quality assurance at a health institution, nurses and other health professionals develop criteria for the outcome of patient care. When auditing of patient care is done, the nurse manager takes part as a member of a multidisciplinary team.

In order for quality care to be delivered to patients, it is also necessary for nurses to work together harmoniously in effective teams. Approximately a quarter of the

DNA graduands declared that they were either insufficiently or not at all prepared in group processes, team building strategies and conflict resolution. Hart and Booyens (1998: 239) report that despite the fact that most nurses work in groups, insufficient emphasis has been given to group dynamics in nursing. A knowledge of group dynamics is an important aspect of management which can enhance the effectiveness of nurse managers. Sullivan and Decker (1997: 248) state that understanding the nature of groups and how groups are transformed into teams is essential to the nurse manager's effectiveness. However, research indicates that many nurse managers experience considerable difficulty in transforming work groups into effective teams.

In order for the team to be effective, team members must mutually agree on the team's objectives. The nurse manager must ensure that the team members understand the goals of the organization. When team members discuss issues, a higher commitment to the decision agreed upon is likely. Booyens (1998b: 206) points out that the nurse manager can enhance motivation or good morale by building teams which are effective in problem-solving. The nurse manager should allow team members to freely air their views. When this happens suggestions and constructive criticisms can be made in order to improve the quality of nursing care.

If team members do not get an opportunity to air their views, there will be potential for conflict. Sullivan and Decker (1997: 248) indicate that although conflict within any work group is inevitable, the manner in which conflict is managed depends on the manager's skill in assisting subordinates to sort out personal differences. It is, therefore, important for nurse managers to become acquainted with principles of conflict resolution. More DNA graduands should feel that they have at least mastered the principles of conflict resolution in the course. When a nurse manager mediates between two or more parties, he or she must be objective and deal with conflict issues and not personalities. For resolution to occur, all parties must agree to the solution. Unresolved conflicts are often the beginning of labour unrest. If conflict remains unresolved over a period of time, this may result in unnecessary additional stress among the nurses.

More than a third (65 or 39.4%) of DNA graduands indicated that they were either insufficiently or not at all prepared in stress management among nursing personnel. Since the environment in health institutions is usually stressful to the nurses, it is vital for nurse managers to have skills in identifying and lessening stress among the subordinates. Booyens (1998a: 152) emphasizes that the effect of burnout on the budget, on organizational functioning, and on personal effectiveness in the health care setting is such that the nurse manager cannot afford to leave this important aspect of managerial function to chance. The nurse manager has to identify organizational, interpersonal and individual factors which cause stress in subordinates.

Booyens (1998a: 148) outlines a number of clinical features resulting from stress. Some of these clinical features include: frustration; lack of assertiveness; nervousness, depression and disorganization. The nurse manager may notice an increase in absenteeism, turnover and job dissatisfaction and decline in productivity as a result of stress in subordinates. The nurse manager can reduce stress in subordinates by developing effective two-way communication. When the nurse manager notices stress in a subordinate, there is a need to conduct confidential counselling. If the nurse manager succeeds in reducing the stress levels in subordinates, this results in an increase in the level of motivation and productivity. Patients will benefit from the improved quality of care delivered.

In order to plan effective nursing care, time management by the nurse manager is essential. Approximately a quarter (40 or 24.5%) of the DNA graduands said they were either insufficiently or not at all prepared in time management. Roos and Booyens (1998: 289) state that the way a nurse manager uses his/her time affects the quality of patient care in his/her organization. If the nurse manager manages time effectively, there will be increased job satisfaction and productivity, improved interpersonal relations and future orientation, as well as improved health resulting from reduced stress.

Sullivan and Decker (1997: 234) highlight that delegation is a difficult leadership skill for nurses to learn and one that may not have been taught in undergraduate

education. Never before has delegation been as critical a skill for nurses to perfect as it is today, with the emphasis on doing more with less. More than half (68 or 59.1%) of the DNA graduands stated that they were either insufficiently or not at all prepared in delegation of tasks. When a nurse manager delegates authority and responsibility to subordinates, this leaves him/her with more time to concentrate on tasks that cannot be delegated. The subordinates also develop advanced skills which they will be able to use in the absence of the nurse manager. As delegation increases efficiency, this results in improvement in the quality of care.

According to Sullivan and Decker (1997: 246), subordinates are empowered with authority and responsibility in delegation. Dunham-Taylor (2000: 242) indicates that when nurses are empowered, job satisfaction increases. Empowerment of subordinates enables them to be innovative. In empowerment, subordinates are involved in participative management which enables them to take part in problem solving and decision making. This results in improved teamwork, motivation and improved quality of care.

In order to facilitate delegation of authority and responsibility to subordinates, nurse managers make use of policies and procedures of the institution. Nurse managers have a role in the formulation of policies and procedures in patient care. Approximately a quarter (43 or 26%) of the DNA graduands indicated that they were either insufficiently or not at all prepared in formulation of policies and procedures of patient care. Nurse managers should be invited to meetings where formulation of policies and procedures are discussed so that they should recognize their involvement in top management decisions.

Sixty-eight (41.7%) of the DNA graduands indicated that they were either insufficiently or not at all prepared in strategic planning. Sufficient preparation in strategic planning is essential for nurse managers so that they get a sense of direction in the running of the health services. Stoner, Freeman and Gilbert (2001: 265) indicate that without plans, managers cannot know how to organize people and resources effectively. Without plans, nurse managers and their subordinates have little chance of achieving their goals.

It is also in strategic planning that the nurse manager is involved in disaster relief planning. Approximately a fifth (30 or 21.5%) of the DNA graduands said they were either insufficiently or not at all prepared in disaster relief planning. The nurse manager is involved in the development of plans and procedures for emergency management and coordination. The nurse manager must ensure that all nurses are acquainted with the procedures for management of disasters. The nurses must know the action to be taken and the part to be played by each member of staff in the event of a disaster. The nurse manager should organise frequent disaster simulation drills to ensure that nurses are always ready should a disaster strike.

The nurse manager has a crucial role in disaster prevention as this is preferable to disaster response. The nurse manager has to ensure that precautions are taken to prevent the occurrence of fires which may necessitate the evacuation of patients from the institution. Perold (1996: 105) points out that the nurse manager plays an important role in forecasting the effect of different types of disasters in the health services in the community which he/she serves. Possible disasters for specific areas should be identified, and the type of disruption to services and the type of injuries associated with different disasters should be analysed, before disaster planning can be done.

In strategic planning the nurse manager has to consider the financial resources available in order for the plans to be realistic. It was noted with concern that more than 53% of the DNA graduands indicated that they were either insufficiently or not at all prepared in aspects of financial management. The aspects included cost containment, budget forecasting, cost benefit analysis, unit budgetary control measures in hospital, procurement of financial resources for the hospital and monitoring of financial resources in individual units. This seems to be a common problem among nurses. Troskie (1994: 40 – 41) identified deficiencies in budgeting in first year students in Nursing Administration at the University of South Africa. Chirwa (2000: 7) also indicated that middle-level nurse managers in Malawi require training in financial management skills. In table 6.2 management of health finances was considered to be relevant for inclusion in the course by

more than 95% of all the respondents. Lemire (2000: 199) reports that a survey of nurse managers showed high agreement on the importance of financial management concepts to the nurse manager's role.

In Zimbabwe the cost of delivering health services continues to rise in an environment of depleted financial resources. The Zimbabwean Ministry of Health and Child Welfare (1999: 69) in its strategic plan indicates that the health sector needs to strengthen its financial management system at all levels. The health sector also needs to improve the use of the existing financial resources and to ensure that expansion is based on economic realities. The nurse manager, therefore, has important responsibilities with regard to budgeting, cost containment, control and monitoring of financial resources in health service.

Woodward (2000: 3) points out that the challenge for the nurse manager is to provide quality nursing care in an environment of depleting financial resources. The nurse manager and his/her subordinates have to be involved in the budgeting process and must be able to prioritize activities to be funded. The development of a budget assists in the orderly handling of financial resources. The nurse manager should make subordinates aware of operating costs and emphasis should be placed on cost containment. Creese and Kutzin (1997: 1) report that in the last decade, government financed health services in most developing countries have come to depend increasingly on payments by patients. The members of the health team should devise effective ways of recovering the cost of care from the clients so as to sustain the services.

Nurse managers have a role to play in promoting nursing research among their subordinates. Approximately a quarter (46 or 27.9%) of the DNA graduands indicated that they were either insufficiently or not at all prepared in conducting nursing research. Some of these respondents trained before the time when all students were required to conduct a research study during the course. If the nurse managers are not acquainted with the research process, they may not see the need to provide opportunities for the nursing staff to develop skills to carry out research

studies in their units. When nurses conduct research, they develop the ability to defend their decisions and actions on a scientific rather than a conventional basis.

Hinds, Gattuso and Morrell (2000: 317) point out that nurses are expected to participate in nursing research and to use study findings. Nursing research is useful in generating knowledge and identifying knowledge gaps. A body of knowledge can be built thereby enhancing professionalism in nursing. As nurses conduct research, they develop critical judgement on nursing issues. The implementation of findings following nursing research leads to greater efficiency and improvements in the delivery of nursing care. The nurse managers also need to know how the research process works in order for them to serve successfully in research ethics committees where research protocols are determined and where research proposals are dealt with.

Commenting on additional topics in the DNA course, one respondent indicated that nursing theories and nursing models were not covered at all. Another respondent indicated practical exercises on financial management as not having been done at all. Practical exercises on financial management are extremely important and should be included in the course as they reinforce the theoretical input.

The majority of the respondents who completed the DNA course indicated that the aims of the DNA course presented in table 6.16 were achieved by the course participants.

In table 6.1, more than 96% of the DNA graduands indicated principles of management as relevant for functioning in various positions in the health services. It is apparent in table 6.16 that nearly a quarter (37 or 22.6%) did not master the principles of management. A third of the nurse tutors felt that the DNA graduands did not apply the principles of management. It is important for all DNA graduands to be able to apply the principles of management as they come across a variety of management problems in the course of their work.

In table 6.15, 89% of the DNA graduands indicated that they were sufficiently prepared in effective communication strategies. In table 6.16 the majority of the DNA graduands indicated that they demonstrated appropriate communication skills in dealing with clients and health care workers. However, a third (2 or 33.3%) of the nurse tutors felt that the DNA graduands did not demonstrate appropriate communication skills. This is possibly because of complaints of communication problems between some nurse managers and clients and health workers.

The majority of all the respondents in table 6.1 indicated that psychology and sociology applied to nursing was relevant for functioning in various positions in the health services. Although in table 6.16 the majority of the DNA graduands indicated that they applied principles of sociology and psychology in the nursing care of patients, the majority of the nurse tutors were uncertain as to whether the principles were applied. It was difficult for the nurse tutors to make an accurate assessment of the extent of achievement of these aims of the DNA course as they spent very little time in the clinical areas.

More than 91% of all the respondents in table 6.1 indicated principles of adult learning as relevant to nurse managers working in various positions in the health services. In table 6.16 half of the nurse tutors were uncertain as to whether nurse managers applied principles of adult learning in the teaching of subordinates. This might be so possibly because some subordinates complained about inadequate teaching from some of their nurse managers.

Approximately a quarter of the DNA graduands in table 6.15 indicated that they were either insufficiently or not at all prepared in performance evaluation. In table 6.16 approximately a quarter of the DNA graduands also indicated that they had problems in appraising subordinates. Half of the nurse tutors indicated that some nurse managers faced problems in performance appraisal of subordinates. If subordinates are unfairly appraised, this results in low moral, dissatisfaction and poor productivity.

Table 6.16 The Extent of Achievement of the Aims of the DNA Course by Participants as Indicated by DNA Graduands and Nurse Tutors

Aims of the DNA Course	DNA Graduands n = 165				Nurse Tutors n = 6			
	Not Achieved		Achieved		Not Achieved		Achieved	
	n	%	n	%	n	%	n	%
Apply the principles of management in running the nursing services	37	22.6	127	77.4	2	33.3	4	66.7
Demonstrate appropriate communication skills in dealing with clients and health care workers	24	14.6	140	85.4	2	33.3	4	66.7
Apply the principles of sociology in the nursing care of patients (e.g. respecting the culture and values of individuals).	32	19.5	132	80.5	5	83.3	1	16.7
Apply the principles of psychology in the nursing care of patients (e.g. reinforcing good behaviour by giving rewards).	61	37.2	103	62.8	4	66.7	2	33.3
Apply principles of adult learning in the teaching of subordinates.	47	28.7	117	71.3	3	50.0	3	50.0
Demonstrate ability to appraise the performance of subordinates.	47	28.7	117	71.3	3	50.0	3	50.0
Conduct research studies in nursing practice.	83	50.9	80	49.1	6	100.0	0	0.0

In table 6.16, it is noted that half (83 or 50.9%) of the DNA graduands indicated that conducting research studies in nursing practice was not achieved. None of the

nurse tutors had evidence of DNA graduands continuing to conduct research studies in nursing practice after completing the course.

Table 6.17 Views of DNA Graduands and Supervisors on the Availability of Resources to Implement what was Learnt in the DNA Course

Aspects	DNA Graduands n = 165				Supervisors n = 34			
	Inadequate		Adequate		Inadequate		Adequate	
	n	%	n	%	n	%	n	%
The human resources to implement approaches to nursing such as the nursing process	132	80	33	20	28	82.4	6	17.6
Equipment to carry out nursing procedures	119	72.1	46	27.9	24	70.6	10	29.4
The support received from supervisors	62	38.3	100	61.7	7	20.6	27	79.4
The support received from colleagues	32	19.6	131	80.4	6	17.6	28	82.4
The time to conduct nursing research studies	141	85.5	24	14.5	22	64.7	12	35.3
Situations in which one could apply the new knowledge and skills.	64	39.3	99	60.7	5	14.7	29	85.3

In table 6.17 it can be noted that the majority of the respondents who completed the DNA course and their supervisors indicated that the following were inadequate:

- the human resources to implement approaches to nursing such as the nursing process;
- equipment to carry out nursing procedures; and
- the time to conduct nursing research.

Even though in table 6.15 more than three quarters (129 or 78.7%) of the DNA graduands indicated that they were sufficiently prepared in the nursing process, in table 6.17 the majority of them (132 or 80%) were apparently unable to implement this. Approximately 70% of the DNA graduands and supervisors indicated equipment to carry out nursing procedures as inadequate. When nurses are unable

to implement what they learnt in the course as a result of shortage of human resources and equipment, their morale is lowered and they may become demotivated. Shortage of staff and equipment were also noted as resources which affected the learning in the hospitals during practical experience. Troskie (1996: 264) points out that sufficient equipment of high quality is necessary in order to meet the needs of patients and to improve the nurses' productivity. A higher percentage of DNA graduands than supervisors indicated time to conduct research studies to be inadequate. Despite the shortage of time, it was noted in table 6.16 that conducting nursing research was a problem for nurses possibly due to the nurses finding it difficult to master statistics.

In table 6.6, it was noted that more than three quarters (28 or 84.8%) of the supervisors agreed that they were able to give students as much support as they needed in relation to their secondment during training. In table 6.17, it is also noted that more than three quarters (27 or 79.4%) of the supervisors indicated that they gave adequate support to DNA graduands on implementation of content learnt in the course. Whilst all graduands need support when implementing what they learnt, this view is not supported by more than a third (62 or 38.8%) of the graduands who indicated that they received inadequate support. Inadequate support from supervisors results in decreased productivity and quality of care. Because of their experience, a higher percentage of supervisors than DNA graduands possibly recognised situations which one could apply the new knowledge and skills. Recognition of such situations is important so that the DNA graduands correlate theory with practice.

Additional comments from four (2.4%) of the nurses who completed the DNA course indicated resistance to change from some supervisors. Four (11.8%) of the supervisors indicated resistance to change from nurses who did not undergo the DNA course. Resistance to change retards progress in the delivery of health care. Five (14.7%) of the supervisors acknowledged that support from the supervisors was necessary for nurses to implement what they learnt.

Two (5.9%) of the supervisors stated that only a few nurses suggested changes after completing the DNA course. One supervisor indicated that sometimes nurses were reluctant to share their information with colleagues. One supervisor called for more consultation among colleagues when planning to implement what was learnt in the DNA course. This suggestion is important as more consultation among colleagues is likely to increase cooperation, motivation and improvement in the quality of care.

Table 6.18 Assistance Required from Supervisors on Some Practical Aspects Indicated by DNA Graduands and Supervisors

Practical Aspects	DNA Graduands n = 165				Supervisors n = 34			
	Never		Sometimes		Never		Sometimes	
	n	%	n	%	n	%	n	%
Planning and organising work schedules	136	82.4	29	17.6	3	8.8	31	91.2
Delegation of duties	159	96.4	6	3.6	8	23.5	26	76.5
Communication skills	151	91.5	14	8.5	9	26.5	25	73.5
Skills in maintaining good interpersonal relationships	141	85.5	24	14.5	9	26.5	25	73.5
Teaching of subordinates	144	87.2	20	12.2	11	32.4	23	67.6
Performance appraisal of subordinates	107	65.2	57	34.8	9	26.5	25	73.5

In table 6.18, significant differences of opinion on assistance required by DNA graduands on practical aspects are noted between the DNA graduands and their supervisors. Whilst most of the DNA graduands did not solicit assistance from their supervisors on the practical aspects presented in table 6.18, most of their supervisors identified a need to counsel them on these aspects. The majority (31 or 91.2%) of the supervisors had counselled DNA graduands on planning and organising work schedules. The DNA graduands submitted their work schedules to their supervisors who then advised on any necessary changes. It is also noted in table 6.15 that 47 (28.5%) of the DNA graduands indicated that they were not

sufficiently prepared in organisation of the unit's workload. This indicates that more guidance was required in this area.

Twenty-six (76.5%) of the supervisors indicated that they sometimes counselled DNA graduands on delegation of duties. The majority (156 or 96.4%) of the DNA graduands did not seek assistance in delegation of duties from their supervisors. However, in table 6.15 more than half (68 or 59.1%) of the DNA graduands indicated that they were insufficiently prepared in delegation of tasks for their positions indicating a need for more guidance. Even though, in table 6.16, 47 (28.7%) of the DNA graduands indicated problems in teaching subordinates, in table 6.18 only 20 (12.2%) sought assistance in this area from their supervisors. It is thus apparent that a number of DNA graduands were not seeking assistance from their supervisors in areas in which they still felt less confident.

In table 6.18 approximately a third (57 or 34.8%) of the DNA graduands required assistance from their supervisors on performance appraisal of subordinates. In table 15, 44 (27%) of the DNA graduands said that they were either insufficiently or not at all prepared in performance appraisal. It is also noted in table 16 that 47 (28.7%) of the DNA graduands indicated problems in performance appraisal. It is apparent that a number of DNA graduands required assistance in performance evaluation.

Under additional comments, six (3.6%) respondents indicated solving disputes and two (1.2%) respondents indicated quality assurance as aspects where they required more assistance from their supervisors. The following were also indicated by single respondents as areas in which they required assistance from their supervisors:

- budgeting;
- research;
- hospital information system;
- initiating improvements at the work place;
- conducting assessments for student nurses; and,

- organising workshops and seminars.

Three (8.8%) supervisors indicated the following as additional issues on which they counselled DNA graduands:

- disciplining of staff;
- accountability on performance; and,
- punctuality.

In table 6.15, 52 (31.9%) DNA graduands indicated that they were not sufficiently prepared in dealing with disciplinary matters.

When asked to indicate in general the extent to which they thought the DNA course prepared participants to function at their workplaces on completion of the course, all 34 supervisors and the majority (5 or 83.3%) of the nurse tutors indicated that the participants were adequately prepared. Only one (16.7%) nurse tutor indicated that the participants were inadequately prepared. In table 6.15, it was noted that there was no area in which all the respondents indicated that they were sufficiently prepared.

The nurse tutors and the supervisors were asked to indicate in general the extent to which they were satisfied by the general performance of graduands produced at the end of the DNA course. All six nurse tutors and the majority (32 or 94.1%) of the supervisors indicated that they were satisfied with the general performance of the graduands. Only two (5.9%) of the supervisors were dissatisfied with the general performance of the graduands. However, in table 6.18, most of the supervisors indicated that they counselled DNA graduands in the practical aspects listed.

6.6 SECTION E: SUGGESTIONS MADE BY THE RESPONDENTS TO IMPROVE THE TRAINING OF NURSES IN THE DNA COURSE

The respondents were asked to make suggestions to improve the training of nurses in the DNA course. The suggestions will be presented under the headings of Stufflebeam's Evaluation Model, which includes the elements of context, input, process and product.

6.6.1 Context

- More input in the course was suggested in the following areas:
 - interpersonal relationships;
 - personnel management;
 - recruitment and selection;
 - interviewing techniques;
 - public relations.
 - computer literacy;
 - identifying key result areas in performance appraisal;
 - practical demonstrations in microbiology;
 - design and development of media messages;
 - gender issues and environmental issues in sociology;
 - coping in an environment of diminished resources.

- Suggestions were made to reduce content on community health nursing;

- Suggestions were made to exclude content on nutritional requirements since this was covered in the general nursing course.

6.6.2 Input

The following resources were suggested for the school:

- adequate classroom space for the number of students;
- current reading materials in the school library;
- vehicles to be allocated to the school.

6.6.3 Process

The following suggestions were made in order to improve the implementation of the course.

- suggestions to extend the training period ranged from fifteen to eighteen months;
- increase the provincial health services practical experience from three to four weeks;
- more time was suggested for conducting nursing research studies;
- more time should be set aside for using the library;
- managers from the private sector should be involved in giving input in the DNA course so as to share their experiences with the students;
- nurse tutors should sit in during guest lecturers' lessons so as to assess the adequacy of the input;
- students should be given weekly tests during the course;
- a suggestion was made to identify hospitals which were well run for the students' practical experience;
- during the practical experience, students should be supervised by supervisors who have undergone a course in nursing management;
- students should gain practical experience on quality improvement during the course;
- nurse tutors should spend more time with students on practical experience in the clinical areas;
- an evaluation of the hospital secondment involving students, supervisors and nurse tutors was suggested at the end of each secondment period; and

- the students should have a break during the course.

6.6.4 Product

The following suggestions were made in order to improve the outcomes of the course:

- a suggestion was made for guest lecturers to be involved in the setting of final examinations for the subjects which they teach;
- it was suggested to always communicate information on students' course evaluation to the guest lecturers;
- on completion of the course the DNA graduands should work under supervision of experienced nurse managers for a period of at least three months in order to consolidate what they have learnt in the course;
- there was a suggestion to organise a meeting for nurses who have recently completed the DNA course so as to come up with suggestions to improve the course.

6.7 SUMMARY

In this chapter information obtained from 165 respondents who completed the DNA course, six nurse tutors, sixteen guest lecturers and thirty-four supervisors in the clinical areas was presented. Components of the DNA course which were indicated as relevant and irrelevant by the respondents were identified. Views of the respondents on aspect of the DNA course were identified. Inadequate human and material resources in the DNA course were presented. Problems in the running of the DNA course were identified. Suggestions made by the respondents to improve the training of nurses in the DNA course were presented.

CHAPTER 7: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

This chapter presents the summary of the findings, the conclusions, recommendations based on the findings, recommendations for further research and limitations of the study.

The course for the Diploma in Nursing Administration (DNA) in Zimbabwe had not been evaluated in a comprehensive and systematic manner since its inception in 1978. The Health Professions Council of Zimbabwe requested that a review of the course be conducted. The Post Basic School of Nursing which runs the DNA course experienced inadequate human and material resources such as current reading materials and classroom facilities. The adoption of the Primary Health Care Approach by the Ministry of Health in 1980, changes in disease patterns, the implementation of the Economic Structural Adjustment Programme and health reforms also necessitated changes in the DNA curriculum. The changes in health care demanded more effective management skills on the part of the nurse managers in Zimbabwe.

The purpose of the study was thus to evaluate the DNA course in Zimbabwe with a view to identifying the strengths and weaknesses of the course and making recommendations for necessary changes. In specific terms, the study sought to:

- identify changes which may be needed in the course content;
- determine the adequacy of human and material resources for the course, such as course facilitators, teaching aids and reference materials;
- identify strengths and weaknesses in the teaching strategies of the course facilitators;
- identify problems faced by the course participants whilst on the course;

- determine from graduands, supervisors and tutors whether the course prepared participants to function adequately in the working environment; and,
- identify problems which the course participants may be facing in implementing what they have learnt in the course.

Stufflebeam's Evaluation Model was used to provide the conceptual framework for the study. The model had the advantage of providing a systematic and comprehensive form of evaluation under the elements of context, input, process and outcome.

Questionnaires were sent to 228 nurses who completed the DNA course between 1978 and 1997. These were presently practising in Zimbabwe. One hundred and sixty-five nurses responded giving a response rate of 74%. All six nurse tutors and all 16 guest lecturers involved in teaching the course were interviewed. A total of 34 supervisors (matrons) who supervised nurses who completed the DNA course, were interviewed from hospitals throughout Zimbabwe. Descriptive statistics were used to analyze the data.

7.2 SUMMARY OF THE FINDINGS OF THE STUDY

The summary of the findings of the study are presented under each of the objectives of the study.

7.2.1 Course Content of the Diploma in Nursing Administration

This section presents a summary of the findings obtained under the objective which sought to identify changes which need to be made in the future course content.

7.2.1.1 Aims and Objectives of the DNA Course in Zimbabwe

All nurse tutors interviewed agreed that the aims of the DNA course reflected the learning needs of the students. The majority of the nurse tutors indicated that learning objectives were not available for sections of the DNA course which were

taught by the tutors. However, learning objectives were available for sections of the DNA course which were taught by guest lecturers.

7.2.1.2 Relevance of the DNA Course Content to the Graduands

The respondents who completed the DNA course, their supervisors and the nurse tutors indicated that from 29 topics taught in the DNA course content as many as 13 were not really relevant for practice. These topics were:

- role of the community nurse;
- human growth and development of children under five years;
- occupational health;
- basic principles of good nutrition;
- nutritional disorders;
- Zimbabwe's expanded programme on immunization;
- family planning;
- infectious diseases in Zimbabwe;
- management of psychotic disorders;
- management of neurotic disorders;
- bacterial pathogens;
- pathogenic viruses; and,
- drugs acting on systems of the body.

7.2.1.3 Suggested Aspects for Inclusion in the DNA Course Content

The majority of the respondents who completed the DNA course, their supervisors and the nurse tutors found the components in table 6.2 to be relevant for inclusion in the DNA course content. These components included the following:

- negotiation skills to solve disagreements regarding service conditions between unions and hospital management;
- management of health finances, including practical exercises on budgeting;
- health sector reforms such as decentralisation;

- patient's/client rights;
- health care personnel rights;
- computer literacy/health information systems;
- health assessment in diagnosis of patient's illness.

Health assessment may have been suggested because it was being covered in the new general nurses' syllabus in Zimbabwe. However, including health assessment in the DNA course would require a lot of time and might result in overloading the course. One nurse tutor suggested inclusion of the costing of care given to patients and business communication into the DNA course.

7.2.1.4 Field Experience in the DNA Course

Hospital secondment and provincial health services secondment in the DNA course were highly rated as relevant by the DNA graduands, their supervisors and nurse tutors. This would be expected as these field experiences are directly related to the role of the nurse manager (Table 6.3).

Visits to industrial sites were rated as being least relevant by supervisors and tutors. During these visits the students are given an orientation on the products produced at the sites. Some of the products were also introduced to the students during their general nurse training programme. Visits to schools for the deaf and children's homes were rated as being least relevant by the DNA graduands. During these visits, the students only received an orientation talk about the place lasting a few hours. The students were thus not actively involved in the activities of the institutions. The visits could thus be excluded in future courses.

7.2.2 Resources in the Diploma in Nursing Administration Course

This section presents a summary of the findings obtained under the objective which sought to determine the adequacy of human and material resources for the course such as course facilitators, teaching aids and reference materials.

7.2.2.1 Human and Material Resources

The number of nurse tutors in the DNA course was indicated as being inadequate by the majority of the respondents. Textbooks and journals in the school library and the classroom space for the number of students were viewed as inadequate (Table 6.4). Transport to follow-up students on field secondment and telephone lines to the tutors' offices were also reported to be inadequate.

There was agreement among most of the nurse tutors and guest lecturers that the audiovisual aids in the DNA course were grossly inadequate. Resources which were considered important in the DNA course by the nurse tutors included the following: video camera; television and cassette recorder; flip charts and boards; overhead projector transparencies and pens; fax facility; computers and internet links; film projector; epidiascope; photocopier and duplicating machine.

7.2.3 Strengths and Weaknesses in the Teaching Strategies of the Course Facilitators and Problems Faced by the Course Participants

This section presents a summary of findings obtained under the objectives which sought to identify the strengths and weaknesses in the teaching strategies of the course facilitators and to identify problems faced by the course participants whilst on the course.

7.2.3.1 Views of the DNA Graduands, Nurse Tutors and Guest Lecturers on Aspects of the DNA Course

There was agreement among most of the respondents that the course content was delivered at an appropriate level of student knowledge and that the students' learning objectives were addressed (Table 6.5). There was also agreement that the academic work of the students was assessed fairly by the facilitators. Most of the respondents disagreed that the classroom environment was conducive to learning as the space was too small for the number of students, thus also inhibiting group work. Another problem which was pointed out was that the hospital environment for practical experience was not conducive to learning.

7.2.3.2 Views of Supervisors on Aspects of the DNA Course

Most of the respondents who supervised the DNA students on clinical secondment to the hospitals agreed on the following aspects (Table 6.6).

- During the hospital secondment the student's learning objectives were addressed.
- The hospital environment for practical experience was conducive to learning.
- Most of the supervisors were able to give the students as much support as they needed in relation to their secondment.

However, DNA graduands and nurse tutors saw shortage of staff as a constraint which affected learning in the hospital environment. The supervisors saw a problem with the student's ability to correlate theory with practice.

7.2.3.3 Views of Supervisors Regarding Supervision of DNA Students

Whilst the majority of supervisors of DNA students on clinical secondment indicated that there were adequate learning opportunities to meet the objectives of students during the secondment, nearly half of the supervisors indicated that they had inadequate time to supervise the students. Most of the supervisors indicated that support from the nurse tutors during the secondment was inadequate (table 6.7).

The visits to the clinical areas by nurse tutors were sometimes impeded by shortage of staff, transport problems and financial constraints. It was also possible that the nurse tutors did not set aside specific slots for these visits. Some of the supervisors indicated that there should be co-ordination between supervisors so as to avoid duplication of information. Accommodation at the hospital for students during the secondment period was expressed as a problem.

7.2.3.4 Support Given to Students by Guest Lecturers and Nurse Tutors

The majority of the guest lecturers and tutors indicated that they were able to give students as much support as they needed in the time allocated for the subjects they taught (figure 6.2). Most of the guest lecturers agreed that they were clear on what they were supposed to teach students in the DNA course.

7.2.3.5 Staff Development Opportunities for Nurse Tutors

Most of the nurse tutors indicated that staff development opportunities for nurse tutors were not adequate. Whilst the nurse tutors got the opportunity to attend workshops and enrol for Masters' degrees, two expressed a need for sabbatical leave and exchange programmes which were not available.

7.2.3.6 Time Allocation and Workload in the DNA Course

All the nurse tutors and most of the guest lecturers and the DNA graduands indicated that the time allocated for each period in the DNA course was adequate (table 6.8). There was agreement among most of the DNA graduands, their supervisors and nurse tutors that one month hospital secondment and three weeks Provincial Health Services secondment in the DNA course were adequate (Tables 6.9 and 6.10). However, nearly 20% of the DNA graduands found the hospital secondment to be too short. Approximately 18% also found the Provincial Health Services secondment to be equally short. The majority of the DNA graduands and half of the number of nurse tutors mentioned that the workload of the students in the DNA course was too great.

7.2.3.7 Teaching Strategies Used in the DNA Course

The nurse tutors and guest lecturers used a variety of teaching strategies to teach students in the DNA course. These included lectures, group discussions, lecture/discussions, demonstrations, role plays, assignments and tutorials (Table 6.13). A combination of lectures and discussions was the most popular teaching strategy as it was used by all nurse tutors and guest lecturers. The use of group discussions was limited by the large numbers of students and lack of space for small group discussions.

7.2.3.8 Teaching Aids in the DNA Course

The teaching aids which were used by nurse teachers and guest lecturers included the chalkboard, overhead projector, film slides, film projector, video tapes, flip charts, charts and models (Table 6.14). All nurse tutors and the majority of guest lecturers used the chalkboard and the overhead projector because of their availability. The limited use of video tapes was due to the unavailability of a television and video cassette recorder in the school. Whilst most of the nurse tutors used the film projector, flip charts, charts and models, the majority of guest lecturers never used these teaching aids. The use of a variety of teaching aids promotes active learning.

7.2.3.9 Problems Faced by Guest Lecturers in Relation to Teaching Students in the DNA Course

Most of the guest lecturers indicated that they faced work overload at their work places which sometimes resulted in postponing lessons for the DNA students. A few of the guest lecturers experienced problems of time to mark tests and assignments for the DNA students.

7.2.3.10 Problems Faced by the Respondents Whilst on the DNA Course

The majority of the DNA graduands indicated that they did not experience problems getting adequate support from the nurse tutors. Nearly half of the respondents indicated that they faced problems getting adequate supervision from supervisors in the clinical areas. Some of the supervisors indicated that they had inadequate time to supervise students. Half of the DNA graduands indicated that they experienced problems of transport in getting to the clinical areas. The transport to the clinical areas was indicated as expensive by some of the respondents.

7.2.4 The Extent to Which DNA Graduands were Prepared for Their Positions and Problems Faced When Implementing What Was Learnt in the Course

This section presents a summary of findings obtained under the objectives which sought to determine from graduands, nurse tutors and supervisors, whether the course prepared participants to function adequately in the working environment. It also sought to identify problems which course participants faced in implementing what they learnt in the course.

7.2.4.1 The Extent to which DNA Graduands Were Prepared in Various Aspects for their Positions During the DNA Course

There were only a few aspects where the respondents indicated that they were sufficiently prepared (Table 6.15). Aspects where more than half of the respondents indicated that they were not sufficiently prepared for their positions included the following:

- ❑ labour relations which enable nurse managers to handle disputes in the health institutions;
- ❑ delegation of tasks which is necessary in order to improve the efficiency of running the health institutions;
- ❑ aspects of managing financial resources which are essential for achieving quality care in the health services.

7.2.4.2 The Extent of Achievement of the Aims of the DNA Course by Participants

Most of the DNA graduands indicated that they achieved the aims of the course (Table 6.16). None of the nurse tutors had evidence of DNA graduands continuing to conduct research studies in nursing practice after completing the course. It was difficult for the nurse tutors to make an accurate assessment of how the DNA graduands performed as they spent very little time in the clinical areas.

7.2.4.3 Implementation of What was Learnt in the DNA Course

Most of the DNA graduands and their supervisors indicated that when the DNA graduands wanted to implement what they learnt, the following were inadequate:

- the human resources to implement approaches to nursing such as the nursing process;
- equipment to carry out nursing procedures; and
- the time to conduct nursing research studies (Table 6.17).

Most of the DNA graduands and their supervisors indicated that the support received from supervisors and colleagues was adequate (Table 6.17).

7.2.4.4 Assistance Required from Supervisors in Some Practical Work by DNA Graduands

The majority of the respondents who completed the DNA course indicated that they did not require assistance from supervisors on the following practical activities:

- planning and organising work schedules;
- communication skills;
- skills in maintaining good interpersonal relationships; and
- teaching of subordinates.

In contrast, the majority of the supervisors indicated that they had counselled the DNA graduands on these practical components of their work.

7.2.4.5 The Extent to Which DNA Graduands Were Prepared to Function at Their Work Places

There was agreement between all the supervisors and the majority of the nurse tutors that in general, the DNA course prepared participants to function efficiently at their workplaces on completion of the course. All the nurse tutors and the

majority of the supervisors were generally satisfied with the average performance of graduands produced in the DNA course. However, in table 6.15 it was noted that there were actually a large number of areas where the respondents indicated that they were insufficiently prepared.

7.3 CONCLUSIONS OF THE STUDY

The conclusions of this study will be presented under the headings of Stufflebeam's Evaluation Model, which includes the elements of context, input, process and product.

7.3.1 Context: The Diploma in Nursing Administration Course Content

The findings of this study revealed that the aims of the DNA course reflected the learning needs of the students. Whilst there was a course outline for the DNA course, there was no teaching guide which provided objectives for all sections of the course. Most of the course content covered in the DNA course was considered to be relevant by the respondents. Secondment to the clinical areas in the DNA course was highly rated as relevant by the respondents. However, visits to industrial sites as well as visits to schools for the deaf, institutions for the disabled and visits to old people's homes were rated as being not relevant.

7.3.2 Input: Resources in the Diploma in Nursing Administration Course

From the findings of the study it was apparent that human and material resources were inadequate in the DNA course. The classroom space was indicated as being inadequate for the number of students. Textbooks and journals in the school library were found to be outdated and inadequate. Other important resources required in the DNA course included a video camera, television and cassette recorder, flip charts and boards, fax facility, telephone lines in tutors' offices, E-mail, epidiascope, photocopiers, duplicating machine, computers and vehicles for the school. A shortage of resources is not conducive to learning. There is, therefore, a need to always ensure the adequacy of necessary resources in the DNA course.

7.3.3 Process: Strengths and Weaknesses in the Teaching Strategies of the Course Facilitators and Problems Faced by the Course Participants

More strengths than weaknesses were identified in the teaching strategies of the course facilitators. Despite the inadequacy of teaching aids and classroom space, there was agreement among most of the respondents that the DNA course content was delivered at an appropriate level of knowledge. The combination of lecture and discussion strategies used by the facilitators made learning an active process. Most of the respondents agreed that the academic work of the students was assessed fairly by the facilitators.

Although the supervisors in the hospitals were willing to give students support, shortage of staff was a constraint which affected student's learning in the hospital environment. Accommodation and transport for the students during the secondment were a problem. The support from the nurse tutors during the secondment was inadequate. However, the support given to students by the nurse tutors whilst in the school was indicated as adequate by the graduands. The majority of the graduands found the workload in the course to be too heavy and the training period to be too short.

7.3.4 Product: The Extent to Which DNA Graduands Were Prepared for Their Positions and Problems Faced when Implementing What was Learnt in the Course

Although there was agreement between all the supervisors and the majority of the nurse tutors that, in general the DNA course prepared participants to function at their work places on completion of the course, there were no areas of nursing management where all the respondents indicated that they were sufficiently prepared. Although the majority of the DNA graduands indicated that they did not require assistance from supervisors on practical aspects, the majority of the supervisors counselled the graduands on planning and organising work schedules and delegation of duties. Despite the support from supervisors and colleagues, the DNA graduands faced problems of inadequate human resources and equipment when they wanted to implement what they learnt in the course. This, however,

will always be a problem and the graduands need to learn how to manage with these scarce resources.

7.3.5 General Conclusions

This study identified changes which need to be made in the future DNA course content. Some of the topics which were considered irrelevant by the respondents had been covered in their general nurse training. These included some aspects of nutrition, family planning and infectious diseases. There were also some components which were suggested for inclusion in the course content so as to keep abreast of changes in the field of nursing administration. Among these were negotiation skills, management of health finances, health sector reforms and computer literacy.

Resources in the DNA course which were identified as grossly inadequate included classroom space for the number of students and reading materials in the library. Fax facility and E-Mail as essential means for modern communication were not available. More strengths than weaknesses were identified in the teaching strategies of the course facilitators. Most of the facilitators were interested in giving support to the students and they delivered course content at an appropriate level of knowledge. The support from nurse tutors during the clinical secondment of students was identified as inadequate. The majority of the respondents indicated that their workload was very heavy for the period of training. There were aspects of nursing management where some of the respondents indicated that they were insufficiently prepared for during the course, and this is of concern.

7.4 RECOMMENDATIONS

The following recommendations are made from the findings of the study. The recommendations should enable the Health Professions Council of Zimbabwe and the Post Basic School of Nursing to make the necessary changes in the DNA course. It is essential to make the changes so as to keep abreast of developments in the field of Nursing Management. The recommendations also bring to the attention of the Ministry of Health and Child Welfare the necessary human and

material resources required in the DNA course. The recommendations will be presented under the headings of Stufflebeam's Evaluation Model which include the elements of context, input, process and product.

7.4.1 Context

The following suggestions address the course content.

7.4.1.1 Teaching Guide for the DNA Course

The Post Basic School of Nursing should develop a teaching guide for the DNA course which provides objectives for all subjects covered in the course. A teaching guide would enable nurse tutors and guest lecturers to identify course content to be covered in order to reach the objectives. The guide should include assessment criteria as well as checklists which would guide students in their own self-assessment and help tutors to establish whether or not objectives had been met.

7.4.1.2 Topics which could be Excluded from the DNA Course Content

The DNA course content is overloaded for the period during which it is supposed to be covered. The Health Professions Council of Zimbabwe could exclude the following topics which participants of the DNA course covered in their general nurse training:

- ❑ human growth and development of children under five years;
- ❑ basic principles of good nutrition;
- ❑ nutritional disorders;
- ❑ family planning;
- ❑ infectious diseases;
- ❑ neurotic disorders; and,
- ❑ psychotic disorders.

However, modern trends in family planning which were not covered in general nurse training, should be covered in the course.

7.4.1.3 Aspects which need to be Consolidated in the Theoretical Teaching of the DNA Students

The Post Basic School of Nursing should sufficiently prepare the DNA students in aspects listed in table 6.15, especially the following:

- ❑ labour relations;
- ❑ delegation of tasks;
- ❑ cost containment in health care;
- ❑ cost benefit analysis in health care;
- ❑ unit budgetary control measures in hospitals;
- ❑ procurement of financial resources for the hospital;
- ❑ monitoring of financial resources in individual units;
- ❑ strategic planning

Management of health finances is a necessity since nurse managers are expected to function in an environment with limited financial resources.

The theoretical input in financial management should be consolidated by involving the students in practical exercises in the clinical areas. The Post Basic School of Nursing should ensure that students master basic statistics so as to enable them to develop more interest in conducting nursing research.

7.4.1.4 Aspects Which Could Be Included in the DNA Course Content

In order to keep abreast of developments in the field of Nursing Management, it is necessary for the Health Professions Council of Zimbabwe to include the following aspects in the DNA course content:

- ❑ Negotiation skills to solve disagreements regarding service conditions between unions and hospital management would enable nurse managers to deal with issues pertaining to labour relations in the health services.
- ❑ Health sector reforms are an important issue in Zimbabwe since the health services are in the process of decentralisation.

- It is vital to include computer literacy in the course as students have to access information for their assignments through the use of computers. In the clinical areas, information for nursing management can be stored and easily retrieved when required in the hospitals with computers.
- Within the sociology content it is necessary to include current topical issues such as gender and cultural issues in the course.

7.4.1.5 Secondment to Clinical Areas and Field Visits in the DNA

Course

Hospital secondment and provincial health services secondment which are directly linked with the role of the nurse manager should be continued in the DNA course. The Post Basic School of Nursing could exclude visits to the industrial sites where students only receive an orientation on the products produced at the sites. Visits to schools for the deaf and children's homes where students also only receive an orientation talk about the place could be excluded from the DNA course content. The students are not actively involved in the activities of these institutions. Moreover, the students would have visited these institutions during their general nurse training programme. The student could always be made aware of any new institutions for the purposes of referring patients.

7.4.2 Input

The following resources are recommended for the DNA courses.

7.4.2.1 Resources in the DNA Course

In order to ensure a conducive learning environment, the Ministry of Health and Child Welfare should ensure the adequacy of the following resources for the DNA course taking into consideration the availability of funds.

- There should be at least six permanent nurse tutors. This should give the tutors more time to supervise the students in the school and in the clinical areas. This would also ensure adequate staff coverage when a tutor goes on vacation leave or sick leave.

- ❑ The intake of DNA students could be reduced in order to match the available classroom space. When funds become available the general nurse training school at Parirenyatwa Hospital could be extended in order to house the DNA course. This school was built in such a way that classrooms and offices could be added on top of the existing building in order to constitute a first floor.
- ❑ It is essential to have current textbooks and journals in the school library. Preferably the books should not be older than ten years and the journals should not be older than five years. This will enable nurse tutors and students to keep abreast of changes in nursing management.
- ❑ A vehicle for nurse tutors to follow-up students on clinical secondment and also to provide transport for guest lecturers from the Ministry of Health Headquarters to the school is required. Until funds are available, the Ministry of Health and Child Welfare could allocate specific vehicles which the Post Basic School of Nursing could share with other departments.
- ❑ Telephone extension lines to all the tutors' offices, fax and e-mail facilities in order to improve communication in the school are essential. For the e-mail facility a modem could be installed into one of the computers available in the school.
- ❑ There should be a computer in each of the tutors' offices and a minimum of ten computers for the students when funds become available.
- ❑ A television and video cassette recorder are needed.
- ❑ A photocopier would enable tutors to produce an adequate supply of handouts for the students.

7.4.3 Process

Recommendations to improve the implementation of the course are presented in this section.

7.4.3.1 Supervision of DNA Students in Hospitals

The Post Basic School of Nursing should identify hospitals which are well run for the practical experience of the DNA students. During secondment the students should be supervised by nurse managers who have completed the DNA course. The supervisors should be given guidelines and objectives of the secondment before they receive the students for supervision. Tutors in the Post Basic School of Nursing should follow up students on secondment on a regular basis and their interactions should be recorded and checked. The supervisors will thus become more aware of the theoretical content covered by the students and will be in a position to assist them to correlate theory with practice.

The supervisors should discuss the hospital secondment objectives with the students and come up with a programme to meet the objectives. Supervisors should also be aware of what students covered with other supervisors so as to avoid duplication of information during the secondment. A checklist should therefore be kept in order to avoid duplication. The supervisors should enhance the students' practical experience by guiding them in the following areas:

- planning and organising work schedules;
- delegation of duties;
- performance appraisal of subordinates;
- solving disputes at the work place; and
- unit budgetary control measures in hospitals.

An evaluation of the clinical secondment involving students, supervisors and nurse tutors should be done at the end of each secondment period and this should be documented using special evaluation forms.

7.4.3.2 The Training Period in the DNA Course

The training period for the DNA course could be increased from eleven months to fifteen months by the Health Professions Council of Zimbabwe. Increasing the training period should enable the students to get through the necessary workload in the DNA course with increased understanding. The hospital secondment period

for the students could be increased from one month to three months. The secondment period in the provincial health services could also be increased from three weeks to six weeks. Increasing the secondment period will give students more time to consolidate their practical experience under supervision. Explicit guidelines for the secondment will be necessary to ensure effective use of time.

7.4.3.3 Involvement of Private Health Sector Managers in the Course

The Post Basic School of Nursing should involve managers from the private health sector in giving input in the DNA course so that they share their experience with the students. The managers could be allocated a few sessions and paid at the same rate as guest lecturers.

7.4.4 Product

The Health Professions Council of Zimbabwe should involve guest lecturers in the setting of the final examinations of the DNA course proportional to their required inputs. This would ensure a wider coverage of components in the final examination. The Post Basic School of Nursing should always communicate information on the students' course evaluation to the guest lecturers so that they take note on aspects to be improved.

On completion of the course, the nursing officers-in-charge of hospitals should ensure that the DNA graduands work under the supervision of experienced nurse managers for a period of at least three months in order to consolidate what they have learnt in the course. This should be done before they are required to function on their own in a managerial position.

7.4.5 Suggested Outline for the DNA Course

The following course outline is suggested after making reference to the existing course content (Appendix : 1) and following discussions with the respondents.

Aims of the DNA Course

- ❑ Equip the student with the necessary knowledge, skill and attitude to function efficiently and effectively as a nurse manager in the health service.

- ❑ Apply the principles of management in running the nursing services.
- ❑ Demonstrate appropriate communication skills in dealing with clients and health care workers.
- ❑ Describe how principles of sociology and psychology are applied in nursing management.
- ❑ Apply the principles of adult learning in the teaching of clients and subordinates.
- ❑ Demonstrate ability to appraise the performance of subordinates.
- ❑ Conduct research studies in nursing practice.
- ❑ Demonstrate skills in the handling of labour disputes and conflicts in the health service.
- ❑ Demonstrate an understanding of financial management in the health service.

Part I: Nursing Management

(a) Planning

- ❑ Vision, mission and philosophy of the organization
- ❑ General management approaches
 - Management theories
- ❑ Human resource planning and management
- ❑ Commissioning of health service facilities
- ❑ Disaster planning and emergency preparedness; and response
- ❑ Social and economic factors influencing health care planning
- ❑ Trends in health care influencing health care facility planning
- ❑ Financial management
 - Cost containment in health care
 - Budget forecasting in health care
 - Cost benefit analysis in health care

- Unit budgetary control measures in hospitals
- Procurement of financial resources for the hospital
- Monitoring of financial resources in individual units

(b) Organizing

- Principles of organization
- Organizational structure in health care institution
- Organizational culture and climate
- Group dynamics
- Interdisciplinary coordination in health care
- Communication in organizations
- Management of supplies and equipment

(c) Leading

- Leadership in health service management
- Motivation strategies for personnel management
- Initiating and managing change
- Decision-making and problem-solving
- Management of conflict

(d) Control

- Quality improvement in health care
- Formulation of policies and procedures
- Maintenance of a therapeutic physical environment free from nosocomial infections
- Labour management

Part 2: Nursing Ethos and Professional Practice; and Nursing Research

(a) Nursing Ethos and Professional Practice

- Factors currently influencing the development of the nursing profession
- Concepts of professionalization
- Nursing philosophy and ethics
- The nursing act

- ❑ Legal issues in patient care
- ❑ Accountability and responsibility
- ❑ Interpersonal relationships
- ❑ Professional organizations
 - International Council of Nurses
 - Nursing Councils
 - Nursing Associations
- ❑ Human rights and nursing
 - The rights of the consumer in health care.
 - Health care personnel rights

(b) Nursing Research

- ❑ The process of nursing research
- ❑ Research designs and approaches
- ❑ Ethical considerations in research
- ❑ Statistics and its use in research

Part 3: Public Health

- ❑ The organization and structure of health services in Zimbabwe
- ❑ Primary Health Care
- ❑ Prevention and control of diseases in the health service
- ❑ Legislation related to health
 - The Public Health act
 - The Child adoption and protection act
- ❑ Occupational health and environmental health
- ❑ Roles of the environmental health team
- ❑ Social services in Zimbabwe
- ❑ The role of voluntary organizations in public health

Part 4: Behavioural Sciences

(i) Sociology

- ❑ Societal structures and processes
- ❑ Health and illness

- Health facilities as social institutions
- Inequalities in health
- Traditional medicine

(ii) Psychology

- Human learning
- Memory and thinking
- Motivation and emotion
- Attitudes and change of attitudes
- Mental defence mechanisms
- Coping with stress and illness
- Counselling clients suffering from HIV/AIDS

(iii) Epidemiology and Statistics

- Basic concepts in epidemiology
- Population and development
- Demography
- Disease surveillance
- Management of disease outbreak
- Types and sources of data
- Descriptive statistics
- Summary statistics
- Measurement of morbidity and mortality
- Health status indices
- Measure of hospital efficiency
- Application of epidemiology in community health nursing
- Computer skills

Part 5: Medical Sciences

(i) Microbiology

- Bacterial pathogens, pathogenic viruses and fungal infections with specific relation to prevention of nosocomial infections.

- ❑ Transmission, prevention and control of infection
- ❑ Sterilization and disinfection
- ❑ Immunity

(ii) Pharmacology

- ❑ Concepts in pharmacology
- ❑ Drug identity and nomenclature
- ❑ Essential drug list
- ❑ Concept of rational use of drugs
- ❑ Pharmacokinetics and pharmacodynamics
- ❑ Drugs acting on systems of the body
- ❑ Drug interactions
- ❑ Drug dependency
- ❑ Drug compliance and the role of the nurse
- ❑ The Drug Control Council

Part 6: Nursing Management Practice in Hospitals and Community Health Service

(a) Nursing Management and Practice in Hospitals

The nursing management practice in hospitals is to be conducted over a period of three months. The hospital secondment period is an essential part of the student's education and training. The student is to be supervised by nurse managers who have successfully completed the DNA course or an appropriate management course. The purpose of the secondment is to acquaint the student with the duties and responsibilities of the nurse manager. During this period the student is to acquire the knowledge, skills and attitudes needed to manage health services by correlating theory with practice.

During the hospital secondment period the student is to conduct a research project on some aspects of nursing management.

Objectives of the Hospital Secondment

By the end of the hospital secondment period, the student should be able to:

- ❑ State the functions of the health care personnel within the hospital per category.
- ❑ Participate in the management activities which include planning, organizing, leading and controlling within the health services.
- ❑ Participate in the following activities under the supervision of nurse managers:
 - planning and organizing work schedules;
 - delegation of duties to subordinates;
 - performance appraisal of subordinates;
 - financial management in the institutions; and,
 - solving disputes and disciplinary hearings in the institutions.
- ❑ Demonstrate appropriate communication skills in dealing with clients, patients and members of the health team.
- ❑ Identify the learning needs of subordinates and take appropriate action.
- ❑ Participate in the induction and orientation activities for new members of staff.
- ❑ Perform supervised ward rounds using the opportunity as a teaching moment for staff and patients.
- ❑ Counsel subordinates, patients and clients.
- ❑ Maintain accurate records of proceedings within the hospital.
- ❑ Take note of the hospital outlay, disaster relief plans and the staffing of the hospital.
- ❑ Identify problems encountered by nurse managers and ways of overcoming them.

(b) Nursing Management Practice in Community Health Service

The secondment of the students to the community health service is to be conducted over a period of six weeks. The students are to be supervised by nurse managers in community health nursing. The purpose of the secondment is to equip the students with knowledge, skills and attitudes needed to improve the health and quality of life in the community.

Objectives of the Community Health Service Secondment

By the end of the community health service secondment period, the student should be able to:

- ❑ State the broad functions of the health care personnel within the community.
- ❑ Conduct a community diagnosis.
- ❑ Participate in family and child health care activities.
- ❑ Take note of the epidemiology profile of diseases in the area.
- ❑ Participate in the promotion of primary health care activities.
- ❑ Conduct health education sessions for clients.
- ❑ Identify problems encountered by community health nurses and ways of overcoming them.

Part 7: Evaluation of DNA Students During Training

The objectives of the programme must be evaluated and the following methods may be used:

- ❑ Pretests to assess the student's prior knowledge before giving the input on specific sections.

- ❑ Tests and examinations on aspects covered by the facilitators.
- ❑ Assessment of the public speaking skills of the student. Video tape recordings should be used in order to give students an opportunity for self assessment.
- ❑ At least two class presentations of individual and group assignments on aspects of nursing management.
- ❑ Assessment of conducted nursing research projects.
- ❑ Reports from nurse managers in hospitals and community health service on students' performance.

7.4.6 Recommendations for Further Research

- ❑ Further research is recommended in identifying the specific training needs of the DNA graduands in aspects in table 6.15 especially in the area of management of financial resources. This will enable the Post Basic School of Nursing to sufficiently prepare the DNA students in these crucial areas.
- ❑ A recommendation has been made for DNA graduands to work under the supervision of experienced nurse managers for a period of at least three months. During this period further research is recommended to identify the specific practical aspects which the DNA graduands still require in order to assume their role as nurse managers. This will enable the Post Basic School of Nursing to ensure that students are sufficiently supervised in the identified practical aspects during the course.

7.5 LIMITATIONS OF THE STUDY

Nurses who completed the Diploma in Nursing Administration course and were living outside Zimbabwe were excluded from this study. Their inclusion into the study would have required more time and financial resources in order to trace where they were working outside the country. In order for nurses who completed the course to be included in this study, they had to be living in Zimbabwe and

registered with the Health Professions Council. Due to time and financial constraints, the researcher could not interview the large number of nurses who completed the DNA course. Information from these respondents was, therefore, limited to questionnaires.

7.6 CONCLUDING REMARKS

The study identified changes necessary for future DNA courses. Despite the limitations of the study, the recommended DNA course outline for Zimbabwe could also be adapted by countries in the region for the training of nurse managers.

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APPENDIX 1**THE COURSE FOR THE DIPLOMA IN NURSING ADMINISTRATION IN ZIMBABWE AND SOUTH AFRICA.****Introduction**

This paper gives a description of the courses for the Diploma in Nursing Administration in Zimbabwe and South Africa. It covers the regulations and syllabi for the courses.

The Course for the Diploma in Nursing Administration in Zimbabwe: Training Regulations**Training Centre**

The Post Basic School of Nursing in Harare is currently the only training centre presenting the course for the Diploma in Nursing Administration in Zimbabwe. The training centre is approved by the Health Professions Council of Zimbabwe. All the nurse tutors in the school have to be registered and hold teaching qualifications approved by the Health Professions Council of Zimbabwe.

Admission to the Course

Candidates eligible for admission to the course should be holders of the General Certificate of Education with passes in five subjects at Ordinary Level. The five subjects should include English Language and a science subject. Candidates with an equivalent or higher certificate may also be admitted on the course. Candidates with educational attainments and previous experience approved by the Health Professions Council of Zimbabwe may also be admitted on the course. Candidates should be registered nurses who possess at least one additional qualification in nursing. The candidates should have had at least five years' nursing experience, exclusive of any training to be a nurse.

Duration of the Course

The course of training extends for a period of not less than two hundred days excluding days off. The training should be completed within a period of one year. The Health Professions Council may, in any particular case reduce the period of two hundred training days. The Health Professionals Council may also permit the course of training to be completed within a period of more than one year.

Assessment During Training

During the training the students are to complete tests and assignments required by the tutors of the course. The students are also required to conduct a research study during the course.

The Examination

An examination to test the students who have completed the course of training is held once during each year. The examination consists of two, three hour written papers, each carrying one hundred marks. The first paper contains questions relating to subjects set out in part one of the syllabus. Paper two contains questions relating to subjects set out in part two of the syllabus. In order to pass the examination, students should obtain not less than fifty marks in each paper. Students who pass the examination may be awarded a pass or a pass with honours.

Entry to the Examination

Students should have covered the prescribed syllabus of training by the date fixed for the commencement of the examination. The students should complete tests and assignments set by the tutors prior to entering the examination. A student shall not be eligible to be entered for the examination unless the head of the school has certified that his conduct and progress during his training period has been satisfactory. An application for entry to the examination is accompanied by a certificate issued by the head of the school. The certificate states that the student has undergone all the training prescribed in the syllabus. It also indicates the date on which the student's training will expire. The

certificate is also accompanied by an examination fee which is currently four hundred dollars.

Supplementary Examination

A student who fails the examination may be permitted by the Health Professions Council to sit a supplementary examination. The supplementary examination is held not less than two and not more than four months after the examination. An application to write the supplementary examination is accompanied by a fee stipulated by the Health Professions Council. Currently the fee for the supplementary examination is four hundred dollars.

Exemptions

A student may qualify for an exemption if he possesses a qualification which the Health Professions Council considers as to justify such exemption. A student may be exempted from receiving instruction in any particular subject. A student may also be exempted from completing any particular test or assignment.

Grant of Diploma

The Diploma in Nursing Administration is granted to a student who has completed the prescribed course of training and has passed the examination or supplementary examination.

Aim of the Course

The aim of the course is to assist the learners to develop indepth knowledge, skills and attitudes to enable them to facilitate the provision of quality care. The learners should be assisted to create and maintain a nursing environment that fosters creativity, professional judgement and high morale.

By the end of the course the learners should be able to:

- apply the principles of management in running the nursing services,
- demonstrate appropriate communication skills in dealing with clients and health workers,
- apply the principles of sociology in the nursing care of patients such as respecting the culture and values of individuals,
- apply the principles of psychology in the nursing care of patients such as reinforcing good behaviour by giving rewards,
- apply the principles of adult learning in the teaching of subordinates,
- demonstrate ability to appraise the performance of subordinates,
- conduct research studies in nursing practice.

Syllabus for the Diploma in Nursing Administration Course in for the Diploma in Nursing Administration Course in Zimbabwe

Part I: Subjects for First Paper

The major subject covered under part I of the syllabus is nursing administration. The topics covered under nursing administration include the general principles of administration and management skills applicable to hospitals and nursing services:

- organisation and planning in relation to hospital services, policy formation;
- personnel provision and policies, counselling and interviewing, education provisions;
- leadership in nursing, decision-making, use and delegation of authority;

- communication process, techniques, correspondence, public speaking, procedures relating to committees and meetings; interpersonal relationships;
- legal aspects, statutory bodies, legislation, medico-legal hazards;
- work procedure and controls within hospital services, problem solving, evaluation of administration procedures;
- public administration, including the structures of local and central government in Zimbabwe.

The professional aspects of nursing include the following:

- principles of professional practice;
- the history of nursing;
- the continuity of service from the hospital to the community;
- principles of nursing education;
- a general introduction to teaching methods and methodology;
- basic concepts of educational psychology and patterns of learning;
- role of the health team.

Part II: Subjects for Second Paper

Community health nursing is the major subject covered under part II of the syllabus.

The topics covered under community health nursing include the following:

- public health focusing on prevention and control of disease through health services;
- the organization and structure of health services in Zimbabwe;
- legislation related to health;
- referral systems;
- establishment of health facilities and health surveys to meet the needs of population groups;
- special clinics and services;
- role of voluntary agencies;
- specific aspects of community health care such as:
 - environmental health measures;
 - town planning;
 - promotion of mental health;
 - the aged;
 - the problem individual and family;
- maternal and child health and family planning;
- specialized nursing in the community; district, school and occupational health;
- health education: basic principles and concepts in preparation and presentation of health teaching;
- preventive and promotive health care from infancy to old age within the context of family health care.

Other topics which are covered in the second paper include the following:

- sociology, social anthropology and social pathology;
- psychology: human development, normal behavioural patterns and psychopathology;
- statistics: epidemiology and vital statistics; collection, use, interpretation and presentation of data;
- factors affecting the psychological, social and physical well-being of the individual;
- microbiology: prevention and control of infection, bacterial pathogens, pathogenic viruses, and immunity;
- pharmacology: drug interactions, therapeutic and prophylactic uses;
- principles involved in emergency and life-saving procedures and use of related equipment.

Part III: Practical Experience

During the course the students gain practical experience under the supervision of qualified health personnel, and lay personnel approved by Council. The students gain experience in areas which contribute insight to and understanding of the administrative principles and procedures.

The students are attached to hospitals and primary care centres. The students also visit institutions which take care of children, the elderly, the handicapped including the deaf and the blind people. The students also visit industries which are involved in the manufacture of health related products.

The Course for the Diploma in Nursing Administration in South Africa: Training Regulations

Conditions for the Approval of Schools

A school shall be approved if a person who is registered both as a general nurse and as a midwife and against whose name an additional qualification in nursing education and an additional qualification in nursing administration is registered, is designated to the Council as the person in charge of the school. Facilities available for the course should be satisfactory to the council. Lecturers should hold qualifications approved by the Council. Notwithstanding the requirements prescribed in this regulation, the council may approve a school even if one or more of the conditions cannot be complied with.

Admission to the Course

A candidate shall submit to the person in charge of the school proof of current registration as a nurse and this registration shall be maintained throughout the prescribed course until the results of the examination are published, failing which the period of the course undergone from the date of removal from the register to the date of restoration, shall be forfeited. A senior certificate or equivalent qualification, unless the council determines otherwise should be submitted.

Duration of the Course

The course extends over at least 200 days excluding days off and should be completed within a period of two years, unless the Council determines otherwise. In the case of a transfer to another school, the course should be commenced de novo, unless the Council determines otherwise.

The Curriculum

The curriculum for the course consists of the following four subjects:

- the scientific foundations of the nursing administration process;

- the health care system in South Africa;
- fundamentals of nursing administration I;
- fundamentals of nursing administration II.

All subjects of the curriculum are taught at an applied level throughout the course. The following acts and regulations shall also be taught at an applied level throughout the course:

The law governing the practice of nursing and midwifery;

- the regulations regarding the conduct of registered nurses which shall constitute improper or disgraceful conduct;
- the conditions under which such nurses may carry on their calling;
- the regulation regarding the conduct of enrolled nurses which shall constitute improper or disgraceful conduct;
- the legislation applicable to the various aspects of the curriculum.

The social, cultural and psychological relationships in health care as well as the preventive, promotive, curative and rehabilitative aspects shall be emphasised in the teaching of students.

Lectures, Demonstrations and Practical

A student shall attend the lectures prescribed in the syllabus; throughout the prescribed period for the course, receive instruction and undergo practice in relation to institutional and extra-institutional services, extending over at least 90 periods of at least one hour each; such instruction and practice need not be continuous.

The Examination and Examination Marks

The examination shall consist of one three hour written paper in each of the subjects. Successful candidates shall be shown as having "passed" or "passed with honours". To pass, a candidate shall obtain at least 50 percent of the aggregate marks for each subject. To pass with honours, a candidate shall obtain at least 75 per cent in the aggregate of the four subjects. Candidates shall not be placed in order of merit and places shall not be disclosed, except in connection with a prize or award approved by the Council. Notwithstanding the conditions prescribed in this regulation, the council may, in its discretion, permit deviations therefrom.

Admission to the Examination

Candidates apply to the council in order to be admitted to the examination. A certificate from the person in charge of the school stating that the period prescribed for the course will be completed by the end of the month in which the examination is held is sent to Council. A candidate who does not take the examination within one year of the date of completion of the course, shall undergo such further training as the council may decide upon, before admission to the examination.

Readmission to the Examination

A candidate who fails shall re-enter within one year of the date of the examination in which the candidate was unsuccessful, failing which the candidate shall undergo such further instruction as the council may decide upon, before readmission. A candidate retains credit for any subject passed; provided that if the diploma is not obtained within three years of the commencement of the course, all credits lapse and the candidate shall enroll anew for the course. A candidate who fails in the examination at the second or at a subsequent attempt shall enroll for the course anew, unless the Council decides otherwise.

Dates of Examination, Applications for Admission and Readmission of Examination, and Examination Fees

The person in charge of a school shall notify the council forthwith giving reasons, if a candidate becomes ineligible for admission or readmission subsequent to the lodging of an application in terms of this regulation. The examination shall be held twice a year during May and November and applications for admission and readmission shall be lodged with the council on or before 7 March and 7 September of the relative year, respectively.

Examination fees for twenty-five rand per three hour paper shall be paid to the Council on application for admission or re-admission to the examination. An application lodged not more than seven days after such date, shall be accepted only on payment of an additional fee of fifteen rand. An application lodged more than seven days after such date, shall not be accepted. Examination fees shall be forfeited if an entry is cancelled or if a candidate is absent, unless the Council determines otherwise.

Examination centres shall be established at such places as the Council may determine. A candidate who has passed in the examination shall be issued with a certificate of registration of the additional qualification without the payment of a fee.

Programme ObjectivesObjectivesObjectivesObjectivesObjectives

The registered nurse with knowledge and skills in this specialised field must be able to:

- ❑ describe the provision, maintenance, development and management of nursing services
- ❑ define the position of the top nursing manager in the top management team in the health service
- ❑ define the function of the nurse in policy making at top management team level

- define the function of the nurse in planning: strategic management (top management) functional management (middle management) operational management (ward and unit management)
- describe the method of providing middle management supervision of the implementation of policy
- describe the historical development of administration
- compare, contrast and evaluate the theories of administration (including systems theory in the light of contemporary administrative practice)
- describe the principles of Public Administration
- describe the history and philosophy of nursing and how this interdigitates with the philosophy of the health care system
- describe the philosophy of health care in South Africa (this includes the concepts of comprehensive health care and the health care team)
- identify the components of the health care system and describe the function of the nurse within these components
- formulate a philosophy for the nursing service
- describe how the principles of sociology and psychology are applied in nursing management
- describe the application of the principles of administration/management in the running of the nursing service, whether this is in the public or private sector, institutional or in the community

- analyze the principles of communication (within the nursing service and with all other sections and services)
- describe how to compile structured factual reports supported by statistical information
- describe the principles involved in the provision of a safe and therapeutic environment for the care of patients
- describe the provision of skilled nursing care by means of the use of the scientific method of nursing (nursing process)
- analyze the functioning of a community liaison service to ensure the planned discharge of patients
- identify the methods of applying the relevant legal and statutory requirements in the administration of health care by all categories of health personnel who constitute "the health team".

Course Content for the Diploma in Nursing Administration Course in South Africa

The course content consists of subjects for four written papers and nursing administration practice. Subjects for each paper are covered over a minimum of ninety periods. A period of instruction extends over at least forty minutes.

Subjects for Paper I: The Scientific Foundations of the Nursing Administration Process

The subjects for Paper I are divided into six sections. Section one covers the following: moral and social dimensions of administration and management. General administrative and management theories: The components of the administrative process- the generic

processes which include policy-making, financing, organising, providing and utilising personnel, determining and improving work procedures and control. Systems theory. Analysis of the processes of: policy-making, financing, planning, programming and organising, personnel administration, work procedures, decision-making, co-ordination and control and the setting in motion of the management processes by the administrative process. The public administration system within the South African context. Management by objectives which includes financial management. Behavioural aspects in administration with emphasis on group dynamics and roles, leadership, norms, attitudes, social perception, social influence, conflict management and team work. Leadership counselling and communication theories.

Section two subjects include the following: sociological aspects of health care, the individual in the group, characteristics of the South African society, demographic aspects, vital statistics, social pathology, medical-sociological concepts, health professionals and their clients.

The subjects covered under section three include the following: the relevance of research to the administrative process and nursing care, elementary descriptive statistics, measurement, graphs, frequency, distributions, measures of central tendency, standard scores and introductory research methods.

Section four subjects include the following: the legal and ethical foundations of nursing administration, the laws and ethics affecting the provision of health care and control, the rights of the consumer of health care, and the rights and duties of health care personnel, and principles of professional practice.

The subjects covered under section five include the following: the scientific process in providing nursing care. The personal frame of reference, the nursing process, identifying nursing needs, the nursing diagnosis, planning of nursing care, nursing care plans, implementing nursing care plans, evaluating and records of nursing care.

Section six subjects include the following: historical and current nursing issues in the development of nursing and their effect on nursing administration; economic, cultural, social and political factors affecting nursing, impact of scientific change and consumer expectations and rights, role functions of nursing organisations, individual and collective responsibility, perspective for nursing administration, and concepts of professionalisation.

Subjects for Paper 2: The Health Care System in South Africa

The subjects for Paper 2 cover the health care system in South Africa and include the following topics: The historical development and the present pattern of South African health care system, including state, regional, local authority, self-governing states and private enterprise subsystems. Contemporary health issues, the health status profile of the South African community, including demographic aspects, morbidity and mortality profiles as basis for planning health care services. Health legislation and other legislation affecting the health status of the community.

The concept of a comprehensive health care system, the characteristics and mode of operation of each of the main components of the system, the levels of providing health care. Health planning and community development, human and financial resources, the significance of the composition of the nursing profession for the health planning and health care provision. Socio-economic implications of health care. The main aspects of health care dynamics. Epidemiological and other research into health care provision. Health support systems available in South Africa. Functions of health care facilities. Evaluation of health care services. Types of health care systems. World Health Organisation Alma Ata declarations. The role of the nurse in the health care system.

Health economics includes financing of the health care system, the tax payer's contribution to the state financing of aspects of health care. The contribution of the individual to medical aid insurance and private health care. Medical aid and medical benefit schemes, cost-benefit analysis. Economics of institutional and non-institutional health services. Economics of health manpower. Factors influencing the demand for

and supply of health services. Inter-relationship between health programmes and social and economic development of a community.

Subjects for Paper 3: Fundamentals of Nursing Administration I

The subjects for Paper 3 include the central focus of nursing administration and management. Other topics include the role of the nurse administrator in the health service in general, the community in particular in the profession of nursing and the nursing service. The professional preparation of the nurse administrator. The broad spectrum of functions of the nurse administrator in regard to the philosophy, processes, objectives, methods relating to the nursing services.

Balancing of society's needs for nursing, both quantitative and qualitative, with available resources of suitable manpower, materials and finances. The provision of guidelines in respect of the legal and ethical aspects of nursing care in the particular service. The provision of written plans of organisation of the nursing service to facilitate the development and attainment of the objectives of the nursing service department and of the nursing units in the service. The defining of projected roles and functions, areas of responsibility and accountability of the various grades and categories of nursing personnel in accordance with the needs of the particular service within the ambit of the relevant laws and ethics and laying down specific channels of communication.

Developing nursing department and nursing unit policies in respect of the planning, organising, staffing, directing, controlling and co-ordinating of the nursing service in the various units, approving modalities of care, and co-ordinating the activities of the nursing service with the rest of the activities of the hospital/health care service. Developing a master staffing plan to make optimal use of available personnel to ensure safe standards of care, personnel satisfaction and attainment of overall objectives. Developing and maintaining an environment that is conducive to safe patient care, personnel growth, sound communication and human relationship practices, and that will facilitate the functioning of the multi-disciplinary health team.

Establishing and maintaining a system of inter-disciplinary relationships with other categories of health personnel. Estimating the need for facilities, supplies, equipment and personnel for patient and other relevant services, and developing a system of collateral relationships to facilitate such services and exercising control over the utilisation of such services and supplies by the nursing services of the centre., Establishing and maintaining a system of records and reports and co-operation with such ancillary services as the computer services. Assessing and making available to the nursing service the benefits of modern advances in health care technology. Unit planning, organising, staffing, direction, control and co-ordination. Commissioning of new or redesigned and renovated health facilities. Inspection of hospital/health units. Planning, developing and implementing disaster programmes.

Subjects for Paper 4: Fundamentals of Nursing Administration II

Paper 4 is divided into two sections. Section one covers the broad spectrum of functions of the nurse administrator in regard to the philosophy, objectives, processes and methods in relation to: formulating, implementing and evaluating staff development programmes, personnel evaluation and merit-rating systems, interviewing and counselling systems. Formulating, implementing and evaluating quality control methods. Identifying and meeting personnel needs. Resolving problems and in general maintaining sound labour relations with special reference to behavioural, social, statutory and common law aspects. Occupational safety and worker's compensation. Working hours, working conditions and leave privileges. The process of salary and allowance determination. Pension and retirement benefits. Handling of grievances, rights and duties of employers and employees.

Section one also covers identification and handling of problems arising in the nursing services relating to: change, implementation of policies, maintenance of standards, personnel relationships, staff development issues, quality of recruits to the nursing service, excessive demands on the nursing service, attitudes of other health professionals, the community, the profession itself, the relationship of nursing education and nursing service, the development of new patterns of staffing and of utilisation of the

various grades and categories of nursing personnel. The preparing of the budget for nursing service. Establishing and maintaining a system for participation in the cost-control activities of the hospital/health service. Developing a system of research into the various aspects of nursing.

Section two covers the role and functions of the nurse administrator in respect of the nursing education process of basic, post-basic and continuing education levels with special reference to the following: understanding the fundamentals of basic, post-basic and continuing education. The nursing education system in South Africa. Establishing and maintaining a climate conducive to learning for all categories of nurses and other categories of health personnel. Establishing and maintaining a system of liaison with educational authorities, the Nursing Council, the health care authorities, the professional association, the community in respect of the education and the training of nurses and midwives at basic and post-basic levels.

Nursing Administration Practice

Nursing administration practice is conducted over a minimum of ninety hours. A nursing administration practicum enables the student to obtain first-hand knowledge of the nursing administration process in a hospital and a community health service situation. The student prepares a study on some aspect of nursing administration. The student also prepares a memoranda and a work book, analysing the role and functions of the nurse administrator in an institutional and a non-institutional setting.

Conclusion

A number of similarities were noted in the Diploma in Nursing Administration course in Zimbabwe and South Africa. Similarities exist in course content. The training period of at least two hundred days excluding days off is identical in both countries. The similarities are due to the fact that the nucleus of nurse administrators who contributed to the planning of the course in Zimbabwe were trained in South Africa. Whilst South Africa has a number of training centres for the course, Zimbabwe only has one training centre which is not able to train all the interested registered nurses. The

opening of more training centres will require adequate reference materials, teaching aids, classroom space and course facilitators with qualifications approved by the Health Professions Council of Zimbabwe.

APPENDIX 2

FOR OFFICE USE ONLY

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QUESTIONNAIRE FOR RESPONDENTS WHO HAVE COMPLETED THE COURSE FOR THE DIPLOMA IN NURSING ADMINISTRATION [DNA] IN ZIMBABWE

Purpose of the study

The purpose of the study is to evaluate the course for the Diploma in Nursing Administration in Zimbabwe with a view to identifying shortfalls within the course and making recommendations for necessary changes in the curriculum.

Undertaking

Confidentiality in relation to information provided will be maintained. Anonymity of the respondents is ensured as you are not required to provide your name on the questionnaire.

Instructions

- Please answer all the questions.
- Please place an X in the appropriate space, or provide the information requested. e.g.

X

- Please feel free to be as honest, objective and frank as possible when responding to the questions.
- Please return the questionnaire by using the enclosed stamped and addressed envelope at your earliest convenience (but before if at all possible).

The questionnaire takes about 30 minutes to complete. Your participation is greatly appreciated.

QUESTIONNAIRE FOR RESPONDENTS WHO HAVE COMPLETED THE COURSE FOR THE DIPLOMA IN NURSING ADMINISTRATION [DNA]

Please answer the questions by either placing an X in the appropriate space, or by providing the information requested.

SECTION A: PERSONAL AND PROFESSIONAL INFORMATION

1. Please indicate your age.

2. Please indicate the number of years you served as a qualified nurse before undergoing the DNA course.

3. Which year did you complete the DNA course? 1 9

4. Please indicate your professional qualifications before you commenced the DNA course.

Registered General Nurse	<input type="text"/> 1	Operating Theatre Nursing Diploma	<input type="text"/> 5
State Certified Midwife	<input type="text"/> 2	Nurse Anaesthetist Diploma	<input type="text"/> 6
Registered Psychiatric Nurse	<input type="text"/> 3	Community Nursing Diploma	<input type="text"/> 7
Intensive Care Nursing Diploma	<input type="text"/> 4	Other, specify	<input type="text"/> 8
		
		
		

5. Please indicate if you obtained any of the following additional qualifications after completing the DNA course.

Bachelor's Degree	<input type="text" value="1"/>	;	Doctoral Degree	<input type="text" value="3"/>
Master's Degree	<input type="text" value="2"/>	;	None	<input type="text" value="4"/>
			Other, specify	<input type="text" value="5"/>
.....				

6. What was the title of the position which you held before commencing the DNA course?

Senior Sister	<input type="text" value="1"/>	;	Clinical Instructor	<input type="text" value="3"/>	;	Other, specify	<input type="text" value="5"/>
Sister-in-Charge	<input type="text" value="2"/>	;	Matron	<input type="text" value="4"/>	;	

7. What is the title of your present position?

Senior Sister	<input type="text" value="1"/>	;	Clinical Instructor	<input type="text" value="3"/>	;	Other, specify	<input type="text" value="5"/>
Sister-in-Charge	<input type="text" value="2"/>	;	Matron	<input type="text" value="4"/>	;	

8. Please indicate the number of years you have been in your present position.

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9. Please indicate the classification of your current place of work.

Central Hospital	<input type="text" value="1"/>	Mission Hospital	<input type="text" value="5"/>
Provincial Hospital	<input type="text" value="2"/>	Private Hospital	<input type="text" value="6"/>
General Hospital	<input type="text" value="3"/>	Other, specify	<input type="text" value="7"/>
District Hospital	<input type="text" value="4"/>	

10. Please indicate the department you are currently working in.

Clinical Ward	<input type="text" value="1"/>	Operating Theatre	<input type="text" value="5"/>
Casualty Department	<input type="text" value="2"/>	Administration Department	<input type="text" value="6"/>
Outpatient's Department	<input type="text" value="3"/>	School of Nursing	<input type="text" value="7"/>
Intensive Care Unit	<input type="text" value="4"/>	Other, specify	<input type="text" value="8"/>
		

SECTION B: CONTENT

11. The following topics are taught in the DNA course. What is your opinion of the topics with regard to their relevance in your current position?

Topics	Irrelevant	Minimally relevant	Relevant	Very relevant
11.1	Fayol's principles of management			
11.2	Generic principles of administration			
11.3	Management of human resources			
11.4	Management of equipment			
11.5	Public administration			
11.6	Nursing ethics			
11.7	Principles of adult learning			
11.8	Methods of teaching adults			
11.9	Role of the community nurse			
11.10	Primary health care			
11.11	Human growth and development of children under five years			
11.12	Occupational health			
11.13	Public health			
11.14	Conducting nursing research			
11.15	Basic principles of good nutrition			
11.16	Nutritional disorders			
11.17	Zimbabwe's expanded programme on immunization			
11.18	Family planning			
11.19	Principles of health education			
11.20	Descriptive statistics			
11.21	Infectious diseases in Zimbabwe			
11.22	Psychology applied to nursing			
11.23	Management of psychotic disorders			
11.24	Management of neurotic disorders			

Topics		Irrelevant	Minimally relevant	Relevant	Very relevant
11.25	Sociology of medicine				
11.26	Bacterial pathogens				
11.27	Pathogenic viruses				
11.28	Rational use of drugs				
11.29	Drugs acting on systems of the body				

12. Please indicate the relevance of the following field experience to your current position.

Field Experience		Irrelevant	Minimally relevant	Relevant	Very relevant
12.1	Hospital secondment				
12.2	Provincial health services secondment				
12.3	Visits to children's homes				
12.4	Visits to schools for the deaf				
12.5	Visits to institutions for the disabled				
12.6	Visits to old people's homes				
12.7	Visits to industrial sites				
12.8	Other relevant field experience, specify				

13. If the following aspects were to be included in the DNA course content, how relevant would you rate them considering your current position?

Aspects	Irrelevant	Minimally relevant	Relevant	Very relevant
13.1 Negotiation skills to solve disagreements regarding service conditions between unions and hospital management.				
13.2 Management of health finances				
13.3 Health sector reforms such as decentralization				
13.4 Patient/client rights				
13.5 Health care personnel rights				
13.6 Computer literacy				
13.7 Health assessment in diagnosis of patient's illness				
13.8 Specify other topics you think should be included.				

SECTION C: INPUT

14. Please indicate whether the following resources were adequately provided or not during the DNA course.

Resources		Totally inadequate	Inadequate	Adequate	More than adequate	Much more than adequate
14.1	Number of nurse tutors					
14.2	Textbooks in the school library					
14.3	Journals in the school library					
14.4	Classroom space for number of students					
14.5	Please comment on the above mentioned aspects and any other type of resources you may feel are important.					

SECTION D: PROCESS

15. Please indicate your personal view or experience on the following aspects of the DNA course.

Aspects		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
15.1	Generally the course content was relevant to my current position.					
15.2	The course content was well organised.					
15.3	The course content was delivered at an appropriate level of student knowledge.					
15.4	My personal learning objectives were addressed.					
15.5	The classroom environment was conducive to learning					
15.6	The hospital environment for practical experience was conducive to learning.					
15.7	I was able to correlate theory with practice					
15.8	My academic work was assessed fairly by the facilitators					

In my opinion:

16. the time period allocated for different sections of the content in the course was:

Too short ; Adequate ; Too long

17. the one month hospital secondment in the course was:

Too short ; Adequate ; Too long

18. the three weeks provincial health services secondment in the course was:

Too short ; Adequate ; Too long

19. the total time allocated for the DNA course was:

Too short ; Adequate ; Too long

20. the workload in the DNA course was:

Too little ; Just right ; Too much

21. Did you face any of the following problems whilst you were on the DNA course?

	Yes	No
21.1 Getting adequate support from the tutors on difficult course content	<input type="text"/>	<input type="text"/>
21.2 Getting adequate practical guidance from supervisors In the clinical areas	<input type="text"/>	<input type="text"/>
21.3 Transport to the clinical areas	<input type="text"/>	<input type="text"/>

21.4 Additional comments:

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SECTION E: PRODUCT

22. To what extent were you prepared for your current position in the following aspects during your DNA training. Please indicate your response using the following scale:

1. Not at all
2. Insufficiently
3. Sufficiently
4. More than sufficiently
5. Much more than sufficiently

Topics	1	2	3	4	5
22.1 Patient care delivery systems					
22.2 Infection control practices in hospitals					
22.3 Effective communication strategies					
22.4 Publication relation strategies					
22.5 Labour relations					
22.6 Effective staffing strategies					
22.7 Recruitment strategies					
22.8 Retention strategies					
22.9 Dealing with disciplinary matters					
22.10 Counselling strategies					
22.11 Performance evaluation					
22.12 Staff development strategies					
22.13 Group processes/dynamics					
22.14 Interviewing techniques					
22.15 Team building strategies					
22.16 Nursing process					
22.17 Management by objectives					
22.18 Strategic planning					
22.19 Quality assurance in patient care.					
22.20 Legal issues in patient care					
22.21 Decision making in management					
22.22 Power and empowerment of staff					

Topics	1	2	3	4	5
22.23	Delegation of tasks				
22.24	Change process in general				
22.25	Conflict resolution principles				
22.26	Problem solving principles				
22.27	Stress management among nursing personnel				
22.28	Conducting nursing research				
22.29	Motivation strategies for personnel management				
22.30	Organisation of a unit's workload				
22.31	Formulation of policies and procedures of patient care				
22.32	Staff education through in-service training				
22.33	Time management by the manager				
22.34	Interdisciplinary coordination in health care				
22.35	Disaster relief planning in hospitals				
22.36	Cost containment in health care				
22.37	Budget forecasting in health care				
22.38	Cost benefit analysis in health care				
22.39	Unit budgetary control measures in hospitals				
22.40	Procurement of financial resources for the hospital				
22.41	Monitoring of financial resources in individual units				
22.42	Specify other topics				

23. Please indicate the extent to which you think you achieved the following aims of the DNA course. Use the following rating scale.

1. Not achieved
2. Uncertain
3. Partially achieved
4. Achieved
5. Well achieved

Aims	1	2	3	4	5
23.1	Apply the principles of management in running the nursing services.				
23.2	Demonstrate appropriate communication skills in dealing with clients and health care workers.				
23.3	Apply the principles of sociology in the nursing care of patients (e.g. respecting the culture and values of individuals).				

Aims		1	2	3	4	5
23.4	Apply the principles of psychology in nursing care of patients (e.g. reinforcing good behaviour by giving rewards).					
23.5	Apply the principles of adult learning in the teaching of subordinates.					
23.6	Demonstrate ability to appraise the performance of subordinates.					
23.7	Conduct research studies in nursing practice.					

24. In implementing the aspects/content you learnt during the DNA course, please indicate your experience using the following rating scale.

1. Totally inadequate
2. Inadequate
3. Adequate
4. More than adequate
5. Much more than adequate

Aspects		1	2	3	4	5
24.1	The manpower to implement procedures such as the nursing process is					
24.2	The availability of equipment to carry out procedures is					
24.3	The support received from supervisors is					
24.4	The support received from colleagues is					
24.5	The time to conduct nursing research studies is					
24.6	Situations in which the new knowledge and skills could be identified and applied is					
24.7	Additional comments: 					

25. Since completion of your DNA course, did you still require additional assistance from your supervisors on the following aspects:

	Yes	No
25.1 Planning and organising work	<input type="checkbox"/>	<input type="checkbox"/>
25.2 Delegation of duties	<input type="checkbox"/>	<input type="checkbox"/>
25.3 Communication skills	<input type="checkbox"/>	<input type="checkbox"/>
25.4 Skills in maintaining good interpersonal relationships	<input type="checkbox"/>	<input type="checkbox"/>
25.5 Teaching of subordinates	<input type="checkbox"/>	<input type="checkbox"/>
25.6 Performance appraisal of subordinates	<input type="checkbox"/>	<input type="checkbox"/>
25.7 Other, specify		
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26. Are you currently pursuing any of the following professional courses?

	Yes	No
26.1 Bachelor's Degree	<input type="checkbox"/>	<input type="checkbox"/>
26.2 Master's Degree	<input type="checkbox"/>	<input type="checkbox"/>
26.3 Doctoral Degree	<input type="checkbox"/>	<input type="checkbox"/>
26.4 Other, specify		
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27. Do you intend to pursue any of the following additional professional courses in future?

Yes No

27.1 Bachelor's Degree

<input type="checkbox"/>	<input type="checkbox"/>
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27.2 Master's Degree

<input type="checkbox"/>	<input type="checkbox"/>
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27.3 Doctoral Degree

<input type="checkbox"/>	<input type="checkbox"/>
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27.4 Other, specify

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28. Please make any suggestions to improve the training of nurses in the DNA course.

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Thank you for your time and input

APPENDIX 3

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**INTERVIEW SCHEDULE FOR NURSE TUTORS INVOLVED
IN TEACHING STUDENTS IN THE COURSE FOR THE
DIPLOMA IN NURSING ADMINISTRATION (DNA)**

SECTION A: PERSONAL AND PROFESSIONAL INFORMATION

1. Please indicate your age.

2. Please indicate your professional qualifications.

Registered General Nurse	<input style="width: 30px; height: 30px; border: 1px solid black;" type="text"/>	Diploma in Nursing Education	<input style="width: 30px; height: 30px; border: 1px solid black;" type="text"/>
State Certified Midwife	<input style="width: 30px; height: 30px; border: 1px solid black;" type="text"/>	Bachelor's Degree	<input style="width: 30px; height: 30px; border: 1px solid black;" type="text"/>
Registered Psychiatric Nurse	<input style="width: 30px; height: 30px; border: 1px solid black;" type="text"/>	Master's Degree	<input style="width: 30px; height: 30px; border: 1px solid black;" type="text"/>
Diploma in Community Nursing	<input style="width: 30px; height: 30px; border: 1px solid black;" type="text"/>	Other, specify	<input style="width: 30px; height: 30px; border: 1px solid black;" type="text"/>
		
		
		

3. If you are currently teaching in the Post Basic School of Nursing, what is your designation?

Tutor ; Senior Tutor ; Principal Tutor

4. If you have left the Post Basic School of Nursing, what was your designation when you left the school?

Tutor ; Senior Tutor ; Principal Tutor

5. State the period of your employment in the Post Basic School of Nursing.

From to

6. For how many years have you been involved in teaching nurses as a tutor?

SECTION B: CONTENT

7. The following are aims of the DNA course. Please indicate the extent to which you feel these aims reflect the learning needs of the students.

Aims	Strongly agree	Disagree	Uncertain	Agree	Strongly agree
7.1 Apply the principles of management in running the nursing services.					
7.2 Demonstrate appropriate communication skills in dealing with clients and health care workers.					
7.3 Apply the principles of sociology in the nursing care of patients					
7.4 Apply the principles of psychology in the nursing care of patients					

Aims	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
7.5 Apply the principles of adult learning in the teaching of subordinates.					
7.6 Demonstrate ability to appraise the performance of subordinates.					
7.7 Conduct research studies in nursing practice.					

8. Are you clear on what is supposed to be taught in the DNA course?

Not clear ; Clear ; Very clear

9. Are learning objectives available for each section of content?

Not at all ; Sometimes ; Always

10. How relevant do you consider the following DNA course content to be for nurses who completed the course and are functioning in various positions in the health services?

Topics	Irrelevant	Minimally relevant	Relevant	Very relevant
10.1 Fayol's principles of management				
10.2 Generic principles of administration				
10.3 Management of human resources				
10.4 Management of equipment				
10.5 Public administration				
10.6 Nursing ethics				
10.7 Principles of adult learning				
10.8 Methods of teaching adults				

Topics		Irrelevant	Minimally relevant	Relevant	Very relevant
10.9	Role of the community nurse				
10.10	Primary health care				
10.11	Human growth and development of children under five years				
10.12	Occupational health				
10.13	Public health				
10.14	Conducting nursing research				
10.15	Basic principles of good nutrition				
10.16	Nutritional disorders				
10.17	Zimbabwe's expanded programme on immunization				
10.18	Family planning				
10.19	Principles of health education				
10.20	Descriptive statistics				
10.21	Infectious diseases in Zimbabwe				
10.22	Psychology applied to nursing				
10.23	Management of psychotic disorders				
10.24	Management of neurotic disorders				
10.25	Sociology of medicine				
10.26	Bacterial pathogens				
10.27	Pathogenic viruses				
10.28	Rational use of drugs				
10.29	Drugs acting on systems of the body				

11. If the following aspects were to be included in the DNA course content, would they be relevant to the learning needs of the students?

Aspects		Irrelevant	Minimally relevant	Relevant	Very relevant
11.1	Negotiation skills to solve disagreements regarding service conditions between unions and hospital management.				
11.2	Management of health finances				
11.3	Health sector reforms such as decentralization				
11.4	Patient/client rights				
11.5	Health care personnel rights				
11.6	Computer literacy				
11.7	Health assessment in diagnosis of patient's illness				
11.8	Specify other topics you think should be included.				

12. Please indicate the relevance of the following field experiences to the learning needs of the students.

Field Experience		Irrelevant	Minimally relevant	Relevant	Very relevant
12.1	Hospital secondment				
12.2	Provincial health services secondment				
12.3	Visits to children's homes				
12.4	Visits to schools for the deaf				
12.5	Visits to institutions for the disabled				
12.6	Visits to old people's homes				
12.7	Visits to industrial sites				

12.8 Other relevant field experience that should be included.

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SECTION C: INPUT

13. Please indicate your view regarding the adequacy of the following resources during the DNA course.

Resources		Totally inadequate	Inadequate	Adequate	More than adequate	Much more than adequate
13.1	Number of nurse tutors					
13.2	Textbooks in the school library					
13.3	Journals in the school library					
13.4	Classroom space for number of students					
13.5	Audio visual aids					
13.6	Telephone lines in tutor's offices					
13.7	Transport to follow-up students on field secondment					
13.8	Please comment on the above mentioned aspects and any other type of resources you may feel are important.					
					
					

SECTION D: PROCESS

14. Please indicate your personal view or experience on the following aspects of the DNA course.

Aspects		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
14.1	Generally the course content was relevant to participants					
14.2	The course content is well organised.					
14.3	The course content is delivered at an appropriate level of student knowledge.					
14.4	The student's learning objectives are addressed.					
14.5	The classroom environment is conducive to learning					
14.6	The hospital environment for practical experience is conducive to learning.					
14.7	The academic work of students is assessed fairly by facilitators					
14.8	The course allows for correlation of theory with practice.					
14.9	I am able to give the students as much support as necessary in relation to their course.					

Aspects		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
14.10	There are adequate opportunities for the development of nurse tutors					

In your opinion:

15. the time allocated for each period in the DNA course is:

Too short ; Adequate ; Too long

16. the one month hospital secondment in the DNA course is:

To short ; Adequate ; Too long ; Don't know

17. the three weeks' provincial health services secondment in the DNA course is:

Too short ; Adequate ; Too long ; Don't know

18. the time allocated for the DNA course is in general:

Too short ; Adequate ; Too long

19. the workload of students in the DNA course is:

Too little ; Just right ; Too much

20. your own workload is:

Too little ; Just right ; Too much

21. Please indicate the frequency with which you use the following teaching strategies to teach students in the DNA course.

Rarely refer to at least once a month and often refers to at least once a week.

Teaching strategies		Never	Rarely	Often	Always
21.1	Lecture				
21.2	Group discussion				
21.3	Lecture/Discussion				
21.4	Demonstration				
21.5	Role play				
21.6	Assignments				
21.7	Tutorials				
21.8	Other, specify				

22. Please indicate the frequency with which you use the following teaching aids to teach students in the DNA course.

Rarely refers to at least once a month and often refers to at least once a week.

Teaching aids		Never	Rarely	Often	Always
22.1	Chalkboard				
22.2	Overhead projector				
22.3	Film slides				
22.4	Film projector				
22.5	Video tapes				
22.6	Flip charts				
22.7	Charts				
22.8	Models				
22.9	Other, specify				

SECTION E: PRODUCT

23. Please indicate in general the extent to which you think the following aims of the DNA course are achieved by the participants. Use the following rating scale.

1. Not achieved
2. Uncertain
3. Partially achieved
4. Achieved
5. Well achieved

Aims	1	2	3	4	5
23.1 Apply the principles of management in running the nursing services.					
23.2 Demonstrate appropriate communication skills in dealing with clients and health care workers.					
23.3 Apply the principles of sociology in the nursing care of patients.					
23.4 Apply the principles of psychology in the nursing care of patients					
23.5 Apply the principles of adult learning in the teaching of subordinates.					
23.6 Demonstrate ability to appraise the performance of subordinates.					
23.7 Conduct research studies in nursing practice					

24. Please indicate in general the extent to which you are satisfied by the general performance of graduands produced in the DNA course.

Very dissatisfied ; Satisfied

Dissatisfied ; Very satisfied

25. Please indicate in general the extent to which you think the DNA course prepares the participants to function at their workplaces on completion of the course.

Very inadequately prepared ; Adequately prepared

Inadequately prepared ; Very well prepared

26. Please suggest any ways of improving the content of the DNA course so as to improve the general performance of the graduands.

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INTERVIEW SCHEDULE FOR GUEST LECTURERS INVOLVED IN TEACHING STUDENTS IN THE COURSE FOR THE DIPLOMA IN NURSING ADMINISTRATION (DNA)

SECTION A: PERSONAL AND PROFESSIONAL INFORMATION

1. Please indicate your highest professional qualifications.

Diploma	<input type="text" value="1"/>	;	Doctoral Degree	<input type="text" value="4"/>
Bachelor's Degree	<input type="text" value="2"/>	;	Other, specify	<input type="text" value="5"/>
Master's Degree	<input type="text" value="3"/>	;	

2. Please indicate the title of your present post.

Lecturer	<input type="text" value="1"/>	;	Principal Lecturer	<input type="text" value="4"/>
Senior Lecturer	<input type="text" value="2"/>	;	Other, specify	<input type="text" value="5"/>
			

3. Please indicate where you are currently employed.

Ministry of Health	<input type="text" value="1"/>	;	Private Sector	<input type="text" value="4"/>
Ministry of Public Service	<input type="text" value="2"/>	;	Other, specify	<input type="text" value="5"/>
University of Zimbabwe	<input type="text" value="3"/>	;	

4. Please indicate the subject which you teach at the Post Basic School of Nursing

Pharmacology	<input type="text" value="1"/>	Nutrition	<input type="text" value="7"/>
Microbiology	<input type="text" value="2"/>	Public Administration	<input type="text" value="8"/>
Sociology	<input type="text" value="3"/>	Statistics	<input type="text" value="9"/>
Psychology	<input type="text" value="4"/>	Zimbabwe's Expanded Programme on Immunization	<input type="text" value="10"/>
Psychiatry	<input type="text" value="5"/>	Family Planning	<input type="text" value="11"/>
Health Education	<input type="text" value="6"/>	Planning and designing health facilities	<input type="text" value="12"/>
		Other, specify	<input type="text" value="13"/>
		

5. Please indicate the number of years you have been teaching at the Post Basic School of Nursing.

<input type="text"/>	<input type="text"/>
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SECTION B: INPUT

6. Please indicate your view on the adequacy of the following resources in the Post Basic School of Nursing.

Resources		Totally inadequate	Inadequate	Adequate	More than adequate	Much more than adequate
6.1	Classroom space for the number of students					
6.2	Audio-visual aids					
6.3	Please comment on any other relevant resources.					

SECTION C: PROCESS

7. Please indicate your personal view or experience on the following aspects of the DNA course.

Aspects		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
7.1	Generally the course content I teach is relevant to the participants.					
7.2	I deliver the course content at an appropriate level of student knowledge.					
7.3	I address the student's learning objectives/needs.					
7.4	The classroom environment is conducive to learning.					
7.5	I am able to give students as much support as they need in the time allocated for the subject I teach.					
7.6	I am clear on what I am supposed to teach.					

8. The time allocated for each period in the DNA course is:

Too short ; Adequate ; Too long

9. The total number of hours allocated to the subject you teach is:

Too short ; Adequate ; Too long

10. Please indicate the frequency with which you use the following teaching strategies to teach students in the DNA course.

Rarely refers to at least once a month and often refers to at least once a week.

Teaching strategies		Never	Rarely	Often	Always
10.1	Lecture				
10.2	Group discussion				
10.3	Lecture/Discussion				
10.4	Demonstration				
10.5	Role play				
10.6	Assignments				
10.7	Tutorials				
10.8	Other, specify				

11. Please indicate the frequency with which you use the following teaching aids to teach students in the DNA course.

Rarely refers to at least once a month and often refers to at least once a week.

Teaching Aids		Never	Rarely	Often	Always
11.1	Chalkboard				
11.2	Overhead projector				
11.3	Film slides				
11.4	Film projector				
11.5	Video tapes				
11.6	Flip charts				
11.7	Charts				
11.8	Models				
11.9	Other, specify				

12. Please indicate if you face any of the following problems in relation to teaching students in the DNA course.

12.1 Overload of work at the work place resulting in postponing lessons for DNA students. Yes No

12.2 Time to mark tests and assignments for DNA students. Yes No

Other, please specify

13. Please suggest any ways of improving the teaching of the subject which you offer to the students in the DNA course.

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APPENDIX 5

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INTERVIEW SCHEDULE FOR RESPONDENTS WHO SUPERVISE NURSES WHO COMPLETED THE COURSE FOR THE DIPLOMA IN NURSING ADMINISTRATION

SECTION A: PERSONAL AND PROFESSIONAL INFORMATION

1. Please indicate your professional qualifications.

Registered General Nurse	<input style="width: 30px; height: 20px;" type="text" value="1"/>	Diploma in Nursing Administration	<input style="width: 30px; height: 20px;" type="text" value="5"/>
State Certified Midwife	<input style="width: 30px; height: 20px;" type="text" value="2"/>	Bachelor's Degree	<input style="width: 30px; height: 20px;" type="text" value="6"/>
Registered Psychiatric Nurse	<input style="width: 30px; height: 20px;" type="text" value="3"/>	Master's Degree	<input style="width: 30px; height: 20px;" type="text" value="7"/>
Diploma in Community Nursing	<input style="width: 30px; height: 20px;" type="text" value="4"/>	Other, specify	<input style="width: 30px; height: 20px;" type="text" value="8"/>
		
		

2. What is the title of your present post?

Matron Grade 3	<input style="width: 30px; height: 20px;" type="text" value="1"/>	;	Principal Nursing Officer	<input style="width: 30px; height: 20px;" type="text" value="4"/>
Matron Grade 2	<input style="width: 30px; height: 20px;" type="text" value="2"/>	;	Other, specify	<input style="width: 30px; height: 20px;" type="text" value="5"/>
Principal Matron	<input style="width: 30px; height: 20px;" type="text" value="3"/>	;	

3. How many years have you been in your present post?

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4. Please indicate your place of work.

General Hospital	<input type="text" value="1"/>	;	Central Hospital	<input type="text" value="4"/>
Provincial Hospital	<input type="text" value="2"/>	;	Other, specify	<input type="text" value="5"/>
Provincial Headquarters	<input type="text" value="3"/>	;	

5. Please indicate the department you are currently working in.

General wards	<input type="text" value="1"/>	;	Operating theatre department	<input type="text" value="4"/>
Casualty department	<input type="text" value="2"/>	;	Administration department	<input type="text" value="5"/>
Outpatient's department	<input type="text" value="3"/>	;	Other, specify	<input type="text" value="6"/>
			

SECTION B: CONTEXT

6. How relevant do you consider the following DNA course content to be for nurses who completed the course and are functioning in various positions in the health services.

Topics	Irrelevant	Minimally relevant	Relevant	Very relevant
6.1 Fayol's principles of management				
6.2 Generic principles of administration				
6.3 Management of human resources				
6.4 Management of equipment				
6.5 Public administration				
6.6 Nursing ethics				
6.7 Principles of adult learning				
6.8 Methods of teaching adults				
6.9 Role of the community nurse				

Topics		Irrelevant	Minimally relevant	Relevant	Very relevant
6.10	Primary health care				
6.11	Human growth and development of children under five years				
6.12	Occupational health				
6.13	Public health				
6.14	Conducting nursing research				
6.15	Basic principles of good nutrition				
6.16	Nutritional disorders				
6.17	Zimbabwe's expanded programme on immunization				
6.18	Family planning				
6.19	Principles of health education				
6.20	Descriptive statistics				
6.21	Infectious diseases in Zimbabwe				
6.22	Psychology applied to nursing				
6.23	Management of psychotic disorders				
6.24	Management of neurotic disorders				
6.25	Sociology of medicine				
6.26	Bacterial pathogens				
6.27	Pathogenic viruses				
6.28	Rational use of drugs				
6.29	Drugs acting on systems of the body				

7. If the following aspects were to be included in the DNA course content, would they be relevant to the learning needs of the students?

Aspects		Irrelevant	Minimally relevant	Relevant	Very relevant
7.1	Negotiation skills to solve disagreements regarding service conditions between unions and hospital management.				
7.2	Management of health finances				

Aspects		Irrelevant	Minimally relevant	Relevant	Very relevant
7.3	Health sector reforms such as decentralization				
7.4	Patient/client rights				
7.5	Health care personnel rights				
7.6	Computer literacy				
7.7	Health assessment in diagnosis of patient's illness				
7.8	Specify other topics you think should be included.				

8. Please indicate the relevance of the following field experiences to the learning needs of the students.

Field Experience		Irrelevant	Minimally relevant	Relevant	Very relevant
8.1	Hospital secondment				
8.2	Provincial health services secondment				
8.3	Visits to children's homes				
8.4	Visits to schools for the deaf				
8.5	Visits to institutions for the disabled				
8.6	Visits to old people's homes				
8.7	Visits to industrial sites				
8.8	Other relevant field experience that should be included				

SECTION C: PROCESS

Please answer questions under this section if you have supervised DNA students on practical secondment.

9. Please indicate your personal view or experience on the following aspects of the DNA course.

Aspects		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
9.1	During the hospital secondment the students' learning objectives are addressed.					
9.2	The hospital environment for practical experience is conducive to learning.					
9.3	The students are able to correlate theory with practice.					
9.4	I am able to give the students as much support as they need in relation to their secondment					

In your opinion:

10. one month hospital secondment in the DNA course is:

Too short ; Adequate ; Too long ; Don't know

11. three weeks provincial health services secondment in the DNA course is:

Too short ; Adequate ; Too long ; Don't know

12. Please indicate your view regarding the adequacy of the following issues when supervising DNA students.

Issues		Totally inadequate	Inadequate	Adequate	More than adequate	Much more than adequate
12.1	Time to supervise the students					
12.2	Learning opportunities to meet the objectives of the students during the secondment.					
12.3	Support from the nurse tutors					
12.4	Please comment on any other issues relating to supervising students.					
					
					
					
					

SECTION D: PRODUCT

13. Please indicate your view regarding the following aspects when nurses who completed the DNA course want to implement what they learnt. Use the following rating scale.

- 1. Totally inadequate
- 2. Inadequate
- 3. Adequate
- 4. More than adequate
- 5. Much more than adequate

Aspects		1	2	3	4	5
13.1	The manpower to implement procedures such as the nursing process is					
13.2	The availability of equipment to carry out procedures is					
13.3	The support received from the supervisors is					
13.4	The support received from colleagues is					
13.5	The time to conduct nursing research studies is					
13.6	Situations in which the new knowledge and skills could be identified and applied is					
13.7	Additional comments:					

14. Please indicate the frequency with which you have counselled the nurses who completed the DNA course on the following aspects.

Rarely refers to at least once a month, often at least once a week.

Aspects		Never	Rarely	Often	Always
14.1	Planning and organising their own work schedule				
14.2	Delegation of duties				
14.3	Communication skills				
14.4	Skills in maintaining good interpersonal relationships.				
14.5	Teaching of subordinates				
14.6	Performance appraisal of subordinates				
14.7	Other, specify				

15. Please indicate in general the extent to which you are satisfied by the general performance of graduands produced in the DNA course.

Very dissatisfied ; Satisfied

Dissatisfied ; Very satisfied

16. Please indicate in general the extent to which you think the DNA course prepares the participants to function at their workplaces on completion of the course.

Very inadequately prepared ; Adequately prepared

Inadequate prepared ; Very well prepared

17. Please suggest any ways of improving the general performance of the graduands produced in the DNA course.

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.....

Telephone 731918 or
794411 Ext 2493

Post Basic School of Nursing
Parirenyatwa Hospital
P.O. Box CY198
Causeway
HARARE

30 April 1997

The Secretary for Health and Child Welfare
Ministry of Health and Child Welfare
P.O. Box CY1122
Causeway
HARARE

ATTENTION: MRS C.R. MUFUKA-RINOMHOTA DIRECTOR NURSING SERVICES

RE: REQUEST FOR PERMISSION TO CONDUCT STUDY TITLED: AN EVALUATION
OF THE COURSE FOR THE DIPLOMA IN NURSING ADMINISTRATION IN
ZIMBABWE

I am requesting for permission to conduct a study titled: 'An Evaluation of the course for the Diploma in Nursing Administration in Zimbabwe.

The purpose of the study is to evaluate the course with a view to identifying any shortfalls within the course and making recommendations for any necessary changes in the curriculum.

The study will involve sending out questionnaires to people who completed the courses in all provinces throughout the country. Nurse teachers and guest lecturers who teach in the course will be interviewed. Supervisors of people who completed the course in various parts of the country will also be interviewed.

Many thanks in anticipation.

Yours sincerely



E. MAKONDO [Mr]
PRINCIPAL TUTOR

Telephone 731918 or
794411 Ext 2493

Post Basic School of Nursing
Parirenyatwa Hospital
P.O. Box CY198
Causeway
HARARE

30 April 1997

The Director of Health Services
City Health Department
P.O. Box 596
HARARE

ATTENTION: DR. O.L. MBENGERANWA

RE: REQUEST FOR PERMISSION TO PRETEST QUESTIONS FOR AN EVALUATION
OF THE DIPLOMA IN NURSING ADMINISTRATION COURSE

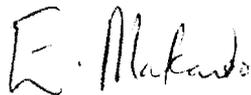
I am requesting for permission to pretest questions for an evaluation of the Diploma in Nursing Administration Course.

The pretesting of the questions is to be done on a few former students of the Post Basic School of Nursing and their immediate supervisors.

The purpose of the evaluation is to identify any shortfalls within the course and make any necessary changes in the curriculum.

Many thanks for your continued support.

Yours sincerely



E. MAKONDO [Mr]
PRINCIPAL TUTOR
for: SECRETARY FOR HEALTH AND CHILD WELFARE

Telephone No: 730011

Telegraphic Address:

MEDICUS, Harare

Fax: 729154/793634 (702293HP)

Telex: 22211 MEDICUS ZW



Reference:

**MINISTRY OF HEALTH
AND CHILD WELFARE
P O Box CY1122
CAUSEWAY
ZIMBABWE**

May 1997

Mr Makondo
Post-Basic School of Nursing
Parirenyatwa Hospital
P.O.Box CY 198
CAUSEWAY
HARARE

**REQUEST FOR PERMISSION TO CONDUCT STUDY ENTITLED: AN
EVALUATION OF THE COURSE FOR THE DIPLOMA IN NURSING
ADMINISTRATION IN ZIMBABWE:**

The Secretary for Health and Child Welfare has granted permission for you to carry out the above research. If this is for the doctoral studies you may need to gain permission from the Research Council.

We wish you every success in your endeavour and look forward to reading the results of your findings.

A handwritten signature in black ink, appearing to be 'P.A. McKenzie', written in a cursive style.

P.A. MCKENZIE
DEPUTY DIRECTOR: NURSING EDUCATION
FOR SECRETARY FOR HEALTH AND CHILD WELFARE



A/J/55

APPENDIX 9

CITY OF HARARE

Director of Health Services

All correspondence to be addressed to the
DIRECTOR OF HEALTH SERVICES

DIRECTOR OF HEALTH SERVICES

DR. O.L. MBENGERANWA
MB. Ch.B. (Birm) Dip Mid. C.O.&G.(SA)
Dip Ven.(Liv) M.Comm.H.(Liv) M.C.P.C.P.(Z)

Ref. No.1/6/4.....

Rowan Martin Building,
Civic Centre,
Pennefather Avenue,
off Rotten Row,
Harare, Zimbabwe.

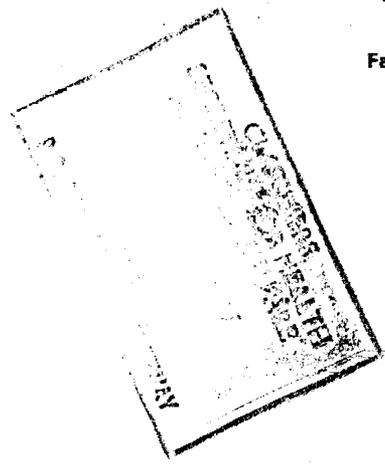
Your Ref.....

P.O. Box 596
Telephone 753326
753330/1/2

Fax: (263-4) 752093

6 May 1997

The Secretary for Health
Ministry of Health and Child Welfare
P O Box CY 1122
Causeway
HARARE



ATTENTION: MR E MAKONDO

Dear Sir

**RE: REQUEST FOR PERMISSION TO PRETEST QUESTIONS FOR AN EVALUATION OF THE
DIPLOMA IN NURSING ADMINISTRATION COURSE (DNA)**

Your request for the above is acknowledged.

Permission is granted for you to pretest the questions for the evaluation of the Diploma in Nursing Administration Course.

For further details please liaise with Assistant Director of Health Services (Nursing).

Yours faithfully

DIRECTOR OF HEALTH SERVICES
PM/gm
7M

Telephone 731918 or
794411 Ext 2493

Post Basic School of Nursing
Parirenyatwa Hospital
P.O. Box CY198
Causeway
HARARE

28 May 1997

The Secretary
Medical Research Council of Zimbabwe
P.O. Box CY573
Causeway
HARARE

ATTENTION: DR. CHANDIWANA

RE: APPLICATION FOR REGISTRATION TO CONDUCT RESEARCH

Please find enclosed a research proposal titled, 'An evaluation of the course for the Diploma in Nursing Administration in Zimbabwe,' for review by the Medical Research Council of Zimbabwe.

Many thanks in anticipation.

Yours sincerely



E. MAKONDO [Mr]
PRINCIPAL TUTOR

Telephone 731918 or
794411 Ext 2493

Post Basic School of Nursing
Parirenyatwa Hospital
P.O. Box CY198
Causeway
HARARE

29 May 1997

The Medical Superintendent
Parirenyatwa Hospital
P.O. Box CY198
Causeway
HARARE

ATTENTION: DR C.P. MADZIWA

RE: REQUEST FOR PERMISSION TO CONDUCT A STUDY TITLED 'AN
EVALUATION OF THE COURSE FOR THE DIPLOMA IN NURSING
ADMINISTRATION IN ZIMBABWE'

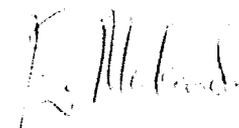
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The purpose of the study is to evaluate the course with a view to identifying any shortfalls within the course and making recommendations for any necessary changes in the curriculum.

The study will involve sending out questionnaires to people who completed the course. Nurse teachers and guest lecturers who teach in the course will be interviewed. Supervisors of people who completed the course will also be interviewed.

Many thanks in anticipation.

Your sincerely



E. MAKONDO [Mr]
PRINCIPAL TUTOR

Telephone 731918 or
794411 Ext 2493

Post Basic School of Nursing
Parirenyatwa Hospital
P.O. Box CY198
Causeway
HARARE

11 December 1997

The Medical Superintendent

.. All Central Hospitals ..
.....
.....

**RE: REQUEST FOR PERMISSION TO COLLECT DATA FOR A STUDY TITLED 'AN
EVALUATION OF THE COURSE FOR THE DIPLOMA IN NURSING
ADMINISTRATION IN ZIMBABWE**

The current training regulations and syllabus of the Diploma in Nursing Administration Course have never been reviewed since they were gazetted in 1978.

I am requesting for permission to collect data in areas under your supervision for a study titled, 'An evaluation of the course for the Diploma in Nursing Administration in Zimbabwe'.

The study is involving institutions throughout the country. Questionnaires will be sent out to people who completed the course. Supervisors of people who completed the course will be interviewed. People who teach on the course will also be interviewed.

The results of the study will be used to make any necessary changes in the curriculum of the Diploma in Nursing Administration Course.

Many thanks in anticipation.

Yours sincerely



**E. MAKONDO [Mr]
PRINCIPAL TUTOR**

Telephone 731918 or
794411 Ext 2493

Post Basic School of Nursing
Parirenyatwa Hospital
P.O. Box CY198
Causeway
HARARE

11 December 1997

The Provincial Medical Director

.. All Provinces ..
.....
.....

RE: REQUEST FOR PERMISSION TO COLLECT DATA FOR A STUDY TITLED 'AN EVALUATION OF THE COURSE FOR THE DIPLOMA IN NURSING ADMINISTRATION IN ZIMBABWE'

The current training regulations and syllabus of the Diploma in Nursing Administration Course have never been reviewed since they were gazetted in 1978.

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The study is involving institutions throughout the country. Questionnaires will be sent out to people who completed the course. Supervisors of people who completed the course will be interviewed. People who teach on the course will also be interviewed.

The results of the study will be used to make any necessary changes in the curriculum of the Diploma in Nursing Administration Course.

Many thanks in anticipation.

Yours sincerely



**E. MAKONDO [Mr]
PRINCIPAL TUTOR**

All correspondence to be addressed to
"THE MEDICAL SUPERINTENDENT"
 Telephone: 170-24001/7
 FAX: 170-22668
 E-Mail



Your Ref.:
 Our Ref.:

**MINISTRY OF HEALTH AND CHILD
 WELFARE**
MEDICAL SUPERINTENDENT
CHITUNGWIZA HOSPITAL
 P.O. Box 61
 Zengeza

19 December 1997

Post Basic Sch. of Nursing
 Parirenyatwa Hospital
 P O Box CY 198
Causeway
Harare

Dear Sir

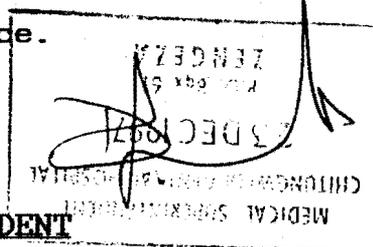
Re: REQUEST FOR PERMISSION TO COLLECT DATA FOR A STUDY TITLED
"AN EVALUATION OF THE COURSE FOR THE DIPLOMA IN NURSING
ADMINISTRATION IN ZIMBABWE"

I refer to your letter dated 11 December 1997 in respect to the above.

Permission has been granted for you to collect data for the above mentioned study.

Thank you in advance.

Dr D D Chifamba
MEDICAL SUPERINTENDENT



DDC/cc

Ref : TRAINING

OFFICE OF THE PROVINCIAL
MEDICAL DIRECTOR, MIDLANDS
P O BOX 206
GWERU

19 December 1997

The Principal Tutor
Post Basic School of Nursing
P O Box CY 198
Causeway

**RE : PERMISSION TO COLLECT DATA FOR A STUDY ON THE EVALUATION OF
THE COURSE FOR THE DIPLOMA IN NURSING ADMINISTRATION IN ZIMBABWE**

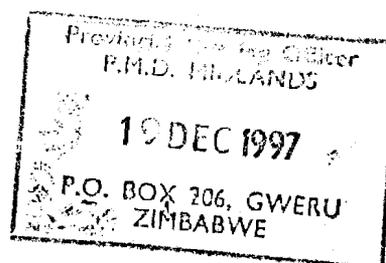
Your communication dated 11/12/97 refers.

Permission is granted for you to collect the data you need for the above study.

We look forward to receiving a copy of the results and also to a change of the curriculum to suit current trends in Nursing Administration.



S.C. Zvavamwe
PROVINCIAL NURSING OFFICER
for : PROVINCIAL MEDICAL DIRECTOR (MIDLANDS)



/sm

Telephone: 23211/2/3/4/5/6

Telegraphic Address:
"PROVMED", Chinhoyi
Fax: 23218



Reference:

PROVINCIAL MEDICAL DIRECTOR
(Mashonaland West)
P.O. Box 139
Chinhoyi
Zimbabwe

19 December 1997

Post Basic School of Nursing
Pariirenyatwa Hospital
P O Box CY 198
Causeway

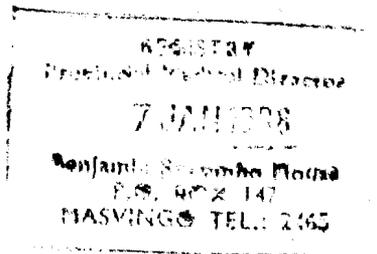
Attention: Mr E. Makondo Principal - Tutor

RE: REQUEST FOR PERMISSION TO COLLECT DATA FOR A STUDY
TITLE 'AN EVALUATION OF THE COURSE FOR THE DIPLOMA IN
NURSING ADMINISTRATION IN ZIMBABWE'

Reference is made to the above. Permission is granted to carry out the study. I hope the findings will be of assistance to you.



Dr W. Nyamayaro
A/PROVINCIAL MEDICAL DIRECTOR (MASHONALAND WEST)



Telephone: 263 - 39-62465

Telegraphic Address

E-mail: 5:7211/2.3801

Fax: 65145

Internet: Pnhindiri@healthnet.zw

Reference:

MINISTRY OF HEALTH AND
CHILD WELFARE
P O Box 147
MASVINGO

7 January 1998

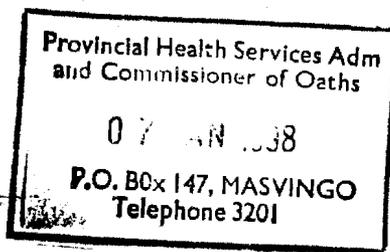
→ MR E MAKONDO
POST BASIC SCHOOL OF NURSING
PARIRENYATWA HOSPITAL
P O BOX CY 198
CAUSEWAY
HARARE

**PERMISSION TO COLLECT DATA FOR STUDY TITLED " AN EVALUATION OF
THE COURSE FOR THE DIPLOMA IN NURSING ADMINISTRATION IN
ZIMBABWE**

Your letter dated 11 December 1997 refers.

Authority is hereby granted for the study to go on in our province. Please present this letter to the institutions you will visit so that you are given access to the data you require.

Yours Sincerely



F MHLANGA
for: PROVINCIAL MEDICAL DIRECTOR: MASVINGO

/ns

Harare Central Hospital
P O Box St 14
Southerton
Harare

9 January 1998

Mr Makondo
Parirenyatwa Post Basic
School of Nursing
P O Box Cy 198
Causeway
HARARE

Dear Sir

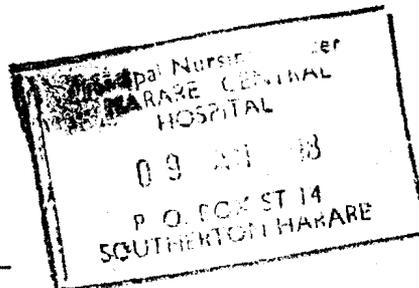
RE : REQUEST FOR PERMISSION TO COLLECT DATA FOR A STUDY ENTITLED
"AN EVALUATION OF THE COURSE FOR THE DIPLOMA IN NURSING
ADMINISTRATION IN ZIMBABWE".

Your letter dated 11 December, 1997 refers.

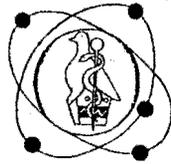
Permission is granted for you to carry out the above study.

Yours faithfully


J M
Chengeta
Principal Nursing Officer
For : MEDICAL SUPERINTENDENT



Telephone: 791792/791193/792747
Telefax: (263) - 4 - 792480
E-mail: mrcz@healthnet.zw



Medical Research Council of Zimbabwe
Josiah Tongogara / Mazoe Street
P. O. Box CY 573
Causeway
Harare

Date 11 February, 1998

Dear Mr. E. Makondo

Thank you for your proposal on: "An evaluation of the course for the
Diploma in Nursing Administration in Zimbabwe"

Which was reviewed and the following recommendations/amendments were made:

N/A

Your proposal was approved/rejected. Reasons for rejection:

Approved

Other:

Please be reminded to send in your research results for our
Health Research Database

Kind regards from the MRCZ Secretariat.

Malidze

FOR CHAIRMAN, MEDICAL RESEARCH COUNCIL OF ZIMBABWE

