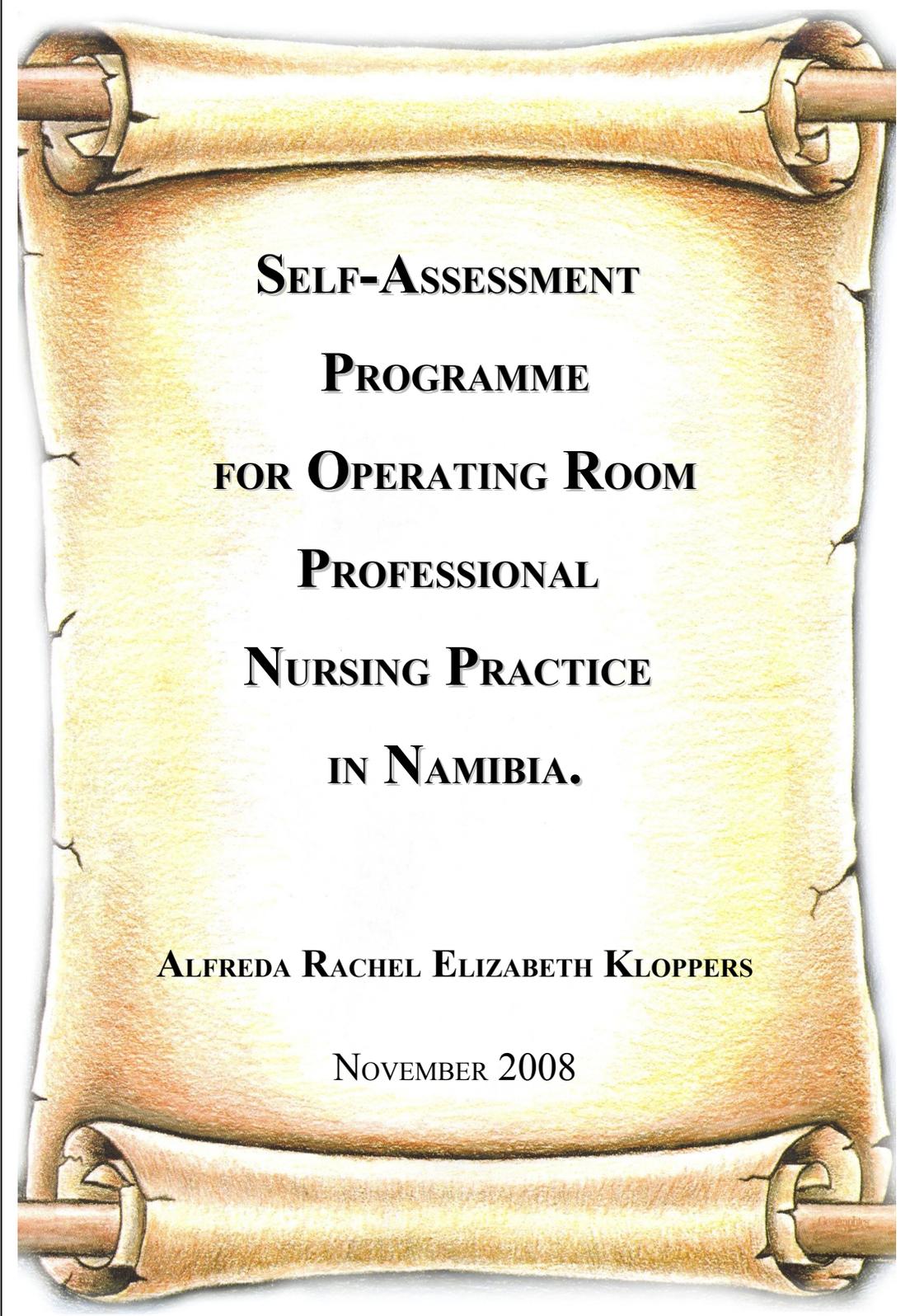


**SELF-ASSESSMENT
PROGRAMME FOR
OPERATING ROOM
PROFESSIONAL NURSING
PRACTICE IN NAMIBIA**

**ALFREDA RACHEL ELIZABETH
KLOPPERS**

NOVEMBER 2008



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**A DISSERTATION SUBMITTED IN FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF NURSING**

OF

THE UNIVERSITY OF NAMIBIA

BY

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NOVEMBER 2008

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NAMIBIA)**



DEDICATION

I DEDICATE THIS THESIS TO:

The ALMIGHTY GOD for guidance, strength, and wisdom to pursue this study. "I can do everything through Him who gives me strength" (Phil. 4:13).

My late father Alfred Sonn and my mother Christine Sonn, for love and support. My father believed that education is a heritage that cannot be bought.

My brothers and sisters-in-law who always supported decisions I made and encouraged me to be focused.

My husband Andrew, for support and encouragement during my studies.

My wonderful children, Zenobia, Grant, Andre, and Nelhari who always encouraged me that gave me the perseverance to complete the study.

My late father-in-law Andrew Kloppers and mother-in-law Richardine Kloppers for encouragement since I started my tertiary education.

The operating room nursing practice community in Namibia and Africa. Operating room nursing practice is a world where I can give of myself, learn of myself and grow within myself.

DECLARATION

I, Alfreda Rachel Elizabeth Kloppers, declare hereby that this study is a true reflection of my own research, and that this work, or part thereof has not been submitted for a degree in any other institution of higher education.

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Date

A R E Kloppers

ACKNOWLEDGEMENT

I give thanks to my HEAVENLY FATHER for the strength, guidance, and wisdom to pursue this study with persistence and dedication.

I would like to convey my sincere gratitude to the following people who contributed to the success of the study.

- ❖ Professor Agnes Van Dyk for her encouragement, assistance, and support.
- ❖ Associate professor Louis Small for continuously reminding me with what I am busy.
- ❖ Professor Marie Poggenpoel for her input and guidance (Consultant from the University of Johannesburg).
- ❖ Professor Chris Myburgh for support and encouragement (Consultant from the University of Johannesburg).
- ❖ The University of Namibia for financial assistance.
- ❖ The Ministry of Health and Social Service for allowing me to conduct the study utilizing their facilities.
- ❖ All operating room professional nurses participating in the study.

- ❖ Operating room management for allowing professional nurses time off to participate in the study.
- ❖ Ms Alexa Barnby for editing the thesis (University of South Africa).
- ❖ Louise Pretorius, my colleague and my friend, for all the support, encouragement, numerous discussions during the period of study.
- ❖ Colleagues, friends, and family for encouragement.
- ❖ Anneliese Bezuidenhout for assisting with computer problems.
- ❖ Leena Kangangi and Monique Seigels for assisting with graphics.

ABSTRACT

Operating room professional nursing practice is an evolving, ever-changing, clinical, hands-on nursing activity. For professional nurses to stay abreast of these changes they need to assess their clinical performance to improve quality of practice.

An adult learner usually brings her/his life experience to the learning situation. Therefore one can assume that they are problem orientated and are capable of self-directed learning. In this respect adults need to be involved in evaluating their own progress towards self-chosen goals

The problem this study addressed is the fact that there is no evidence at present, of a structured system with an assessment process to monitor the initial and continuing competence of professional nurses in the operating rooms in Namibia. It is also evident, by a previous study, that assessment and/or evaluation by others and/or self-assessment is not done on a regular basis. To address the problem it was necessary to determine the perceptions of professional nurses working in the operating room regarding self-assessment, develop a self-assessment programme, implement the self-assessment programme and evaluate the feasibility of implementing the self-assessment programme.

The aim of this study was to develop a self-assessment programme for professional nurses working in the operating rooms of State hospitals in Namibia. The researcher argued that the self-assessment programme could be used to assist professional nurses with professional and personal growth, knowledge enhancement, and improve clinical performance skills.

To achieve this aim a qualitative, inductive, deductive, explorative, descriptive, contextual research design was used.

The objectives were to:

- ❖ determine the perceptions of professional nurses working in the operating room regarding self-assessment;

- ❖ develop a self-assessment programme for operating room professional nursing practice for the state hospitals in Namibia;
- ❖ implement the self-assessment programme;
- ❖ evaluate the feasibility of implementing the self-assessment programme.

The study was conducted in four (4) phases that represent the objectives.

The population consisted of professional nurses working in the operating room. For purpose of this study the population and sample were the same. Focus group discussions were used to determine the perceptions of professional nurses working in the operating room regarding self-assessment.

The key themes elicited from the focus group discussions in phase 1 were presented as follows:

- ❖ self-assessment was viewed as an important aspect of professional and personal development;
- ❖ managerial support is needed to develop a process of self-assessment;
- ❖ personal values influence a person's commitment to self-assessment;

- ❖ standards of operating room professional nursing practice are needed to guide professional nurses to render quality performance.

The development of a self-assessment programme was achieved on the basis of the results of the empirical data that explored the perceptions of professional nurses of self-assessment and the results of concept analysis. The self-assessment programme consists of self-assessment checklists and a self-assessment instruction guide.

The self-assessment programme was implemented and evaluated. This research shows that the use of such a programme in the operating room is feasible. The important factor to remember is that the implementation of this type of programme is subject to the professional and personal character of the individual.

The researcher believes that the self-assessment programme sensitized professional nurses to their responsibility for their own knowledge enhancement and operating room professional nursing practice quality improvement.

The researcher believes that the self-assessment programme sensitized professional nurses regarding their responsibility for their own knowledge enhancement and operating room professional nursing practice quality improvement.

It was recommended that a self-assessment process as part of the educational system for operating room professional nursing practice for quality improvement be established. This process should include a quality assurance committee, an in-service educational system task force and an orientation and monitoring programme for operating room professional nursing practice.

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CHAPTER 1

INTRODUCTION TO THE STUDY

“Life is short, the art long, opportunity fleeting, experience treacherous, judgement difficult

(Hippocrates, 460-359BC).

1.1 BACKGROUND AND RATIONALE

A characteristic of adult learners is the ability and willingness to be able to assess their own performance. As a result of their age, professional nurses co-define adult learners. Adult learners are categorised as self-directed, self-controlled learners that possess the ability to reconstruct their experience by means of the educational process (Hiemstra, 2006, p.5).

Education encompasses the processes and theory of teaching and learning combined with clinical practice and measuring the outcomes of the educational process (Addis & Karadag, 2003, p.27). Schwandt (1997, p.xix) argues that “theories, concepts, beliefs, understandings, and values” are the language that constitutes practice. The latter author further states that theory and practice, and acting and thinking are linked in a “continuous process of self-examination and self-transformation”.

In education it is important to first decide where you are going, then where you are and then to plan on how to get where you want to be (Learning Point Associate, n.d., p.1). The challenge is to determine how far you are away from where you want to be by means of a measuring tool appropriate for your situation. In the operating room, professional nursing practice assessment can be used as the fundamental supportive framework for monitoring effective professional practice (Hansen, Mior & Mootz, 2000, p.4). Therefore, professional nurses as adult learners need to be involved in assessing their own progress towards self-chosen goals (Knowles, 1990, p.22; Quinn, 2000, p.200) with the expectation that they are able and willing to conduct self-assessment.

Self-assessment can be regarded as a valuable life skill (Sample self-evaluation prompts, n.d., p.1). Although the operating room professional nursing community is not particularly familiar with the term “self-assessment”, the activity of self-assessment could be an effective and important tool for personal and professional growth in learning new technological skills and

building confidence (National Board for Professional Teaching Standards, n.d., p.1). Research on self-assessment in operating room professional nursing practice is limited but has gained popularity in recent years (Sorcinelli, n.d., p.1). During the early 1980s the United States adopted the term “assessment” as referring to obtaining information from students.

Many professional nurses have the desire to be effective in their interaction with patients. Stein-Parbury (2000, pp.87,92) places self-assessment of performance within the “context of actual interaction” and argues that self-assessment should provide the opportunity for professional nurses to review their mistakes, which can then be used as indicators for growth and development, rather than to be judged as ineffective performers. Evaluation done by others to measure professional competence can be done objectively and effectively. On the other hand, the same evaluation may be perceived negatively and may threaten a nurse’s professional image and self-esteem. Hence the notion that self-assessment can be utilised as a guide for conducting operating room professional nursing practice development more effectively.

The aim of nursing education is to develop professional nurses capable of analytic inquiry, problem solving, independent actions, collaboration, decision making, and proactiveness in a changing health care practice environment and they should be responsible and accountable for their current and future practice (Department of Baccalaureate & Graduate Nursing, n.d., p.3). In nursing education, theory and practice are equally important. The assessment of learning and

competence of both these elements lies at the heart of nursing education (Gannon, Draper, Watson, Proctor & Norman, 2001, p.534).

Neary (2001, p.15) is of the opinion that assessment of “clinical competence in nursing continues to be a source of difficulty for education”. Assessment is a process gathering valid data in order to help guide continuous professional development (American Association for Higher Education, n.d., p.2). It helps individuals to direct their activities to what they need to learn. The process of assessment is also described as a set of routine tasks on which to receive feedback on learning (Davis, Kumtepe & Aydeniz, 2007, p.115). Thus it can be used to determine whether professional nurses are knowledgeable about what is expected of them. The process of self-assessment can also be utilized by professional nurses to determine their level of professional nursing practice competence, individually and as a group. The Interim Health Professions Councils of Namibia describe continuous professional development as “the means for maintaining and updating professional competence” (Interim Health Professionals Councils of Namibia, n.d., p.1). The documentation of the outcomes of assessment can be used to come to a conclusion on the effectiveness of nursing activities (guidance for professional nurses) and to make recommendations based on the results (Voss 1996, p. 65; Foertsch & Alexander, n.d., p.1; McAllister, 2001, p.312).

Professional nurse education forms part of post-compulsory secondary education and training with the aim of producing nurses for the workforce and equipping them to deal with the demands of the profession and to promote personal growth (Quinn & Hughes, 2007, p.1).

Professional nurses as adult learners need to conform to the concept of life-long learning. The principles of life-long learning stipulate that professional nurses should strive for continuous professional development in line with the expectations of the Interim Health Professions

Councils of Namibia (Quinn & Hughes, 2007, p.435; Interim Health Professionals Councils of Namibia, n.d.,

p.1). Ryan (2003, p.499) claims that continuous professional development is closely associated with the maintenance and growth of professional competence. The

question of what the best way is to determine competence is increasingly being asked by employers and professional bodies. In many countries competence is believed to be present when a practitioner has completed his or her basic training. Others believe that there has to be other approaches to assure ongoing competence in this ever-changing environment of operating room nursing practice (Whittaker, Smolenski & Carson, 2000, p.1). An approach can be reflective practice or self-assessment to identify strengths and weaknesses for continuing competent practice (College of Nurses of Ontario, n.d., p.1).

Professional nurses are the backbone of the health services (Kaye-Petersen, 2001, p.6; Shivute, 2003, p.18) and this is

supported by a statement by the Interim Health Professions Councils of Namibia stating that “ethical practice of the health professions require consistent and ongoing commitment” to develop and update their knowledge and skills to underpin professional nursing practice competence (Interim Health Professionals Councils of Namibia, n.d., p.1). It is universally agreed that it is critical to build scientific knowledge that is well developed and refined for professional nursing practice (Nursing Research Worldwide. Current Dimensions, 1990, pp.4,73).

With continuous surgical and technological advancements, professional nurses working in the operating room have an increasing need for professional and personal development (IHETS, n.d., p.1). Professional nurses are expected to

enhance their knowledge (cognitive domain) in order to understand why it is important to carry out certain activities in a certain manner; to identify their values and feelings (affective domain) regarding the patient as a human being with specific needs; and to develop their skills (psychomotor) for competent performance (Aucoin, 1998, pp.213-216). The latter is supported by Spry (1997, p.6) who states that professional nurses have a responsibility to develop knowledge of specialised skills, technical competence and a caring attitude which are essential for the successful surgical patient experience.

Surgical patients are often unconscious, owing to the administration of general anaesthesia, and it is supposed that they cannot experience the affective, cognitive, and/or psychomotor developmental level of professional nurses.

However, these skills are demonstrated in the execution of their psychomotor activities during an operative/invasive procedure even if the patient is not aware of them.

The goal of education is for the learner to become a fully functional person (Quinn, 2000, p. 54). During research done by Wakefield, Attree, Braidman, Carlisie, Johnson and Cooke (2005, p.337), participants argued that nurses are well prepared in the art and science of nursing but few have the skills necessary to improve care and patient safety. Nursing education in the United Kingdom has been criticised for failing to prepare its nurses adequately in respect of practical skills (Grundy, 2001, p.260).

Spry (1997, p.vii) argues that professional nurses may not be effectively equipped for the challenges of operating room nursing practice. Education regarding operating room professional nursing practice is very basic during the training years of nurses registered for the Comprehensive Nursing and Midwifery Science course at educational institutions in Namibia. Therefore, most professional nurses in Namibia may not be sufficiently equipped for the challenges of operating room professional nursing practice.

Uys and Gwele (2005, p.193) further state that newly employed graduates are academically equipped, but have limited abilities to apply their knowledge to the clinical settings. Cope, Bruce, McNally and Wilson (2003, p.674) argue that higher education tends to emphasise theoretical knowledge at the expense of practical knowledge. The

latter statement is supported by research results done by Major (2005, p.443) in the United Kingdom which show that the lack of practical skills in newly qualified professional nurses is as a result of the low profile of skills teaching within the curricula. There is no evidence to contradict these statements because of a lack of methods to measure the competence of newly qualified professional nurses in the operating room (O'Connor, Pearce, Smith, Voegeli & Walton, 2001, p.560).

Sigsby (2003, p.1) attests that it is difficult to add operating room nursing science to the already overcrowded curriculum and few of the faculties are qualified to teach in this area. Educational psychologists and cognition specialists have debated as to whether graduates should be

“competent, proficient, or even possessing some aspects of expertise” (ADEA, 2006, p.927). It has, however, been proven over the years that, to function effectively in all aspects of operating room professional nursing practice, staff members have to develop their skills, knowledge, competence and attitudes because patients rely on their expertise (Venter, 2006, p.2; AORN Online, 2002, p.1).

Competence entails not only adequate clinical skills, but also the development of self-confidence, motivation, knowledge, appropriate attitudes, sufficient skills, experience for successful performance, and professional and personal maturity for quality operating room professional nursing practice (Torres & Dominguez, 1998, pp.230–231; Quinn, 2000, p.231). Traditionally, this is

acquired through continuing educational programmes and self-directed and self-controlled learning (Kress, n.d., p.1).

It is important to remember that medical and surgical technologies and related advances affect the day-to-day practices in the operating room profoundly (Kirby-Harris, 2001, p.17).

Health care providers play an integral part in ensuring patient safety (North American Spine Society, n.d., p.1). The primary goal of operating room service is safe, quality patient care for all surgical patients (University of Kentucky, n.d., p.1). Operating room professional nursing practice focuses on identifying and meeting the needs of surgical patients immediately preoperatively, intraoperatively and immediately postoperatively (Operating Room Nurses Association of Canada, 1998, p.1). All health professionals and are inclined to collaborate to improve the present status of the quality of operating room professional nursing practice (Borden & Perkins, 1999, p.1). Quality nursing practice has always been measured by the outcomes of the patients' health status after surgery and not the performance of professional nurses (Rothrock, 1996b, p.112). Troskie (1993, p.51), on the other hand, states that the safety of the patient should be assured by the safe and competent nursing intervention of professional nurses according to their scope of practice. Although there is an increased tendency in the

nursing profession to emphasise assessing, and promoting and documenting the competence of staff members, there is little evidence of the implementation of results of these processes (Lenburg, n.d., p.1). Even if it is a known fact that quality can be gained through self-assessment, there will be no proof of this without an assessment process to prove it (Self evaluation/self-assessment & rubrics, n.d., p.1).

By the late 1800s, a professional nurse working in the operating room was described as an individual who should have a “level head, keen eyes, ever watching for all that may be required, a mind not easily irritated or confused, combined with the faculty of keeping out of the way, yet, still being of the greatest help” (Fairchild, 1996, p.3). To match the above description, professional nurses have to acknowledge the fact that they are responsible and accountable, first and foremost to their clients/patients, their employers, the nursing profession, the community at large and themselves (Kisting Sparks, 1995, p.119). It is therefore their duty to care for clients/patients according to their needs, to keep abreast of developing technology through continuous education and in-service training, and to measure their competence against the requirements of statutory bodies with the aid of a recognised and approved method of assessment that is in harmony with international expectations (Kaye-Petersen, 2001, p.1).

In the early and mid 1990s many quality improvement activities focused on the study of process performance in health care, but the measurement thereof continued to be

underdeveloped (Rothrock, 1996b, p.16). Evaluation and assessment are the appraisal measurement methods that can be used successfully for operating room professional nurse practice. Previous research results have shown that these activities are seldom carried out in the operating rooms in Namibia (Kloppers, 2002, p.79). Therefore, a self-assessment programme for competent professional nurse performance in operating room professional nursing practice may create awareness in individuals of the level of their professional competence and, hopefully, result in operating room professional nursing practice quality improvement.

Operating room nursing practice is implemented in many hospitals in Namibia. Health services in Namibia are divided in 13 directorates. Within these directorates there are 34 hospitals that serve the community with comprehensive health care. The operating room is regarded as one of the high-risk areas of a hospital as it renders curative treatment through surgical interventions and/or diagnostic investigations. After general anaesthesia, the patient is regarded as unconscious and this situation forces the professional nurse to be responsible and liable, and to act as an advocate for the total wellbeing of the patient. Fairchild (1996, p.20) supports this statement by stating that although employers and accreditors require competent practice, it still remains an individual professional responsibility. Professional nurses are therefore expected to be knowledgeable, clinically skilled, and competent in their practice.

In most of the rural hospitals in Namibia, the personnel who organise and manage the operating room form part of the ward personnel. Most of these professional nurses do not have an additional qualification in operating room nursing science and thus have little or no experience in operating room professional nursing practice. This situation requires an educational system to support them in becoming increasingly competent for the ever-changing practice requirements and to meet the expectations of internal (medical practitioners) and external consumers (patients). One of the main aspects of a supportive educational system is the concept of assessment and evaluation in order to monitor these relative concepts: knowledge, skills and competency with feedback and further education and training. All these aspects and

processes mentioned should be developed, approved, accepted, documented and readily available for implementation.

The presence or not of a performance appraisal system in health care institutions varies, but where there are such systems they do not always address critical and specialised areas, such as professional nurses' competence in operating rooms and other professional nursing interventions. Owing to the fact that these systems are not always very reliable, methods should be implemented that are more effective and efficient in promoting and assessing performance competence. A system of guided self-reflection (self-assessment) could enhance initial and continuing competence (Calpoly, n.d., p.7). When professional nursing practitioners take responsibility for individual self-assessment it is envisaged that they would be more motivated to engage actively in self-improvement.

The emergence of any form of clinical guidelines for use as a tool for quality improvement is an international development (Miller & Kearney, 2004, p.813). These authors argue that the development and implementation of clinical guidelines are "two of the promising and effective advances for defining and improving the quality of care".

1.2 PROBLEM STATEMENT

One of the ideals of nursing is that professional nurses working in the operating room should have an additional qualification in operating room nursing sciences. However, this is not always possible because the demand for operating room personnel is sometimes greater than the educational institutions can supply in one year. Another factor is that professional nurses must be interested in operating room professional nursing practice in order to face the challenges of the expected level of competence prescribed by society, statutory bodies, the profession and the self. Current demands deem it necessary to allocate professional nurses to the operating room who do not have the essential qualifications and, often, do not have any experience in this discipline.

At present there is no evidence of a structured system assessing and monitoring initial and continuing competence in professional nurses in the operating rooms in Namibia. The results of research done by the researcher done in 2002, show that 95.2% of professional nurses working in the operating room were never been either assessed by themselves and/or evaluated by supervisors during the time they worked in the operating room in state hospitals in Windhoek and Oshakati (Kloppers, 2002, p.79). Therefore competent performance and performance improvement for ensuring quality operating room professional nursing practice cannot be proved. In view of the above, a self-assessment programme could provide professional nurses with a means for identifying their strengths and challenges with regard to their performance

competence with the vision of enhancing knowledge and improving skills and proficiency in order to improve the quality of operating room professional nursing practice.

The skilled, knowledgeable, intelligent and creative assistance of professional nurses during an operative or invasive procedure is essential to the overall care of the patient in this highly specialised area (Powers, 1993, p.72). Most patients are unable to evaluate the quality care rendered in the operating room because of their lack of knowledge of the speciality and/or their state of unconsciousness. Many patients and nursing personnel also cannot relate postoperative pain to inefficient, incompetent practice by professional nurses. However, with the global information explosion people can gain a huge amount of information from the internet, increasing the possibility that patients might be able to link certain injuries and complications to operating room activities (Foster, 2003, p.3). There is therefore a need to assess the way in which operating room professional nurses perform.

The entire health care service is being faced with diverse new technology and surgical advances, which also affect operating room professional practices (Geoghegan, 2000,

p.13). Bruwer (1992, p.4) supports this statement arguing that “changes and challenges” are accepted as a way of life. As mentioned, there is no evidence of the presence of a structured system in operating rooms in state hospitals in Namibia to monitor and enhance the competence (knowledge, skills and attitudes) of professional nurses with regards to these technical advances. This implies an inability to provide evidence of operating room professional nursing practice quality improvement.

During her clinical contact with professional nurses, the researcher, as a lecturer in Operating Room Nursing Science, identified a lack of awareness among professional nurses of their own level of performance competence or incompetence.

Over a period of time, various statements were made by medical personnel, supervisors, lecturers and peers about the incompetence of operating room personnel in Windhoek. It can be argued that these statements were made from personal perspectives and expectations and are not scientifically grounded.

Currently in Namibia, professional nurses are allocated anywhere after they have qualified, mostly with only basic knowledge and no post-basic experience. Those allocated to the operating room are often faced with situations they have never encountered in their years as student nurses. Furthermore, there are often few field experts to instruct them. For this reason the idea of developing a self-assessment programme as part of the educational system for operating room professional nursing practice in order to improve the quality of practice started to form.

1.3 PURPOSE OF THE STUDY

The purpose of the study is to develop, implement and evaluate a self-assessment programme for the quality improvement of operating room professional nursing practice in Namibia.

The reason for developing a self-assessment programme was to communicate the importance of self-directed lifelong learning to the operating room professional nursing community and to provide guidelines for assessing their level of professional competence whereafter knowledge could be enhanced and clinical skills improved for high quality operating room professional nursing practice. The vision is that this programme will help professional nurses to comply with the requirement of the Interim Health Professions Councils of Namibia, which states that professionals should express a consistent and ongoing commitment to update and develop the “knowledge, skills and ethical attitudes that underpin competent practice” (Interim Health Professionals Councils of Namibia n.d., p.1). Thus the intention is to enable professional nurses to build higher levels of expertise and offer them personal fulfilment (Pollard, 2002, p.405).

1.4 OBJECTIVES OF THE STUDY

The objectives of this study were to:

- ❖ determine the perceptions of professional nurses working in the operating room regarding self-assessment;
- ❖ develop a self-assessment programme for operating room professional nursing practice for the state hospitals in Namibia;

- ❖ implement the self-assessment programme;
- ❖ evaluate the feasibility of implementing the self-assessment programme.

1.5 SIGNIFICANCE OF THE STUDY

This study is important because it may help the researcher, who teaches students registered for the Advanced University Diploma in Nursing Science (operating room), to facilitate the self-assessment program in the operating room. A structured self-assessment programme could help professional nurses to assess and monitor their performance and competencies in order to gain theoretical knowledge on a regular basis, in their own time and at their own pace, so that they may be able to contribute to improve professional nursing performance.

All professional nurses working in operating rooms in Namibia will benefit from this study since they function under the same acts, rules and regulations of the Nursing Council of Namibia and are guided by the protocol, policies and procedures approved by the Ministry of Health and Social Services.

The community and public at large have high expectations of the quality of patient care in health systems. These expectations hold professional nurses responsible and accountable for providing the expected quality of nursing care. As a result, the development of a self-assessment programme for quality improvement in operating room professional nursing practice can provide positive outcomes in terms of high quality professional nursing practice in the operating rooms of state hospitals in Namibia.

The naturalistic paradigm was relevant for this study because of the nature of enquiring into the reality of the perceptions of professional nurses regarding self-assessment (Polit & Beck, 2006, p.15). Polit and Hungler (1999, p.10) view a paradigm as a general perspective on the complexities of the real world, that is, the way in which the researcher views the world. A paradigm is a general framework that includes basic assumptions, questions to be answered, models of research practice and theory, and methods for finding answers to questions (Neuman, 2000, p.65; LoBiondo-Wood & Haber, 1998, p.49). Therefore paradigms influence the research question, and the choice of the most relevant method, and techniques for data collection, analysis and interpretation (Parahoo, 1997, p.39). The first objective of the study was to determine the

perceptions of professional nurses working in the operating room regarding self-assessment.

1.6.1 META-THEORETICAL ASSUMPTIONS

An assumption refers to a “basic principle that is believed to be true without proof or verification” (Polit & Beck, 2004, p.13). The meta-theoretical assumptions relevant to this study include ontological, epistemological, axiological and methodological assumptions and these are discussed in order to clarify the understanding of the researcher of the concepts related to the study.

1.6.1.1 Ontological assumptions

An ontological assumption enquires into the nature of reality which is “multiple and subjective, and mentally constructed by individuals” (Polit & Beck, 2004, p.15). The reality of operating room professional nursing practice is that consumers, internal and external, express individual

expectations of high quality competent professional practice. The Constitution of the Republic of Namibia deals with the Fundamental Human Rights and Freedoms specifically addressing aspects of the protection of life. This aspect is relevant to this study in the sense that operating room professional nursing practice focuses on safe, quality nursing care to prevent medical legal hazards that could be detrimental to patients. In addition, the Patient Charter of Namibia was developed to inform and create an awareness of the assurance and improvement of the quality of services to be rendered to consumers and it is accepted as a point of departure when caring for patients (MOHSS, 1998, p.1). It is also the duty and responsibility of professional nurses to render high quality nursing care to all patients in all situations. Rules relating to “acts or omissions by registered nurses constituting improper conduct or misconduct” guide professional nurses in their everyday practice regarding the prevention of accidents, injury, or trauma to patients (Government Notice No.10, 1999, p.3).

Professionals may or may not provide the expected quality of care. It is, however, difficult to prove the level of quality without an assessment process. The educational system within a department should incorporate structured methods for informal and formal assessment and feedback. There is thus a need for managers to create an environment and atmosphere that is conducive to informal and formal assessment. The process of formal assessment and evaluation can be time consuming and competent personnel to do the assessment, is a requirement. Hence the relevance of introducing a self-assessment programme for facilitating quality improvement in operating room professional nursing practice.

1.6.1.2 Epistemological assumptions

An epistemological assumption questions the relationship between the “enquirer and that being studied” (Polit & Beck, 2004, p.13). The researcher is currently a lecturer for the Advanced University Diploma in Nursing Science (operating room) course and is responsible for teaching theory and guiding the students during their clinical practice. In the operating room, professional nurses have a responsibility to guide and evaluate the students in the operating room in each discipline every second week; thus, it is of the utmost importance that professional nurses keep themselves up to date with the standards of practice so as to be able to guide students. In this regard a self-assessment programme can help professional nurses to

enhance their level of knowledge, clinical competence and self-assessment skills.

1.6.1.3 Axiological assumptions

An axiological assumption addresses the role of value in the inquiry (Polit & Beck 2004, p.13). Polit and Beck (2006, p.14) state that the inquiry should focus on the “subjective and non-quantifiable”, that is, the inquiry should be context bound. The individual aspects of phenomena are captured within the context of individual experiences. Knowledge and skills for professional nursing practice are acquired during the nurses’ years of study for their basic diploma. Most professional nurses are then placed in operating rooms in the rural areas of Namibia with little or no clinical experience or expert support in the operating room nursing practice. The value of this study is the generation of a self-assessment programme to guide professional nurses in operating room nursing practice.

1.6.1.4 Methodological assumptions

LoBiondo-Wood and Haber (1998, p.244) describe research methodology as methods, means and techniques for different purposes, data collection and data analysis.

Creswell (1998, p.2-3) describes a research design as a process that has its beginning in the conceptualisation of the problem. This incorporates the sampling, sources and procedures for data collection and the plans for data analysis (Fouché & Delport, 2002, p.77). Mouton (1996, pp.35-36) further argues that the methodological dimension refers to the total set of means employed by researchers to reach their goal during the research process. This process continues in a logical sequence, connecting the empirical data to the initial research question, and concludes with conclusions and recommendations. For further explanation see chapter 2.

1.7 DEFINITIONS OF KEY CONCEPTS

Assessment

Assessment is an ongoing process that makes our “expectations explicit and public; set appropriate criteria and standards for quality; for systematic gathering, analyzing and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain and improve performance” (Calpoly, n.d., p.7).

Assessment is also described as an opinion and/or act of judgement about something that has been carefully thought about (Hornby, 2005, p.79). Banta (n.d., p.1) refers to assessment as a process to provide credible evidence of learning outcomes and to assess programmes for a resulting improvement in services. Assessment may be defined as the documented activities for monitoring performance against predetermined standards of quality improvement.

In the opinion of the researcher, assessment refers to a process whereby the level of academic knowledge, in terms of theory and practice, and the development of professional competence can be measured, recorded and then discussed with those involved by means of a structured system.

Self-assessment

Self-assessment is defined as a “process by which you learn more about yourself” (The Riley Guide: Before you search, n.d., p.1). This process of judging one’s progress and achievements describes the concept of self-assessment (Hornby, 2005, p.1325). It is also described as a learning process in itself where people take responsibility for monitoring and making

judgements about their own learning (Burgess, n.d., p.1). Self-assessment is part of a process for developing character and self-empowerment (Link: Self-evaluation, n.d., p.2).

The concept of self-assessment does not stand alone, but forms a part of the whole quality assurance process. Self-assessment can thus be summarised as a process of thinking about one's performance and comparing it to the standard level of expected performance for one's qualifications and experience. Furthermore, it is used to estimate the degree of improvement that should take place to achieve the desired quality of operating room professional nursing practice.

Programme

A programme is defined as a plan of things that will be done that is organised into a set of instructions that control the operation or functions (Hornby, 2005, p.1161). A programme is also described as a set of courses intended as a tool to inform practitioners in order to change behaviour (Rothrock, 1996b, p.20). The researcher refers to a programme as a written document that can be used as a guide before an activity, or, as information after the activity to strengthen the knowledge base.

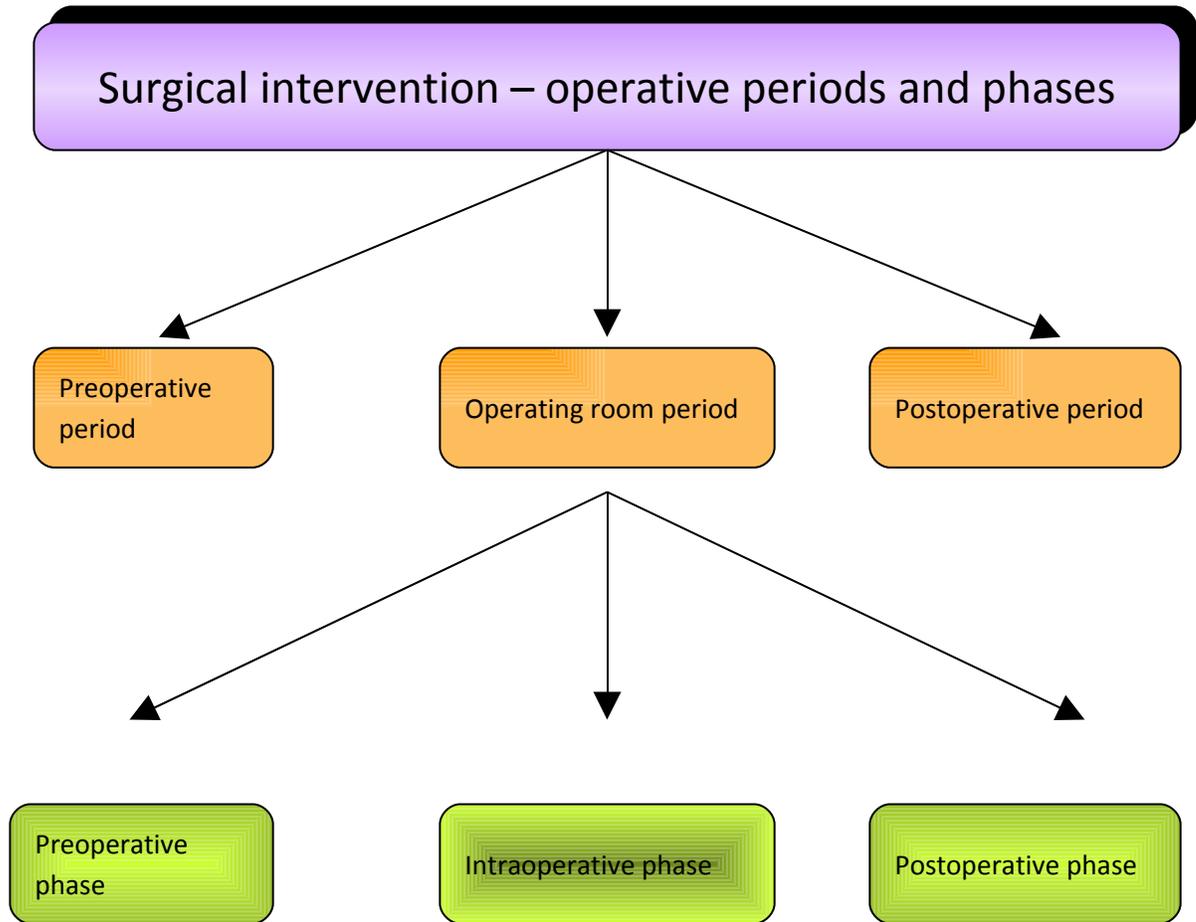
Operating room professional nursing practice

Historically, operating room professional nursing practice was referred to as the care of the surgical patient during the preoperative, intraoperative, and postoperative phases of a

surgical intervention. This provides an image of professional nurses' activities as being limited to the environment with little interaction with the patient. Currently, operating room professional nursing practice is described as an independent and interdependent function of delivering care during the preoperative, intraoperative, and postoperative phases of a surgical intervention through the framework of the nursing process. In the broadest scope of operating room practice, activities may begin at the patient's home, a clinic, a medical practitioner's consulting room, and/or the ward. In the narrower sense of this practice, patient care activities are confined to the surgical suite (Rothrock, 2003, p.1).

Operating room professional nursing practice can also be defined as the nursing intervention that occurs during a surgical intervention, which can start as soon as a surgical procedure is recommended and lasts until the time the patient is fully recovered. For the purpose of this study, operating room professional nursing practice is limited to the intraoperative phase of the operating room period, which begins when the patient is admitted to the operating room and ends when the patient intervention is reported by the professional nurse (scrub nurse) to the recovery room personnel. For the sake of clarification the various operative periods and phases are illustrated in figure 1.1. The phase relevant to this study has not been coloured in.

Figure 1.1: A graphical representation of the various operative periods and phases during a surgical intervention



1.8 ETHICAL CONSIDERATIONS

A number of ethical considerations were taken into account for this study.

The proposal was made available to the scientific community for critique and approval. Approval to conduct the research in the state hospitals in Windhoek and Oshakati was obtained from the University of Namibia and the Ministry of Health and Social Services. All participants were invited to participate verbally and sign in a letter that gave the details of their participation. Informed consent was obtained from the participants.

A verbal agreement was made between the researcher and the participant regarding the nature of the research and the responsibility of each partner (Babbie & Mouton, 2001, pp.527,530). Anonymity and confidentiality was assured. No harm came to the participants as the nature of their participation was in the form of written self-assessment.

1.9 SUMMARY

This chapter gave the background to, and rationale for the study. The research problem, the research purpose, the significance of the study and the objectives were stated. Paradigmatic perspectives on the metatheoretical assumptions were described and the key concepts were defined. The research design, strategies and method of the first objective identified as phase 1 will be described in the following chapter.

CHAPTER 2

RESEARCH METHODOLOGY

“...the psychological causes of our belief in the validity of induction without trying to provide logical reason for it..., but left the philosophical ground of induction as a valid mode of knowledge unaccounted for” (Popper, 1902-1994).

2.1 INTRODUCTION

The background and rationale to the study were presented in the previous chapter. The research design and method will now be discussed to help clarify the way the researcher implemented the qualitative research method in order to elicit the perceptions of self-assessment of professional nurses working in the operating room.

The perceptions of professional nurses are very important and thus formed the basis for the development of a self-assessment programme (Greeff, 2002, p.305-306). Perceptions are part of a person's worldview, thus, the realisation that perception will differ from person to person and may change over time (Burns & Grove, 1997, p.67). The fact is that what we know and think has meaning only within a given context. Even though operating room professional nursing practice is a specialised field and is practised in an enclosed environment, many different meanings of self-assessment are possible. This is the rationale for qualitatively

eliciting the perceptions of professional nurses in the operating room with regard to self-assessment, that is, to be able to describe what they really thought and believed about the nature of self-assessment. A further reason was to explore the feasibility of developing and implementing a programme for self-assessment in order to enhance knowledge and improve professional practice competence in operating room professional nursing practice.

Throughout the rest of the study “professional nurses” will refer to professional nurses working in the operating room irrespective of whether they obtained a diploma in the Advanced University Diploma in Nursing Sciences (operating room) or an equivalent qualification.

2.2 RESEARCH DESIGN

Creswell (1998, p.2-3) describes a research design as a process that has its beginning in the conceptualisation of the problem. A research design also focuses on the formulation of a research problem as a starting point, with the end product in mind (Fouche & De Vos, 2002, p.137). It incorporates the sampling, the sources and the procedures for data collecting and the plans for data analysis (Fouché & Delpport, 2002, p.77). This process continues in logical sequence, connecting the empirical data to the initial research question, and ends with conclusions.

This study involved a **qualitative, explorative, descriptive and contextual research design**. The reasoning strategy includes **inductive, analysis, synthesis and deductive reasoning**.

2.2.1 Qualitative research design

Qualitative research design is a systematic, subjective approach used to explore, describe, analyse and understand the experiences of the individual in the world around them. Qualitative research focuses on words and feelings (Asia Market Research Dot Com, n.d., p.1). A qualitative research design was selected for this study because the researcher wanted to gain an in-depth understanding of the perceptions of professional nurses regarding self-assessment. The subjective experience and personal knowledge of participants add to the diversity of their viewpoints (Gubrium & Holstein, 1997, p.13). The researcher was perceptive for themes to emerge from the perceptions of the participants during the focus group discussions (Tesch, 1995, pp.4-9, 68). By using the qualitative method the researcher could study selected issues in depth. In addition, detail could be added to operating room professional nursing practice knowledge by building on the process of developing a self-assessment programme consisting of checklists and an instructional guide (Patton, 1990, p.13; Burns & Grove, 2005, p.52).

2.2.2 Exploratory research design

An **exploratory** design is appropriate when there is evidence of little or no literature on a concept (LoBiondo-Wood & Haber, 1998, p.163). The aim of this study was to explore the depth of knowledge of the participants regarding self-assessment through their perceptions and their experiences and it focused on the “how, what, when and where” of the application of self-assessment as part of the educational system (Fouché, 2002, p.109; Babbie & Mouton, 2001, p.80; Hart, 2000, p.47). There is very little literature on self-assessment in the context of operating room professional nursing practice.

2.2.3 Descriptive research design

This research is descriptive in the sense that it aims to describe the phenomenon of self-assessment from the participants' perspective. The outcomes of the research focus on the "how" and "what" (Hart, 2000, p.47). The primary aim of the study is to understand and give meaning to the ideas and opinions of professional nurses regarding the concept of self-assessment as a means for measuring their level of professional competence (Schwandt, 1997, p.161).

2.2.4 Contextual research design

The **contextual** interest refers to the understanding of events in their context (Babbie & Mouton, 2001, p.212). The context of the study was state hospitals in Windhoek (Windhoek Central Hospital and Katutura Hospital) and Oshakati, referred to as hospitals A, B and C in the text. These hospitals are the only registered training facilities in Namibia for the Advanced University Diploma in Nursing Science (Operating room). Students are allocated to the operating rooms in the training hospitals in Windhoek for clinical training and experience. On completion of their training, some are employed in private hospitals in Namibia, hence the involvement of experts from the state hospitals as well as private hospitals to verify the content of the self-assessment programme developed in phase 2. Furthermore, in 2002 the researcher conducted a study in the operating room entitled "Quality of nursing care rendered

by professional nurses during the intra-operative phase of a surgical intervention". The operating room context is thus very familiar to the researcher and the focus of this study.

2.3 REASONING STRATEGY

Reasoning strategies are used to determine the reasonability of statements and the relationship between the concept under study and existing knowledge (Walker & Avant, 2005, pp.127-128). This is done by inductive reasoning, analysis, synthesis and deductive reasoning.

2.3.1 Inductive reasoning

"Inductive logic is reasoning from the particular to the general" (Chinn & Kramer, 2004, p.87). Conclusions can be drawn about the particular phenomenon by interpreting and structuring the meanings that derive from the data (Parahoo, 1997, p.36; Thorne, 2000, p.2). Inductive logic was used to find out what the ideas, opinions, feelings and experiences of professional nurses were regarding self-assessment (Patton, 1990, p.45). The researcher needed to find out whether the concept of "self-assessment" is familiar to the professional nurses and whether they think that it can be used effectively as a method of appraisal within the educational structure of the operating room to improve the quality of operating room professional nursing practice. For this study, inductive reasoning was used during the focus group discussions in phases 1 and 4. To facilitate induction during the focus group discussions one key question was asked together with a number of probing questions.

2.3.2 Analysis

Analysis involves taking data apart and then identifying relationships between its constituent parts (Chabeli, 2001, p.40). Data must be sifted so that the ideas chosen contribute to the objectives of the study (Burns & Grove, 2005, p.565).

For this study the concept of self-assessment was verbalised by professional nurses (the participants) from different perspectives and various levels of experience. The information recorded and noted was dissected into relevant meaning units. The aim was to link the concept of self-assessment to the research problem and the understanding of the quality of operating room professional nursing practice (Friedl, De Vos & Fouché, 2002, p.442).

2.3.3 Synthesis

Synthesis is the process of dividing concepts into categories or units that fit a phenomenon (Walker & Avant, 2005, p.39-40). For the purpose of this study qualitative synthesis was used.

To construct a self-assessment programme the researcher grouped the ideas and feelings regarding self-assessment into clusters of phenomena to form themes and subthemes (Walker & Avant, 2005, p.41).

During the evaluation of the feasibility of a self-assessment programme, the opinions, feelings and ideas of participants after the implementation of the programme were gathered in a focus group discussion. New concepts were formed (Walker & Avant, 2005, p.40) around the phenomenon of self-assessment, and these were used to make recommendations for the operating room professional nursing community in Namibia.

2.3.4 Deductive reasoning

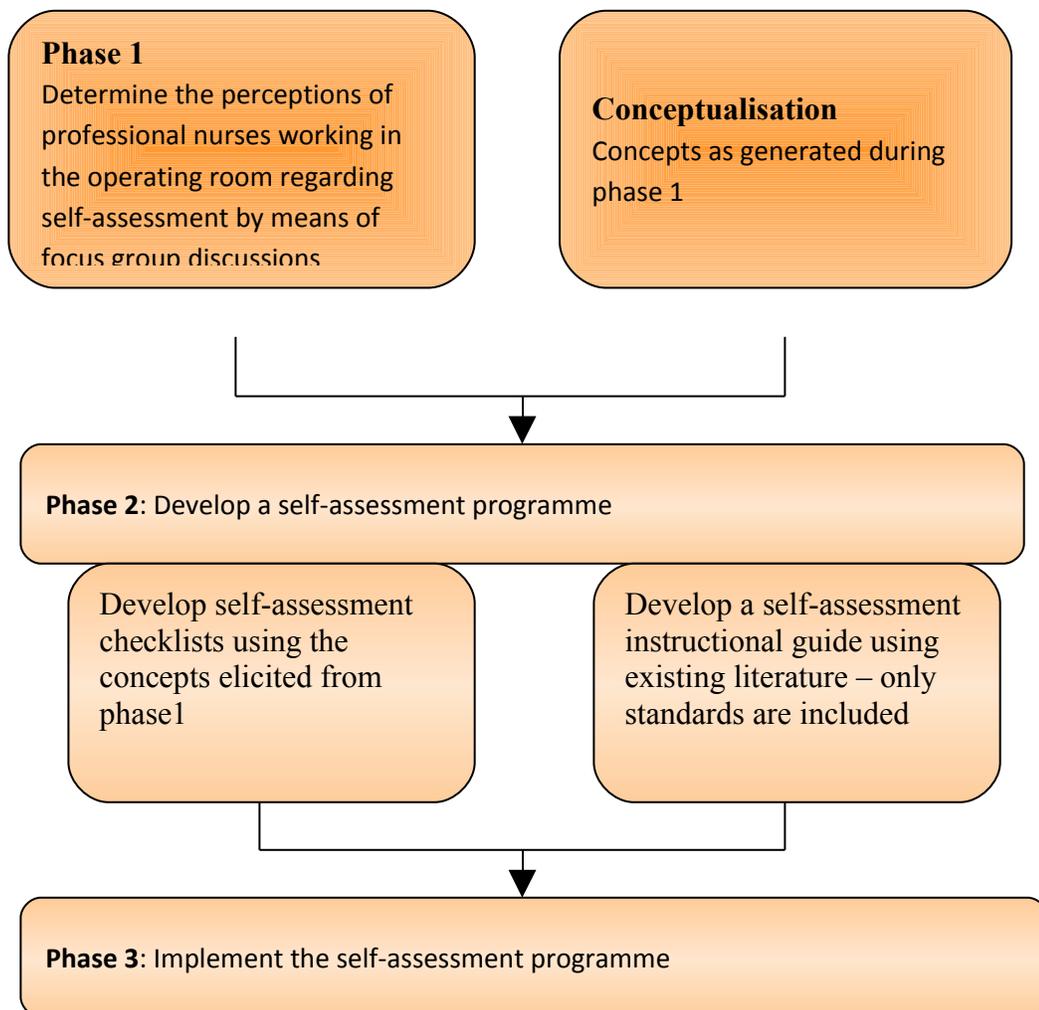
“Deductive logic is reasoning from the general to the particular” (Chinn & Kramer, 2004, p.87; LoBiondo-Wood & Haber, 1998, p.137) “general to general and particular to particular” (Hart, 2000, p.82). The deductive approach suggests that evidence should be gathered to prove a theory or a logical relationship between concepts implying moving from the whole to the particular (Neuman, 2000, p.49). The concept “self-assessment” is an integrated part of the educational process. All the concepts elicited from phase 1 are generally known and are available in the literature (Morse & Field, 1996, p.6), but there is no evidence of their structured application in operating rooms. Literature relevant to the study already exists hence deduction is used (Delpont & De Vos, 2002, p.52). A literature study was done to link the data

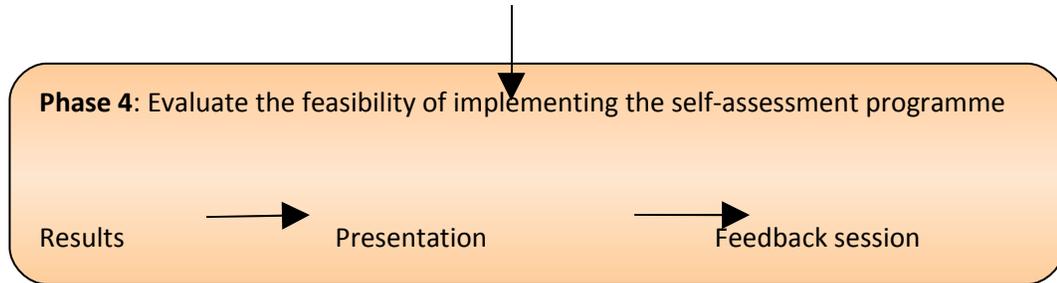
to existing theories relevant for this study. Data obtained during focus group discussions was analysed and described.

2.4 RESEARCH METHOD

This study was done in four phases. During the first phase the perceptions of professional nurses working in the operating room were elicited and conceptualised. The second phase entails the development of a self-assessment programme in operating room professional nursing practice. Phase three consists of the implementation of the programme. The fourth phase encompasses the evaluation of the feasibility of a self-assessment programme. Figure 2.1 is a graphical representation of the developmental phases of the study.

Figure 2.1: A graphical representation of the developmental phases of the study





The methods used to determine the research population, including sample and sampling, data gathering and analysis, will be discussed in detail for all four phases. Only phase 1 will be described in this chapter. The relevant research methods used for the other phases will be described in the following chapters.

2.4.1 PHASE 1: Determine the perceptions of professional nurses working in the operating room regarding self-assessment

The objective of phase 1 was to determine the perceptions of professional nurses working in the operating room regarding self-assessment.

2.4.1.1 Population

A research population refers to the entire group of people with “common, defining characteristics” (Polit & Beck, 2006, p.56). The target population for phase 1 was professional nurses working in the operating rooms in the state hospitals in Windhoek (Windhoek Central and Katutura) and Oshakati.

2.4.1.2 Sampling and sample

Sampling is defined as the process used to select a portion of the population to represent the entire population (Polit & Beck, 2006, p.260). Sampling techniques are usually used in order to generalise the findings of the study. For this study the researcher aimed to develop a rich description of the perceptions of professional nurses regarding self-assessment and not to present a representative sample of the population (Streubert & Carpenter, 1995, p.25; Macnaghten & Myers, 2004, p.68). The results could not be generalised to other professional nurses as descriptions of competencies, but may be generalisable as a description of the principles and standards that should be adhered to in operating room professional nursing practice (Gobo, 2004, p.453). The purpose of qualitative research is to elicit meaning, rather than generalise the findings of the research (Dempsey & Dempsey, 1992, p.32). Purposive selection of participants was used, as it was of the utmost importance that participants had firsthand experience in operating room nursing practice (Streubert & Carpenter, 1995, p.23). The participants consisted of all professional nurses who scrubbed and were available on the appointed days, irrespective of their years of experience or whether they were in possession of a diploma in operating room nursing sciences or not.

Table 2.1: Sample size

HOSPITAL	POPULATION	SAMPLE	PERCENTAGE
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L	N Professional nurses	Profession al nurses	E OF THE POPULATIO N
A	23	16	70%
B	22	17	77%
C	19	9	47%
TOTAL	64	42	66%

Sixty-six percent of the population formed part of the study. The rest of the professional nurses were either in supervisory positions, on night duty, on annual or sick leave, or assisting with a surgical procedure during the time scheduled for data collection.

2.4.1.3 Data collection method

The process of data collection aims to gather information in view of answering the research questions. Aspects that were attended to during the data collection process were

preparing the field, conducting the focus group discussions and field notes.

2.4.1.3.1 Preparing the field

Data was collected in the operating room complex because it is important to interview participants in the natural setting of the phenomenon being researched (Streubert & Carpenter, 1995, p.22-23). Participants were gathered in a circle for all the meetings in the rest room in the operating room complex. The aim of the discussion was communicated and it was also explained that participation was voluntary. Those who did not wish to participate at that time were given the opportunity to leave. The use of the audiotape recorder was explained and informed consent was obtained. The taking of notes was also

explained to the participants. Nobody had question or complaints about the use of either the audiotape recorder or the taking of notes. The researcher had to be sensitive to some respondents who were inhibited by the presence of others during the discussions (Welman, Kruger & Mitchell, 2005, p.204).

2.4.1.3.2 Conducting the focus group discussion

Focus group discussions are regarded as a powerful means of data collecting (Evaluation tools, n.d., p.2). Focus groups are defined as a method for obtaining the participants' perceptions in a "focused area in a setting that is permissive and non-threatening" (Burns & Grove, 2005, p.542). These authors also argue that the group dynamics assist individuals to express themselves and give a sense of

support for ideas not commonly voiced. Focus group discussions were used because they embody an interactive strategy with the aim of gaining “knowledge of the perceptions, experiences and beliefs” of professional nurses with regard to self-assessment (Chen, 2005, p.138).

Focus groups were held at the three state hospitals respectively, which will be referred to as hospitals A, B and C (refer page 29). Operative procedures schedule did not allow the same participants to attend all the sessions necessary until the date is saturated. For that reason the researcher encouraged participants to attend the second and/or third meeting for either the first or the second or the third time. At hospital A, two focus group discussions were held. Nine professional nurses attended the first

meeting and seven attended the second. Some participants attended both meetings and some only the first meeting or the second meeting. At hospital B, two focus group discussions were held. Nine participants attended the first meeting and eight the second meeting, with some participants attending only the first meeting or the second meeting. At hospital C two meetings were held, with nine professional nurses attending. At hospital C all participants attended the focus group discussions only once.

Appointments were made with professional nurses (scrub nurses) on duty on Wednesdays. An open-ended global question was posed to stimulate the discussion which required professional nurses to express their feelings, ideas and thoughts on the process of self-assessment as part of

day-to-day assessment of their professional practice competence (Morse & Field, 1996, p.26). The focus group discussions were repeated for the purpose of collecting rich data and until saturation was reached (De Vos 2002, p.341; Akerström, Jacobsson & Wästerfors, 2004, p.349).

Whether or not true saturation can be obtained is a contentious issue (Schneider, Elliot, LoBiondo-Wood & Haber, 2003, p.147). There was repetition of data in the different focus groups, hence the acceptance that saturation was reached.

Data was collected with the aid of an audiotape recorder and field notes. The use of audiotapes provided the researcher with verbatim information from the participants and the nuances of their voices were added to the spoken

words. The use of a tape recorder furthermore records data without distracting the interviewee and the researcher is able to interact more (Ely, Anzul, Friedman, Garner & McCormack Steinmetz, 1991, p.82; Burns & Grove, 1997, p.55). Rapley (2004, p.18) attests that tapes have been proven to provide more detailed information than written notes.

The research question was formulated as follows: **What are your perceptions regarding self-assessment as part of the system to improve the quality of operating room professional nursing practice?**

As the discussions progressed probing questions related to responses were asked. Their input enabled the researcher

to form a picture of the inclination towards operating room professional practice competence. It is also imperative to determine whether professional nurses are aware of their role in maintaining the level of quality operating room professional nursing practice. Honesty about their knowledge, feelings, ideas and values, and the practicability and feasibility of implementing a self-assessment process was important because evaluation is perceived, by some, as a negative experience.

The responses were spontaneous and open. There was an atmosphere of eagerness to share their opinions and concerns. Before the discussions were concluded the researcher asked each participant for further inputs to

eliminate the possibility that a shy person might not have voiced her or his opinion (Parahoo, 1997, p.299).

2.4.1.3.3 Field notes

During the focus group discussions interviews field notes on were taken on non-verbal interaction. It was important to record expressions, and attitudes, to supplement the information on the audiotape (Morse & Field, 1996, p.91).

2.4.2 Data analysis

Data gathering and data analysis occurred simultaneously in this study. Analysis occurred as soon as the researcher listened to the opinions of the participants. The researcher listened to the tape several times to get a sense of the whole (De Vos, 2002, p.343).

For this study the data analysis was done on the basis of Tesch's open coding (Tesch, 1995, p.90). Results were presented in a descriptive way that formed the basis for analysis using this open coding (Burns & Grove, 1997, p.579; Henning, van Rensburg & Smit, 2004, p.128). The

spoken word was converted into text by the inductive process. Gillham (2000, p.60) and Henning et al. (2004, p.128) are of the opinion that spoken words may be redundant, fantasies or even lies. Gillham (2000, p.60) also states that the categorising of the content is subjective. Therefore the researcher remained alert to the possibility of bias and ignored preconceived ideas (Henning et al. 2004, p.129). The researcher read through the text to get a sense of wholeness. The spoken words and nonverbal communication of the participants were encapsulated in the field notes. The spoken words recorded on audiotape and contained in the field notes were entered into a computer software programme and then printed by the researcher. Words and phrases that could be used to give meaning to certain feelings, behaviour and/or concepts were colour coded and categorised in groups called subthemes by the researcher and the co-coder, who is an expert in qualitative research methodology. The subthemes were clustered to form key themes that were used as the basis for the development of a self-assessment programme (Miles & Huberman, 1994, p.248).

The results of the focus groups discussions are described in detail in chapter 3.

2.4.3 Pilot testing

Pilot testing was not done because of the limited size of the population.

2.5 TRUSTWORTHINESS

Streubert and Carpenter (1995, p.318) define trustworthiness as a process to “establish validity and reliability of qualitative research. Quality research is trustworthy when it accurately presents the experience of the study participants”. The researcher described the feelings, opinions and ideas of operating room professional nursing practitioners regarding self-assessment (qualitative).

The four general criteria, namely truth value, applicability, consistency, and neutrality, described by Lincoln and Guba (1985) and the strategies of credibility, transferability, dependability and confirmability were applied for this study (Morse & Field, 1996, p.118).

2.5.1 Measures for trustworthiness

To overcome the perception that there is lack of control over the validity and reliability of the research findings, trustworthiness was developed.

Table 2.2: Trustworthiness: criteria and strategies for establishing the trustworthiness of a qualitative approach

Criteria of trustworthiness	Strategies applied
	Qualitative approach
Truth value	Credibility
Applicability	Transferability
Consistency	Dependability
Neutrality	Confirmability

Credibility refers to the “believability of the data” (Polit & Hungler, 1999, p.434). Credibility was assured by prolonged engagement until the scope of data was adequately covered and in-depth information on factors influencing quality operating room professional nursing practice was obtained; triangulation, referential adequacy and peer debriefing were also applied.

Transferability is defined as to extent to which findings can be “transferred to other settings or groups” (Polit & Hungler, 1999, p.434). Purposive sampling and dense description ensured **transferability**.

Dependability refers to the “stability of data over time and over conditions (Polit & Hungler, 1999, p.434). Polit & Hungler, (1999, p.434) defines confirmability as the “objectivity or

neutrality of the data". An audit, an audit trail and reflexivity ensured **dependability** and **confirmability** (Polit & Hungler, 1999, p.434; Mondungwa, Poggenpoel & Gmeiner, 2000, p.63).

The implementation of Lincoln and Guba's (1985) trustworthiness strategies for the qualitative approach are discussed in detail in table 2.3.

Table 2.3: The implementation of Lincoln and Guba's trustworthiness strategies for the qualitative approach

Strategies to ensure trustworthiness for the qualitative approach		
Strategies	Techniques	Activities
Credibility	<ul style="list-style-type: none"> • Prolonged and varied engagement in the field • Triangulation and referential adequacy (Babbie & Mouton, 2001, pp.276,278) 	<ul style="list-style-type: none"> • Varied engagement with three focus groups of participants by two different data gathering methods until data has been saturated within a time frame • Data gathered with a central question to all groups for phase 1 and phase 4 during focus group discussions • Field notes were taken and data was audio taped • Data collected was categorised in

	<ul style="list-style-type: none"> • Peer group debriefing 	<p>themes and presented to participants</p> <ul style="list-style-type: none"> • International and national literature used as a basis • Expert in the field validated the content and context of the self-assessment programme
Transferability	<ul style="list-style-type: none"> • Thick description 	<ul style="list-style-type: none"> • The findings of the study can be meaningful to practices in all operating rooms because of the basic principles of operating room professional nursing practices and standards that are universal (Streubert & Carpenter, 1995, p.26) • The design of this study provides a clear description of the methods and the report describes the results obtained • Participants were handpicked by the researcher because of the small population and because of the

	<ul style="list-style-type: none"> • Purposive sampling 	<p>speciality of the field of study (LoBiondo-Wood & Haber, 1998, p.255)</p>
Dependability	<ul style="list-style-type: none"> • Audit 	<ul style="list-style-type: none"> • The raw data was colour coded, categorised in subthemes and themes according to Tesch's open coding • Self-assessment checklists were developed using the concepts derived from phase 1, and a self-assessment instructional guide was developed using existing literature on standards
Confirmability	<ul style="list-style-type: none"> • Audit trail • Reflexivity 	<ul style="list-style-type: none"> • Data was recorded, written, analysed and reconstructed into key themes and subthemes (Lincoln & Guba, 1985, p.319) • The researcher constantly reflected on her own values, behaviour and

		<p>position with the participants so as not to influence responses (Parahoo, 1997, p.292)</p> <ul style="list-style-type: none"> • Data collected in phase 1 was presented to the participants for clarification of its correctness (Parahoo, 1997, p.292)
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Source: Lincoln & Guba, 1985, p. 290-331

As illustrated in table 2.4, the study was performed in four successive phases each serving as a basis for the next phase.

Table 2.4: An exposition of the methods proposed for phases 1 to 4.

Phase	Design	Population/units	Data gathering	Data	Result
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		of analysis		analysis	
1	Qualitative, inductive, deductive exploratory, descriptive and contextual	Professional nurses working in the operating room	Focus group discussion with a central question	Qualitative analysis using Tesch's open coding	Key themes and subthemes regarding self-assessment
2	Development of a self-assessment programme consisting of self-assessment checklists and a self-assessment instructional guide and the validation thereof	Opinions of professional nurses Literature Conceptualisation of the concepts of the study	Deductive process	None	Draft a self-assessment programme and validation thereof
3	Implementation	Professional nurses working in the operating room	Practical implementation of a self-assessment programme	Descriptive statistics	Self-assessment programme
4	Evaluate the feasibility of implementing the self-assessment programme	Results of the implementation of the self-assessment programme	Presentation of the results Feedback session	Qualitative descriptions	A self-assessment programme for internalisation and operationalisation

2.6 SUMMARY

This chapter focused on the research methodology used for the study. The qualitative research design and methods were discussed. Reasoning strategies, inductive reasoning, analysis, synthesis and deductive reasoning, were described.

The chapter described the characteristics of the qualitative research approach to elicit the perceptions of self-assessment as part of an educational system of professional nurses working in the operating room (phase 1). Using Lincoln and Guba's model of trustworthiness, measures for ensuring trustworthiness were discussed according to the criteria of truth value, applicability, consistency and neutrality. Strategies for ensuring trustworthiness in the qualitative approach were described as credibility, transferability, dependability and confirmability.

The results of the focus group interviews in phase 1 and literature control will be discussed in chapter 3.

CHAPTER 3

RESULTS OF FOCUS GROUP DISCUSSIONS AND LITERATURE CONTROL

“We arrive at truth, not by reason only, but also by the heart” (Blaise Pascal, 1623-1662).

3.1 INTRODUCTION

The previous chapter focused on the research methodology. It described the research design, the reasoning strategies and the measures for ensuring the trustworthiness of the qualitative approach applied to this study. The methods used were relevant because the aim was to elicit the feelings and opinions of professional nurses on their perceptions of self-assessment as part of an educational system in operating room professional nursing practice.

This chapter describes the results of the focus group discussions with supporting literature control.

The key themes categorised were:

- self-assessment with subthemes of self-assessment and alternative views on self-assessment referred to as a systematic continuous process done by others as well to identify strengths and weaknesses;
- managerial support with subthemes of in-service education, supervision, staff allocation and staff shortage, feedback on performance and physical support;
- personal values with subthemes of interest, internal and external motivation, responsibility and accountability, honesty, trust, integrity, the development of the self, commitment and a caring attitude;
- standards with subthemes of criteria, procedures, checklists and guidelines.

The key themes and the subthemes are presented in table 3.1 and discussed in the text.

Although for some of the subthemes only one response for a specific concept, elicited from the focus group discussion in phase 1, is reflected in the text, other participants supported and approved of the statements made.

3.2 RESULTS OF FOCUS GROUP DISCUSSIONS

The results of phase 1 of the study are presented in table 3.1 and discussed in terms of the final categories identified as themes and subthemes.

Table 3.1: Key themes and subthemes elicited from concepts analysed from the perceptions of professional nurses regarding self-assessment

THEMES	SUBTHEMES
1. Self-assessment was viewed as an important aspect of professional and personal development	There were different views on self-assessment <ul style="list-style-type: none"> ❖ Self-assessment is seen as a vehicle for practice improvement in the absence of a formal structure in this regard. ❖ Alternative view on self-assessment was referred to as a systematic continuous process done by others as well to identify strengths and weaknesses.
2. Managerial support is needed to	The following are aspects required to support

<p>develop a process of self-assessment</p>	<p>professional nurses in the application of self-assessment</p> <ul style="list-style-type: none"> ❖ In-service education is needed to maintain and improve knowledge and develop skills to ensure professional competence ❖ Supervision must be done for management to keep abreast of the professional needs of the personnel ❖ Staff allocation and shortage of staff are aspects that cause job burnout and dissatisfaction amongst personnel ❖ Feedback on performance by management to objectively discuss strengths and weaknesses ❖ Support – physical resources should be readily available for the end user to be able to render high quality professional nursing care
<p>3. Personal values influence a person's commitment to self-assessment</p>	<p>The following personal values are needed to apply self-assessment</p> <ul style="list-style-type: none"> ❖ Interest – mostly influences choice of work and determines job satisfaction

	<ul style="list-style-type: none"> ❖ Motivation – internal motivation is an inner desire to develop, improve and give direction to life; external motivation comes from outside the person and lasts as long as there is a reward for performance ❖ Responsibility and accountability are attributes described as qualities of character and mind and become a integrated part of the self ❖ Honesty, trust, integrity and the development of the self are cornerstones for relationships amongst professionals and between clients and health care providers ❖ Commitment to oneself and others is essential to a sense of continuity of self, professionally and personally. ❖ Caring attitude is central to a person’s self-concept and forms a unified domain for the body of knowledge and practice of nursing
<p>4. Standards of operating room professional nursing practice are needed to guide professional nurses to render quality performance</p>	<p>The following are structures for standards</p> <ul style="list-style-type: none"> ❖ Criteria serve as detailed indicators of the standard and thus make the standard functional

- ❖ **Procedures** provide guidance to increase competence and efficiency and improve accuracy and patient and personnel safety
- ❖ **Assessment instruments and checklists** can be used as evaluation devices to clarify the criteria that should be considered for standards
- ❖ **Guidelines** are important elements in operating room professional nursing practice care and must reflect current standards of care.

3.2.1 Key themes and subthemes

A discussion of the four key themes and their subthemes will follow.

3.2.1.1 Key theme 1: Self-assessment

The terms “assessment” and “self-assessment” are not commonly used in operating rooms. Although the term “self-assessment” was used when the question was asked of the participants, evaluation was the term they used in their response. The term “self-assessment” was described in the study, but the verbatim presentation of the participants reflected the term evaluation.

Assessment and self-assessment were considered necessary activities. Although there was an overall positive attitude towards the idea of implementing a self-assessment process, some participants preferred alternative methods of appraisal. Participants stated that self-assessment as a method of measuring professional performance competence in the operating room to improve quality operating room professional nursing practice may be practicable and have its benefits.

Assessment is described as an ongoing systematic process of information-collection, analysis and interpreting activities to determine performance compared to predetermined standards. It is also defined as a process used to obtain data about the performance of people (Engelbrecht, 2003, p.1). The obtained data from this process is used to document, explain and improve performance (Calpoly, n.d., p.7).

During the assessment process expectations are made explicit and public; appropriate standards and criteria are set; and data is systematically gathered, analysed, and interpreted to determine how well the performance matches these expectations and standards. Assessment is not an end in itself but a vehicle for improvement in the sense that it reflects an understanding of learning as multidimensional and integrated, and revealed in performance within a prescribed time frame (American Association for Higher Education, n.d., p.1). Furthermore, it is a learning experience in itself, as it

demonstrates the results of learning and is perceived as an ever-present reality in any career and personal development (Hill & Howlett, 1997, p.58, 60; MBEC, 1998, p.2). It furthermore serves the purpose of providing information for performance improvement (Engelbrecht, 2003, p.2). In addition, Mills (2003, p.536) attests that assessment is a tool to strategically direct learning.

Research done in the United Kingdom has revealed that there is little evidence of systematic approaches to assess the competence of nurses. It further indicates that there is no evidence for the reliability and validity of instruments for measuring competence (Watson, 2002, p.476). If this is a reality for the nurse education for general nurses, then the question is what about the existence of measurement tools and the whole process of assessment as part of the educational system in operating room professional nursing practice.

Enforced assessment is sometimes perceived as a threat and is resented. On the other hand, when it is introduced as a responsibility of the individual it is ignored (Lenburg, n.d., p.2-3). Self-assessment, also described as an assessment process, is the total responsibility of the individual.

Self-assessment forms the basis of life-long learning and life skills and is an important skill for professional nurses to acquire (Quinn, 2000, p.223). Zeelie (2002, p.63) is of the opinion that self-assessment forms the cornerstone of quality assurance. It has been established as a

necessary skill in higher education to prepare students for lifelong learning and learner independence (Taras, 2003, p.550). The aim of self-assessment in the latter situation is relevant to the development of a self-assessment programme for professional nurses in this study. The first sub-theme of self-assessment is assessment.

Self-assessment of performance is becoming more common because it is recognised as a skill needed for professional practice (Miller, 2003, p.383), and may be experienced as an aspect of the development of professional competence and lifelong learning (Lockett & Sutherland, 2000, p.112).

3.2.1.1.1 Subthemes of self-assessment

Self-assessment

Different views on self-assessment were voiced in the group interviews. Self-assessment was viewed as an

important aspect of the professional and personal development of professional nurses working in the operating room. Participants revealed that, in the absence of formal appraisal, self-assessment is needed as part of the system to improve the quality of operating room professional nursing practice. The following statements are evidence of this.

"I think self-evaluation is evaluating yourself and is good and we must just start doing it. I think it is applicable in this department".

"Ons kan dit doen om te kyk hoe dit ons opbou". [We can do it to see how it build us up].

"Self-evaluation is very important".

"Self-evaluation is a good thing".

"It is very important to evaluate yourself positively".

"Self-evaluation must not be seen as judgement, but as upgrading yourself for improvement".

"Self-evaluation is essential because sometimes we do not know the procedure to know what we are doing".

"Some things you do you know are wrong. Self-evaluation can help you to cut out the wrong things".

"Aan die ander kant sal dit goed wees as jy self-evalueer want dan kan jy niemand beskuldig nie". [On the other hand it will be good if you self-evaluate because then you cannot blame another].

Literature on self-assessment supports and underwrites the statements made by the participants. Fairchild (1996, p.369) attests that introspective self-assessment is sometimes hard to accomplish, but by doing such an exercise professional nurses can continue to develop their knowledge and skills resulting in the strengthening of their professional commitment to deliver quality operating room professional nursing practice. Martin, Oksanen and Takala

(2000, p.2) report that they experienced subjectivity during a process of self-assessment and acknowledge the fact that evaluation by others would be more objective. In support of self-assessment, these authors noted that there are valuable “insights and reflections” that can only be contributed by the individual engaging in the process of self-assessment. It may motivate individuals to learn more as they identify their progress or lack of progress themselves (Ogunniyi, 1986, p.7).

Self-assessment is a learning process in itself during which professionals can become critical about their work and develop their assessment skills while they engage in the activity rather than afterwards. The activity may also provide a structure for discussions regarding quality performance. To enhance internal motivation it may be best for the workers to make comments about their own strengths and weaknesses rather than hearing them from someone else (Burgess, n.d., p.1).

Self-assessment is an inseparable component of the theory of evaluation. It is valuable because it recognises genuine achievement and the development of a positive self-image.

Self-assessment is based on evidence about the standards that performers achieved and therefore acknowledges the

quality of care rendered. The process provides the opportunity for personal and professional development and its effectiveness depends on individual personal goals, self-confidence, assessment abilities, and the perception that practitioners have of themselves (Booyens, 1998, p.601) thus, highlighting the importance of introducing the notion of honest self-assessment as soon as possible after professional nurses have started working in a department (Troskie, 1993, p.544; Link: Self-evaluation, 2004, p.1).

Self-assessment provides the opportunities for professional nurses to take responsibility for their own learning in their own time; encourages a sense of independence and responsibility for critical judgment about their performance; and enhances self-discipline to assure quality

operating room professional nursing practice. It forms the basis for the development of one's character, self-empowerment and moral consciousness (Link: Self-evaluation, 2004, p.1). When professional nurses are confronted with their own moral conscience they may be motivated to reflect on their behaviour to acquire and maintain positive self-assessment (Link: Self-evaluation, 2004, p.2). Searle (2004, p.204) states that it is the responsibility of professional nurses to identify their strengths and weaknesses, correct their disabilities and report their own errors. This view supports the fact that the process of self-assessment can enhance the quality of operating room professional nursing practice. Evaluation is a process for interpreting self-assessment results.

Alternative view

Some of the participants were of the opinion that self-assessment alone is not appropriate. They indicated that professional nurses must assess themselves but must also be assessed by others. These statements have merit in the sense that the self-assessment results can be correlated with the assessment by others' results. The activity in itself can be a learning experience for both parties.

The following statements were made by respondents in favour of the alternative view.

“Self-evaluering en evaluering deur ander moet saam loop sodat die ander kan sien wat jy nie sien nie”. [Self-evaluation and evaluation by others must be done together so that others can see what you are doing].

“Someone else must take the responsibility to evaluate you”.

“Evaluation have to be enforced on you”.

“Evaluation must be enforced. It must be incorporated in the system”.

“Before self-evaluation is done the personnel must first observe one-another until they think they are ready and then do the self-evaluation”.

“Kan miskien werk. Die self-evaluering sal nie by die skrop werk nie. Ander moet jou evalueer. Jy sal nie weet wat jy goed gedoen het nie. Better as julle twee is”. [Maybe it can work. It will not work if you scrub. Someone else must evaluate you. You will not know if you do the correct thing. It is better if you are two].

“Wanneer moet ons ons-self evalueer as ons in die oggend so besig is. Dit sal beter wees as iemand anders dit doen”. [When will we have time to evaluate ourselves if we are so busy in the morning? It would be better for someone else to do it].

Assessment by others may be influenced by the values and beliefs of the evaluator regardless of the objectives or outcomes being evaluated (Oermann & Gaberson, 1998, p.2) and may be regarded negatively. Negative connotations about evaluation are threatening to the self and can impair personal and professional growth and development (Link: Self-evaluation, 2004, p.2).

The process of assessment by others forms an essential part of the appraisal system which is a necessity in operating room professional nursing practice. It is a

systematic process, is continuous and must be fair, relevant and useful (Chen, 2005, p.9). Fairchild (1998, p.7) states that professional nurses need to use scientific and behavioural practice to meet the individual needs of the patient undergoing a surgical intervention. This process is continuous and dynamic and therefore requires “constant re-evaluation” of individual professional nursing practice. The process not only assesses clinical competence, but also the validity and reliability of evaluation methods and techniques against formulated standards and objectives (Mulder, 1992, p.17). It focuses on learning outcomes, describing the desired knowledge, skills, abilities, capacities, attitudes, and dispositions of the learner (Engelbrecht, 2005, p.9). In this context, assessment will determine the degree of competency of operating room

professional nursing practice performance and take place in the actual clinical practice environment (operating room) (Troskie, 1993, p.51; Mulder, 1992, p.17).

In health institutions evaluation could be used in addition to self-assessment. Evaluation of a person's work performance is an essential control measure. The process of evaluation also serves to determine whether standards within an organisation have been adhered to and if set goals have been achieved (Troskie, 1993, p.534). Booyens (1998, p.601) refers to evaluation as the formal way in which information is gathered and assessed in relation to set standards and criteria; it is usually done by supervisors on a regular basis for awards/appraisal. Although health care institutions may have staff appraisal procedures that

are carried out on a regular basis, professional nurses should have the means to assess herself/himself.

Lenburg (n.d., p.2) argues that professional nurses find the process of evaluation of competent performance threatening and usually ignore the requirement from the authorities. Quinn (2000, p.231) claims that evaluation by others can either raise the anxiety levels of performers with negative connotations or enhance performance by their presence and is not perceived as a learning experience while self-assessment is (Tiwari, Lam, Yuen, Chan & Fung, 2005, p.300).

The importance of assessing and evaluating the professional competence of professional nurses is evidenced by the comprehensive competence required by professional nurses. The process determines the effectiveness of nursing care and measures the overall quality

of the care given to clients compared with the expected outcomes (Delaune & Ladner, 2002, p.162), and usually used for performance appraisal for promotion (Engelbrecht, 2003, p.1). Therefore a self-assessment programme for professional nurses to monitor their own growth and development is needed and is relevant for quality care improvement in operating room professional nursing practice, especially in the absence of other professionals to perform the evaluation.

3.2.1.2 Key theme 2: Managerial support

In this study it was evident that participants think that self-assessment is needed and can be done, but managerial support is needed.

The need for managerial support to develop a system of self-assessment was strongly voiced. Managerial support by means of personnel management and in-service education were identified as the most important reasons why self-assessment and even evaluation by others is difficult for professional nurses. Participants also voiced the fact that there is no evidence of a formal and/or informal feedback routine, supervision and/or any form of awards/appraisal system for professional nursing practice competence.

Management is a generic term denoting a function within an organisation. The management process involves formal authority over the working practices of people to achieve organisational goals (Calpin-Davies, 2003, p.4). To unlock the potential of staff, an environment

should be created in which people can learn and teamwork can flourish, and individuals can grow in self-esteem and self-confidence (Otaala & Mahlalela, 2004, p.2).

Positive, active, effective and participatory management enhances professional performance and personal growth in any working environment. The responsibility of management is to gather information regarding professional performance on a continuous basis to “motivate, direct, redirect, check, encourage and engage” professional nurses in positive self-assessment (Van der Merwe, 2000, p.4). Management is therefore accountable for the performance evaluation of its personnel (Martin & Henderson, 2001, p.276; UCLA. Medical Center, n.d., p.1).

Brewer and Nauenberg (2003, p.152) state that there is an intimate relationship between job satisfaction by staff members and commitment by management. People are not inclined to use their talents to the benefit of an organisation unless they are well treated and their needs are provided for (Otaala & Mahlalela, 2004, p.1). The importance of managerial support by means of written standards, policies and procedures that are clear, realistic, attainable, measurable and known to all and the supervision thereof cannot be overemphasised. All personnel should be involved in the compilation of these written standards and the criteria used to evaluate the quality of professional performances (Naude, Meyer, & van Niekerk, 1999, p.242). The latter is an important statement because the people providing the services must be knowledgeable regarding the expected standards and criteria of performance. For successful implementation of these standards, management should provide educational and training programmes (Dale & Oakland, 1994, p.55). Management is also responsible for the provision and management of all resources, such as budgets, staffing, equipment and supplies (AORN online, n.d. a, p.3).

Career advancement, job satisfaction, preventing the job burnout syndrome, and appropriate in-service education with a structured feedback system should be the core of managerial

support for operating room professional nursing practice (Searle, 2004, p.77). These expectations could be met by means of a systematically planned process of assessment with resulting improved professional nursing performance (Naude et al., 1997, p.239). A self-assessment programme may encourage professional nurses to adhere to the prescribed standards and eliminate subjective appraisals done by supervisors (Dienemann, 1998, p.471). However, the important aspects are to develop, implement, and sustain a sound in-service training programme that forms part of the educational system for quality operating room professional nursing practice improvement under the supervision of management.

3.2.1.2.1 Subthemes of managerial support

In-service training

In-service training aims to keep personnel in line with international technical and professional operating room nursing practice development. In-service training is defined as education to help individuals to develop their skills in a specific area of employment after they have started with work responsibilities. Such training takes place during a break in the work schedule. If in-service training in any institution is absent, then the opportunity to enhance knowledge and improvement quality of practice is problematic.

Participants emphasised the importance of in-service training by the following statements.

“Wat ek graag will hê is opleiding op ‘n ander plek”. [What I want is training somewhere else].

“We do things wrong because of lack of knowledge”.

“We do not know the right procedure because there is a lack of in-service training”.

“Daar moet in-diensopleidings, werkswinkels en seminare bygewoon word”. [Attend in-service training, workshops and seminars].

“If you are not sure about the correct method of doing things you can ask someone to demonstrate the correct procedure”.

“Because some do not know the correct way things should be done”.

“Ander mense moet indiens-opleiding aanbied”. [Other people must present the in-service training].

“Through in-service training personnel will know what to do”.

The advancement of surgical technology with corresponding technical knowledge development does not supersede the responsibility of professional nurses to render holistic patient care (Puterbaugh & Anderson, 1991, p.1). This emphasis on the need for in-service training as part of the educational system with an assessment component to enhance quality improvement in operating room professional nursing practice seems to be an international phenomenon. It is portrayed in the Indiana University Hospital, for example, where nurses were not prepared for the work with limited exposure to the operating room activities prior to the onset of them filling the positions (IHETS, n.d., p.1). Continuous education and in-service training are designed and offered to maintain and improve knowledge and develop skills to ensure professional competence (University of Kentucky, n.d., p.3) thus preventing a backlog of developing that will negatively affect professional practice (Kaye-Petersen, 2001, p.5). It is, however, a fact that most operating room managers are expert clinicians, but are most often inexperienced in teaching. Research done in Turkey shows that management guidance of others often fails leading to some staff members being overloaded and an ineffective educational and assessment system (Addis & Karadag, 2003, p.31).

Although institutions initiate the process of in-service training, it remains the responsibility of the individual to attend (Perioperative Learning Center, n.d., p.1). Any activity pertaining to operating room professional nursing practice will be more effective and successful if there is a component of supervision attached.

Supervision

Supervision is generally defined as “the active process of directing, guiding and influencing the outcome of an individual’s performance of an activity” (AORN online, n.d. b, p.2). Supervision is also defined as a “formal process of professional support and learning” enabling individual professional practitioners to enhance knowledge and become competent. Supervision furthermore guides the individual practitioner to assume responsibility for their own practice and to “enhance consumer protection and safety of care in complex clinical situations” (Quinn, 2000, p.429).

Environmental safety can be assured by means of supervision of functions and management of equipment as well as the supervision of the quality performance of professional nurses by means of an assessment structure. In the absence of supervision or in-effective supervision and the lack of guidance by supervisors, may lead to low quality performance because professional nurses may not know what is expected of them.

The following statements from participants' highlight the expectations regarding managerial involvement in the form of supervisors. These statements indicated that expectations regarding supervision are not met.

"There is no one to check on you".

"Every quarter of the year the chief registered nurse must visit each theatre, evaluate the personnel and give report to everyone about her findings".

"Supervisor must see that self-evaluation is done".

Claveirole and Mathers (2003, p.52) describe supervision as a "negotiated contractual relationship" between management and professional nurses in which professional nurses will

give account of their performance with the purpose of developing their competence to provide high quality operating room professional nursing practice.

Quinn (1997, p.186-187) states that, in nursing, supervision is the least developed and least well-defined and the models they use are adapted from other disciplines. Managerial support includes the supervision of the quality of clinical practice by means of performance evaluation. Managers have to be knowledgeable of the needs of the personnel and be able to meet their needs by means of meetings, in-service training, continuing education and overall involvement in the day-to-day activities in the operating room (UCLA. Medical Center, n.d., p.1-2). During the process of supervision management will be able to observe the status of the staff in terms of quality and quantity.

Staff allocation and shortage

A creative challenge confronting all managers is the demand for appropriate qualified personnel for quality operating room professional nursing practice (Tenzer, 2000, p.754). Shortage of staff can lead to medical-legal risks because of job-burnout syndrome. Improper allocation of staff may result in incompetent professional nursing practice performance that can be traumatic to patients/clients and health professionals.

The following statements made by participants are evidence of the fact that the quality of operating room professional nursing practice is impaired because of improper staff allocation and a shortage of staff.

“We do things wrong because there is shortage of staff”.

“We ignore the things we do wrong because of work overload”.

“Ons doen dinge verkeerd want daar is nie tyd nie en ‘n tekort aan staff”. [We do things wrong because there is no time and a staff shortage].

“Soos met ‘staff’ te kort slaan mens dinge oor en steriliteit kom ook in die gedrang”. [With staff shortage you skip things and sterility is also threatened].

“Medical legal hazards is baie hoog hier as gevolg van te kort aan staff en goed”. [Medical legal hazards are very high because of the staff shortage and things].

“Daar moet toegesien word dat daar genoeg personeel vir elke teater is – vier per teater”.
[There must be enough staff for every theatre – four per theatre].

A positive statement regarding self-assessment in spite of staff shortages is as follows.

“Self-evaluering is belangrik. Al is daar tekort kan jy jouself evalueer”. [Self-evaluation is important even though there is staff shortage].

The lack of student exposure to the operating room practice may have contributed to the decrease in student interest in operating room nursing practice after graduation leading to a shortage of staff in the operating room (Happell, 2000, p.1; Sigsby, 2003, p.1). This statement may be viewed as universal and is also applicable to the situation in Namibia.

The required pattern of staff allocation is at least two staff members for each operating room (University of Kentucky, n.d., p.4). In the opinion of the researcher a third staff member, excluding the anaesthetic assistant, is needed for circulation. This depends on the turnover in each operating room and the speciality of the surgical procedures. Therefore management should be constantly supervising the daily schedule and its effectiveness in allocating staff members appropriately. Situations where staff are inappropriately allocated according to experience and work load, may lead to burnout syndrome with negative consequences such as emotional exhaustion, lack of self-care and attitude, and behavioural change. Malpractice and medical legal risks may result from this.

The staff shortage is not a recent phenomenon and is not restricted to a specific geographical location. Many countries experienced a nursing shortage throughout the 1970s to the 1990s (Brodie, Andrews, Andrews, Thomas, Wong & Rixon, 2004, p.721). In most developing countries, including Namibia, issues such as ageing of professional nurses and a diminishing workforce because of migration, makes it difficult to meet the demands of the profession.

A recent analysis of 16 major studies done in the United States of America on the nursing shortage reflects that a shortage of staff in the operating room is a reality. The results also show that implemented solutions are inadequate and health institutions are faced with workforce crises (Beyea, 2002, p.1). Recent literature states that operating room nursing practice is being threatened because of the difficulty in attracting a sufficient number of nurses for operating room professional nursing practice (Happell, 2000, p.1). This situation may be the cause of job burnout and dissatisfaction amongst incumbent operating room professional staff members. It may also lead to the appointment of technicians to do the job of a professional nurse (Van Beuzekom & Boer 2006, p.1). This may also be the reason why scientists in the United States of America are developing robots so that non professionals are employed in preparing the patient for surgery. The problem can probably be attributed to the fact that operating room nursing science as a study unit is absent in the basic nursing diploma course. Another factor contributing to the situation may be the increase in non nursing staff members taking over the role of the operating room professional nurse. The latter situation is currently applicable to Australia, the United States and the United Kingdom (Happell, 2000, p.1) but does not apply to Namibia at present.

A survey done by the Gallup Organization of Surgical Information Systems in the United States of America revealed that more than “17 nursing care hours per day are not filled in operating rooms across the country” (AORN online, 2000, p.1). There has been a shortage in the nursing labour markets for more than forty years (Brewer & Nauenberg, 2003, p.144) and there is a similar situation in the operating rooms in Windhoek. This kind of staff shortage makes extra demands on existing personnel because of increased hours and they sometimes have to work through their tea and lunch breaks. In analysing these situations it becomes evident that assessment of practice performance by someone else is not possible on a regular basis. Thus it is believed that self-assessment may be a better option for ensuring that there is some kind of feedback of professional nursing practice performance.

Feedback

Feedback is defined as information conveyed through the communication of results and/or responses with the aim of enabling improvements to be made (Feedback, n.d., p.1). Feedback is described as knowledge of results of performance to guide future knowledge and skill development (Oermann & Gaberson, 1998, p.171). Participants regard feedback on performance as the responsibility of management. In the absence of a feedback system there cannot be proof of any level of quality professional performance and management will not be able to report on the performance of individual staff members.

Participants' remark on what happens when there is no feedback from management as part of the system in the operating room.

“Medical legal risks happen, but there is no feedback on any investigations done and no research”.

“Spot evaluation is good with feedback after the procedure”.

Feedback may be unintended and can be negative or positive (Define that, n.d., p.1). The results of a study done by Hardyman and Hickey (2001, p.58) reveal that newly qualified nurses regard constructive feedback on their clinical skills as a very important aspect of managerial support. However, there is a possibility that learning will not take place, because the learner may not know what to do differently next time when supervisors give negative feedback or no feedback. Negative feedback may also be taken personally. It is therefore argued that assessing your

own mistakes becomes feedback, which the individual can use to develop competence (Alberta Assessment Consortium, n.d., p.5), because they personally experience and identify the activity done wrong and those done correctly. The identification of weakness should be used to encourage professional nurses to discuss these issues and take steps for improvement (UNCKLE Guide to the subject review, n.d., p.2). Troskie (1993, p.534) and Engelbrecht (2005, p.173) state that feedback should primarily focus on positive aspects for the purpose of building the learner's self-image. It is the opinion of the researcher that both negative and positive feedback is needed in order to enhance quality in operating room professional nursing practice.

The general expectations are that professional nursing performance should improve. However, this can only be realised when management support is effective and adequate especially regarding the physical resources.

Support – physical resources

Management has the responsibility to mobilise a variety of essential resources to support any objective or goal in a department (Creativity and the management process, n.d., p.1). The availability of physical resources for a surgical intervention is very crucial. The operative procedure cannot be done successfully, the surgeon and nursing personnel will be stressed and the patient can be harmed, if equipment or supplies needed is not available or broken.

One participant's expectations regarding physical resource support from management, which was supported by other participants by means of nodding the head and making agreement sounds, was as follows.

“Medical legal hazards are high, we don't have gowns and drapes and sutures and a lot of things to work with. This is not good”.

Operating room services are regarded as the most resource-intensive area of any hospital. Therefore, there is a need for management to provide maximum resource utilisation, to minimise expenses and to create a positive relationship between patient, surgeon, operating room professional staff and the environment (PECA, n.d., p.1). The results of research carried out by Holmström and Larsson (2005, p.152) shows that nurses are of the opinion that a lack of resources hinders health care providers from acting in the interests of the patient.

Before quality operating room professional nursing practice can be assured, professional nurses need to assess the patient's needs and plan accordingly. Thus, professional nurses (scrub nurse) have a responsibility to ensure that the special instruments, supplies and/or equipment required is available (AORN online, n.d. a, p.1). Armstrong (2006, p.1) supports this statement by arguing that although management is responsible for ensuring that equipment and supplies are available it is still advisable for the end user (scrub nurse) to inform management of the type and quality required before purchasing.

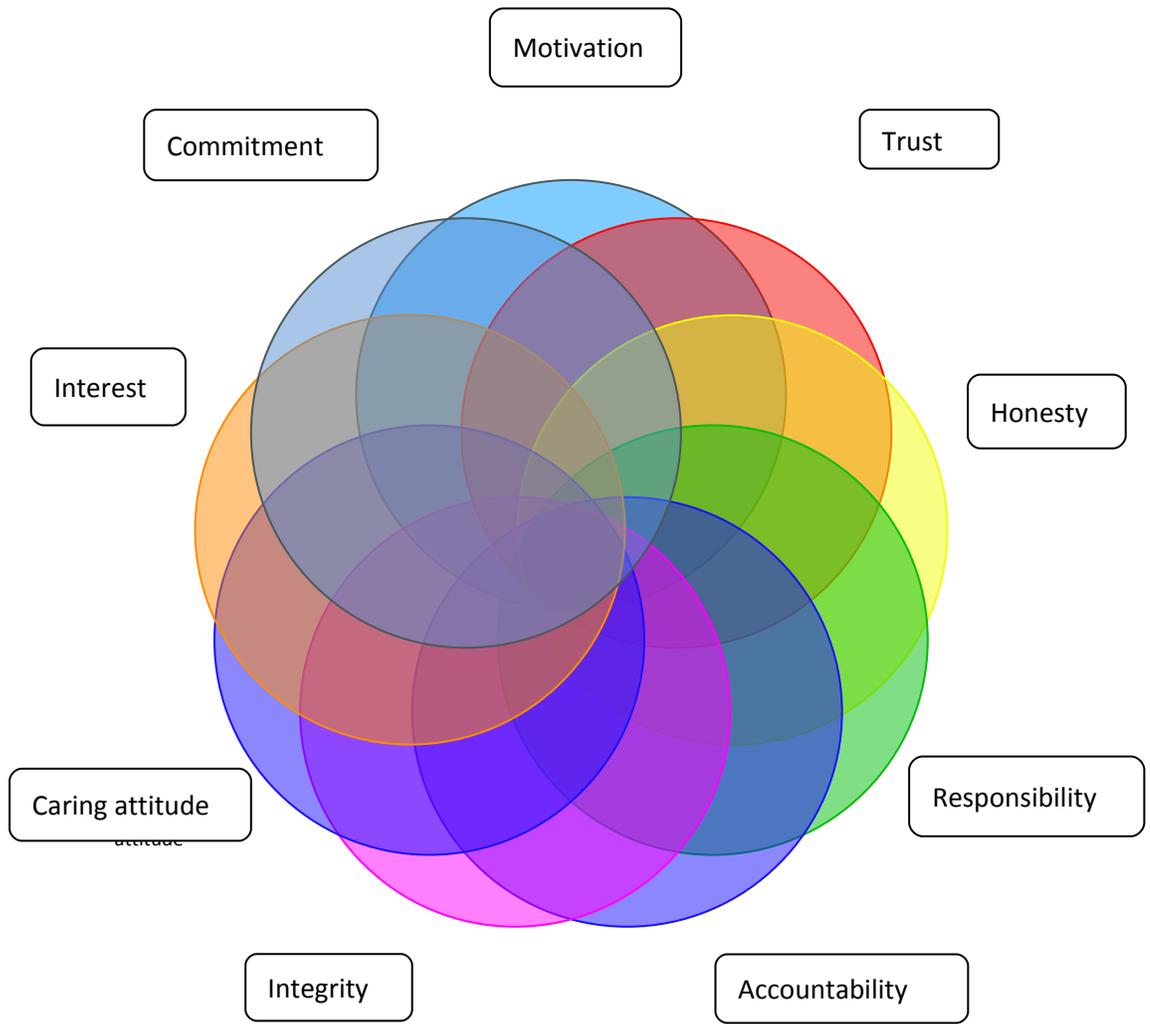
The key theme personal values and its subthemes were identified from the focus group discussions in phase 1. These will be discussed next.

3.2.1.3 Key theme 3: Personal values

Personal values influence a person's commitment to self-assessment. Participants considered personal values very important for quality improvement in operating room professional nursing practice.

Values are the considerations and beliefs that are presented as being significant and true in guiding an individual's actions (King & Broom, 2002, p.2). All the concepts that describe personal values are interlinked with one another. An excellent performer is **committed** to the standards prescribed for quality performance. Committed people are usually driven by **interest** in the subject or are **internally motivated**. Motivated people are **responsible** and **accountable** for their actions. When one accounts for one's actions they are **honest** and **trustworthy**, therefore they act with **care** and have an unquestionable **integrity**. Personal values also influence **behaviour** (Mc Clelland, 2000, p.33). Personal **attitudes** and **behaviour** of individuals in a working environment usually determine the working climate which in turn affects individuals and in the end the whole community (Bohner & Wänke, 2004, pp.81, 82; Pervin, 1996, p.94; Searle, 2004, p.174, 212). Fairchild (1996, p.145) links the words "caring, discipline, vigilance, honesty and integrity" to surgical practice. Personal values will hence be discussed under the subthemes as indicated table 3.1 pages 51, 52. Figure 3.1 illustrates how the subthemes of personal values are interlinked.

Figure 3.1 An exposition of how the concepts of personal values are interlinked.



3.2.1.3.1 Subthemes of personal values

The first subtheme of the theme “personal values” that will be discussed is “interest”.

Interest

Interest is defined as “a relatively constant, positive or negative directedness towards a specific activity” (Gerdes, 1988, p.251). People can be very frustrated if they have to do something and are not interested in that activity. This situation can lead to be very harmful to the patient if professional nurses are not interested in their work.

Participants regard interest as a very important aspect of rendering quality operating room nursing care.

“We do things wrong because of lack of interest”.

“Mense stel nie belang in hul werk nie”. [People are not interested in their work].

Interest mostly influences your choice of work and determines job satisfaction. The individual’s interest in the

work has a direct effect on internal motivation and interest by management regarding the progress of professional nurses this in turn has a direct influence on external motivation.

Motivation

Motivation is an important factor in the learning process (Quinn, 2000, p.15-16) and concerns energy, persistence and direction (Ryan & Deci, 2000, p.69). Factors such as intrinsic and extrinsic interest and fear of negative sanctions may have an influence on motivation (Pollard, 2002, p.157).

Internal motivation

Internal motivation refers to the drive from within to accomplish goals and values. These values are determined by oneself because of one's beliefs and therefore one takes responsibility for actions taken (Weinstein, 2001, p.1; Changing minds, n.d., p.1; Carley, n.d., p.2.). In the

absence of internal motivation there may be a tendency of an 'I don't care' attitude, that can have devastated consequences for patients and professional nurses.

The following statements were made by participants on how self-assessment can internally motivate professional nurses' competence.

“Dit sal ook dien as ‘n motivering wanneer ek ‘n kort pad wil vat”. [It will also serve as a motivation when you want to take short cuts].

“Self-evalueering is baie goed om jouself te ondersoek. Moeding jou aan. Dan kan jy weet waar om te begin en eindig. Die goed wat jy doen sal altyd by jou bly. As jy nie self-evaluering doen nie hoe weet jy. Wanneer jy klaar ge-evalueer het gaan dan na ander om by te voeg wat jy nie gedoen het nie”. [Self-evaluation is good for examining yourself. Motivate you. Then you can know where to begin and where to end. The things that you do will always stay with you. If you do not do self-evaluation how will you know? After the evaluation you can go to other to add what you did not do].

“Evaluering hang van myself af en hoe ek my wil ‘improve”. [Evaluation depends on me and how I want to improve myself].

Internal motivation derives from an inner desire to develop, to explore, to learn, to “extend and exercise one’s capacities” (Ryan & Deci, 2000, p.70), to improve and give direction to life. It

addresses the life needs of a person and the urge to strive for a goal that is worthy of the individual (Hill & Howlett, 1997, p.121). It has a positive connotation for everything an individual wants to do. It has the “most global impact on self” (Osborn, 1996, p.34; More-Selfesteem.com, n.d., p.1). Internal motivation stimulates the urge to learn and forms a natural process of identifying and correcting one’s own weaknesses and learning from them (Link: Self-evaluation, n.d., p.3; Pervin, 1996, p.257). Internal motivation can be a drive to self-assessment and to maintaining positive self-assessment that underlies behaviour (Osborn, 1996, p.37). Therefore one can assume that it involves developing skills to enable the individual to deal effectively with the environment (Pervin & John, 1997, p.8).

External motivation

Participants’ experience regarding motivation by management was the following.

“We do things wrong because there is absence of motivation from management”.

External motivation comes from outside the person and is based on objective evaluation (Link: Self-evaluation, n.d., p.1). These external motivations can be presented as negative events, people who encourage you, a better post and/or a better salary (More-Selfesteem.com, n.d., p.1). Professional nurses may be externally motivated because they want to fit into the

operating room nursing practice community (Bohner & Wänke, 2004, p.82). External motivation is observed as lasting as long as there is a reward for performance. A motivated person, whether motivated internally or externally, will take responsibility for her/his task and understand that they are responsible and accountable for their actions and omissions.

Responsibility and accountability

Professional nurses are responsible and accountable for outcomes identified during a surgical intervention. The responsibilities include all the preparations that need to be done prior to the onset of the surgical procedure, assistance during the surgical procedure complying with the aseptic principles and the care of the patient after surgery to the point where they report to the recovery room personnel.

The statements made by the participants indicate that professional nurses do not feel responsible and accountable for the patients' wellbeing as follows.

“Sometimes the medical legal risks are minor with no danger”.

“You will not harm the patient because the things you do wrong is simple and you think you can leave it like that”.

“The surgeon is in a hurry, so you do not do the correct things”.

“Surgeons force you to scrub fast. You then just wash your hands and do not scrub according to the prescribed method”.

Berlandi (2002, p.1) states that accountability with responsibility is one of the foundations of professional nursing care practices. Lucas (1995, p.11) further argues that responsibility and accountability are attributes/behaviour described as a quality of character and mind and become an integral part of the self.

Delaune and Ladner (2002, p.441) state that a nurse demonstrates accountability when she/he is caring and compassionate towards patients. Accountability is the demonstration of the quality of being answerable for decisions made, continually gaining knowledge (Berlandi, 2002, p.2) and developing skills. The person that demonstrates responsibility and accountability can be left with responsible tasks and will cope and not leave the work undone because it is her/his teatime. Even if the surgeon is in a hurry, professional nurses are legally accountable for their actions (Legal Eagle Newsletter, 1998, p.1). Therefore they should not allow surgeons to pressurise (The Nurse Friendly, n.d., p.2) them into failing to comply with the standards of operating room professional nursing practice.

Although responsibility refers to a person’s choice it is not an option in nursing. Professional nurses are responsible for the manner in which they execute their professional duties. These responsibilities expand with the increase in new technology (Berlandi, 2002, p.2). Therefore

there is a need for professional nurses to continuously enhance their knowledge and develop their performance practices. Linked to this statement is the argument that the purpose of self-assessment is to promote responsibility (Delaune & Ladner, 2002, pp.162, 168).

Within the nursing profession, accountability is an integrated part of and an important method for demonstrating commitment to quality nursing care (Delaune & Ladner, 2002, pp.165, 168).

Commitment

Commitment is a promise to behave in a particular way or to do something (Hornby, 2005, p.290).

The following statements by participants reflect the behaviour of professional nurses who are not committed to her/his profession.

“Because you will not evaluate yourself because people are lazy”.

“Wanneer indiensopleiding gehou word kom almal nie”. [When there is in-service not everyone turns up].

"Some people are forced to work in the theatre. So you just do the job".

"You do wrong because you are late".

"A person must have a will to be competent and committed to what she is doing".

"Almal moet alles ken en weet waar om alles te kry". [Everyone must know everything and know where to find everything].

According to Gerdes (1988, p.96) commitment is the "ability to believe in the truth". Commitment is being interested and valuing who one is and what one is doing. The latter author also indicates the importance of involvement in all life situations. It is also a reality that the degree of commitment may change because life situations change. However, it is essential to believe that commitment to yourself and others is essential to a sense of continuity of self, professionally and personally. Therefore it is imperative for the individual to be in contact with him or herself, who they are and how they will achieve their goals in life. In the context of the latter the development of the self is needed.

Development of the self

During the discussion an uncertainty was sensed when the focus group discussion started and the question, “What are your perceptions regarding self-assessment as part of the system to improve the quality of operating room professional nursing practice”, was posed by the researcher. In the opinion of the researcher, the participants did not think of the term self as being an important part of their development, professionally and personally.

Nursing as a profession is perceived as a career. Career management is a lifelong process (Career Counseling, n.d., p.1) and an important aspect of this process is to know yourself. Carper (1999, p.16) argues that a person cannot

know the self, but merely strives to know the self.

Knowing yourself is being aware of what you want to do, where you want to do it and when you want to do it.

Professional nurses as adult learners recognise the uniqueness of self in the sense that they have their own style of learning, goals, pressures, commitment, and motivation. There is also a possibility that professional nurses may resist learning when conditions are not compatible with their self-concepts if they are in contact with themselves (Nelson, 1999, p.5).

Osborn (1996, pp.1,2) defines self as “the sum total of beliefs you have of yourself. It includes attributes, abilities, attitudes and values that an individual believes define who he or she is”. The self is also defined as an “integration of self-concept, self-esteem and self presentations” (Osborn, 1996, p.2). Bohner and Wänke (2004, p.4) support the latter definition by stating that one has to explore the cognitive, affective, and behavioural facets of the self if you want to know yourself. Therefore it can be assumed that attitudes towards day-to-day responsibilities

influence behaviour and actions. However, learning can only be meaningful if it does not “threaten the individual’s perception of the self” (Link: Self-evaluation, n.d., p.4). Therefore, it is important that the assessment process should be directed towards the actions of a person and should not be experienced as a bearing on the value of the person (Hill & Howlett, 1997, p.59).

Operating room professional practice with regard to both theory and practice are equally important. The theoretical principles are guidelines for the application of these principles in practice. Although operating room nursing practice is perceived and experienced as a hands-on, very practical, procedurally orientated endeavour, the development of the professional nurse as a whole is important for high quality nursing care and can be best observed in the execution of their professional practice performance.

The development of the self as a whole entails the development of the cognitive, affective and behavioural facets of the self. The separate discussion on the facts will emphasise the need of the participants for the development of the self.

Cognitive facet

According to Osborn (1996, p.2) the **cognitive facet** of the self requires an understanding of the processes individuals use to know themselves. A person needs to know what you want and

what your abilities are. It is also important to be able to evaluate your knowledge base in accordance of what is expected of you in a specific area of duty.

The statements made by the participants reflect that their understanding of the cognitive fact is the enhancement of scientific knowledge as indicated below.

"I agree that self-evaluation is needed because you can upgrade your knowledge".

"Mens moet vermoemens en kennis hê". [People must have abilities and knowledge].

When you know yourself it is easy to identify strengths and weaknesses and redirect your focus towards performance excellence. Professional nurses are expected to enhance their knowledge (cognitive domain) to understand why it is important to do certain activities in a certain manner. Professional nurses cannot just use their knowledge to produce excellence, but have to develop their affective facet of the self because their patients/clients' needs extend beyond the physical. In operating room practice, professional nurses tend to refer to patients by the surgical procedure they are undergoing and not by their names, for example, a hysterectomy. This might degrade the patient to something and not be regarded as a human being in need of emotional support.

The affective facet of the self highlights the "manner in which individuals evaluate themselves" (Osborn, 1996, p.2). During the process of developing this facet professional nurses learn to

identify their value and feelings (affective domain) regarding the patient as a human being with specific needs. Even though there are standards and criteria, assessment remains a subjective process (Oermann & Gaberson, 1998, p.3). The development of the affective facet of the self can be evaluated in the behaviour of professional nurses towards the patient especially when the patient is under anaesthesia.

The behavioural facet of the self addresses the manner in which individuals present themselves to others (Osborn, 1996, p.2). These manners are experienced by others and oneself through their senses and assessed accordingly. It is of the utmost importance that professional nurses develop their skills (psychomotor) for competent performance because of the clinical and practical nature of operating room professional nursing practice (Aucoin, 1998, pp.213, 216).

Surgical patients receiving general anaesthesia cannot experience the affective, cognitive and/or psychomotor developmental level of professional nurses. However, these skills are portrayed in the execution of the psychomotor activities that are dictated by operating room professional nursing performance standards. Whenever there is observable behaviour (activities), someone present will provide feedback on the activity as perceived. This feedback may also come from within an individual in the form of self-assessment (Osborn, 1996, p.16). Hill and Howlett (1997, p.59) support the latter statement by stating that an important skill for an employee to have is an objective awareness of one's own behaviour. This can enhance the

ability for individual assessment of strengths and weaknesses with planned corrective actions.

People who are in touch with themselves are usually trustworthy and honest.

Trust and honesty

Trust is described as the key to the contract that professional nurses commit themselves to regarding the legal and ethical parameters of their practice and society (Searle, 2004, p.74).

Honesty is a human quality entailing communicating and acting truthfully towards others and oneself about one's motives and understanding one's own moral core (Wikipedia, n.d. a, p.1). It means expressing one's true feelings. Honesty is a skill that can be learned when you believe that you have feelings that are neither right nor wrong, but can be used to communicate certain aspects to others (Emotional Intelligence, n.d., p.1, 4). Honest people can be trusted and depend on. These are characteristics very valuable and necessary in the nursing profession because patients are dependent of the honesty and trustworthiness of health professionals.

Participants regard honesty as an important personal value in applying self-assessment successfully.

"Self-evaluation is good but it is not done honestly".

"If you do it honestly it can be used for improvement and a refreshment course can be attended".

"People are evaluation but it is not always the truth because it is my friend or because they fear to evaluate them negative they think you are the alien".

According to the Western view, honesty is an unbiased approach to the truth. The requirement of being honest applies to all behaviour. Behaviour and perceptions go hand in hand. The confusion regarding honesty and the failure of it to become a norm in a specific society is because honesty has been marginalised to specific behaviour and changes all the time. Thus it may be the cause of conflict in human relationships and may result in feelings of making yourself vulnerable (Emotional Intelligence, n.d., p.4). Honesty is a human quality related as a value towards others and oneself (Wikipedia, n.d. a, p.1). Honesty entails both quality and ethics.

Trust and honesty can be described as the cornerstones for relationships between professional colleagues and between the patient/client and the health care provider. Furthermore, others will have faith in you if you are honest to yourself and to the purpose of the task. Honesty is the connection between thoughts, word and actions. What you think must be spoken and what you say must be done. Honesty must come from within an individual with no contradictions and/or

discrepancies so as to prevent confusion and mistrust in the minds and lives of others (Living Values Education, n.d., p.1,2). Honesty suggests a refusal to lie or deceive at any time in any way (Online Merriam-Webster, n.d., p.1). Dishonesty leads to the loss of self-respect, loss of integrity, loss of respect by others and loss of peace with oneself. The reasons why professional nurses are dishonest may be to protect themselves, the patient and/or other professional practitioners (Weston, Buchda, & Bergstrom, 1998, p.307). Dishonesty challenges trustworthiness and queries the integrity of a person.

Integrity

“Integrity is doing the right thing even if nobody is watching” (Hidalgo, 2002, p.8). Integrity is defined as the “inherent complex of attributes that determines a person’s moral and ethical actions and reactions” (The Free Dictionary, .n.d., p.1) and is measured by their conduct. Integrity arises as a “dynamic intrinsic quality of individuals” (Jacelon, 2004, p.552). In contrast to the statements of these authors, Hidalgo (2002, p.1) argues that integrity is not necessarily inherent within a person’s personality, but must be taught and learned over a lifetime. If truth and honesty become a lifestyle, personal integrity can become inherent and stand the tests of any circumstances, situations and/or conditions professional nurses face during their years of practice.

The following participants' statements indicate how integrity can be observed.

“You can evaluate your shortcomings even if no one is near”.

“Self-evaluering kan aan die einde van die lys gedoen word. Dis iets wat jy in jouself inbou. Deel van integriteit”. [Self-evaluation can be done at the end of the list. It is something that you build in yourself. Part of integrity].

The expectations of integrity in the nursing profession and of adult learners are high (Anastasi, 2004, p.13). In professional nursing practice it is imperative to maintain integrity by means of truth and honesty in all thoughts, decisions, actions and reactions (Hidalgo, 2002, p.2). The latter statement is supported by King and Broom (2002, p.1) who argue that professional nurses are responsible for nursing decision making that is appropriate for that moment in a specific situation not only clinically and technically, but also morally.

The patient/client relies on the integrity of professional nurses to acknowledge their needs and to meet them. Personal integrity is inseparable from the quality of health care service and can be identified by the honest and committed care given without being evaluated by others (Weston et al., 1998, p.307). For improvement of quality there should be a concern for integrity, openness and self-renewal (Badley, 1992, p.23). Professional nurses have to stand firm on principles and guard against the possibility that their integrity gets lost because they

are afraid of the consequences when the truth needs to be told. Truth and honesty are part of the foundational aspects of true integrity (Hidalgo, 2002, p.1).

Integrity can influence and be disclosed through the caring attitude of an individual towards others.

Caring attitudes

The public complain that nurses have become too academic and uncaring while nurses claim the moral high ground of professional caring (Calpin-Davies, 2003, p.3). Caring and attitude will be discussed separately because the responses of the participants evaluated them as separate concepts.

Caring

Nursing is defined as an art and science. The art reflects the caring aspect of nursing. Caring is positioned as the central and unified domain for the body of knowledge and practices in nursing.

The following participant's statement supports this argument.

“Veiligheid van die patient is belangrik en ‘n medical hazard”. [Safety of the patient is important and a medical hazard].

Nurses used the term “care giving” and talk about nursing care activities, but there is very little research and systematic investigations on the phenomenon and nature of caring, therefore it is difficult to define (Leininger, 1981, p.3; Karaöz, 2005, p.32). However, caring was identified as the “essence and unifying domain of nursing” and has acquired particular significance over the last 20 years (Karaöz, 2005, p. 32). Leininger (1981, p.9) defines caring from two perspectives. Firstly, in a generic sense caring is defined as “assistive, supportive, or facilitative acts towards or for another individual or group with evident or anticipated needs to improve a human condition or life way”. Secondly, professional caring is defined as “those cognitive and culturally learned actions, behaviours, techniques, processes, or patterns that enable or help an individual, family or community to improve or maintain a favourable healthy condition or life way”. Newman, Sime and Corcoran-Perry (1999, p.21) argue that nursing is the study of caring that explains health and wellbeing of individuals. All the definitions describe the expected characteristics of professional nurses.

Caring is also defined as a relationship that expresses the feeling of concern, regard and/or respect human beings have for one another with a personal sense of commitment and responsibility (Boyle, 1981, p.40-41; Karaöz, 2005, p.32). Although care is considered to be at the heart of all health services little attention has been given to this concept by humanistically oriented scientists and caregivers (Leininger, 1981, p.4-5).

According to Snyders (1995, p.29) caring still requires the nurse to be attentive to the patient/client even though it is evident in operating room professional nursing practice that, with the enhancement of science and technology, nurses are inclined to shift from caring for the patient/client to the skilled management of machines. When admitting a patient to the operating room professional nurses need to give their full attention to the patient enabling them to observe the emotional status of the patient. This interaction can be monitored and appreciated by the patient. On the other hand, when positioning the patient on the operating table some patients will be under anaesthesia and not able to respond to the competence of the practitioner. It is, however, the duty of professional nurses to care enough about the patient's wellbeing by understanding the principles of positioning of the patient and the complications that may occur if they do not adhere to these principles (Ray, 1981, p.31). These actions will portray their knowledge, the integration of knowledge into practice, and their commitment and trustworthiness towards their professional responsibilities.

Attitudes

Quinn (2000, p.105) regards attitude as an "internal state that influences" the choices people make that direct their actions. Attitudes are closely related to an individual's opinions, beliefs and experiences. They can be defined as a tendency to respond either positively or negatively to stimuli (TIP: concepts, n.d., p.1). A positive attitude of professional nurses towards their work is a valuable asset to the nursing profession in terms of quality performance.

The participant's are of the opinion that attitudes influence the quality of professional practice.

"Some people have the wrong approach and attitude towards the work".

"Ignorance. We ignore the danger because of wrong attitudes".

Professional nurses must first of all be aware of their attitude towards the quality of the operating room nursing practice they render before they can judge and/or change their behaviour.

Attitudes may be central to a person's self-concept, and may influence perceptions and reflect the intensity of feelings and beliefs. Therefore they direct individuals to act towards situations in a particular way (Quinn, 1997, p.80). Attitudes can change depending on the presence or absence of rewards when beliefs are unbalanced and there is pressure on individuals to change and in the presence of inconsistency in their beliefs. It is not possible to observe attitudes directly, but they can be observed through behaviour. It is important that change in behaviour in operating room professional nursing practice is driven by attitude change rather than by control of superiors.

Another important aspect is the fact that attitude change without behaviour change will not be sufficient. There has to be attitude behaviour consistency in any given situation of operating room professional nursing practice (Attitude-behaviour consistency, n.d., p.1-3). Therefore an assessment process is needed (Bohner & Wänke, 2004, p.8-14). The use of self-assessment may be a tool for individuals to become knowledgeable regarding their attitude towards their world. This knowledge may be used to control behaviour by changing their attitudes.

Standards are the last key theme that derived from phase 1. The subthemes of standards will be discussed next.

3.2.1.4 Key theme 4: Standards

Standards of operating room professional nursing practice are needed to comply with expected quality performance. Participants identified the lack of appropriate guiding documentation to enable them to maintain high quality operating room professional nursing practice. In their experience, self-assessment will be difficult to execute owing to a lack of established standards and criteria and a checklist against which to measure their performance.

Standards contained in written policies that are realistic and achievable guide professional nurses towards quality care rendering (Rothrock, 2003, p.13). Standards and quality go hand in hand and lie at the heart of quality-driven institutions (Gabel, Kulli, Stephen Lee, Spratt & Ward, 1999, p.151). It is difficult to measure quality without standards against which to judge it. The subthemes, guides, criteria and procedures, underwrite standards.

Only one respondent voiced the necessity for standards for them to be able to assess themselves. The other participants were in agreement, nodding their heads and/or saying “yes, I agree”.

“Standaarde moet aan internationale verwagtinge voldoen”. [Standards must comply with international standards].

Atkinson and Fortunato (1996, p.4) define standards as a “written document sanctioned by an authoritative body that directs or guide interventions to achieve objectives”. According to Fairchild (1996, p.33) standards reflect the definition, purpose and frame for all the health care activities in the operating room setting.

Fairchild (1996, p.36) further states that standards of professional performance address the quality of care by evaluating the “quality and appropriateness” of nursing care systematically and that performance appraisal occurs when the practice of the professional nurse is evaluated in the context of “professional standards and relevant statutes and regulations”.

Standards define the quality of operating room professional nursing practice in a written, authoritative value statement of rules, conditions and actions. These standards describe the level of performance and may be used as a tool for measuring the quality of operating room professional nursing practice (Atkinson & Fortunato, 1996, p.24; Katz & Green 1997, p.9; Rothrock, 1996b, p.25).

Booyens (1998, p.20) is of the opinion that standards provide an expression of ideal practice and, regardless of the practice settings, professionals must be knowledgeable and practise according to these standards within their professional scope of practice. These standards should be made achievable by clear statements of the activities for meeting consumers’ needs (outcome standards), the way professional nurses ought to function

(process standards) and how the system is to operate (structure standards) in order to benchmark performance (Katz & Green, 1997, pp.9,25).

Standards of professional performance are descriptive statements reflecting the nature of current knowledge, current nursing practice, and current quality of patient care and can be used as a means to establish accountability in professional nursing care. Therefore, they should focus on the way in which nurses performs their various roles during operating room professional nursing practice (Fairchild, 1996, pp.34,38). Furthermore, standards are guidelines for the wellbeing of patients in the care of professional nurses. A “standard of zero defect” is the only acceptable quality standard. This means doing it right the first time, every time (Docherty, 1992, p.4; Thompson & Koranacki, 1993, p.2).

Standards of operating room professional nursing practice are “authoritative statements” which describe a level of care or performance that should be common to all operating room clinical practice and that is used to judge the quality of professional nursing practice (Rothrock, 1996b, p.25). Standards are also defined as technical or

management specifications influencing the daily activities of individuals and organisations (Dale & Oakland, 1994, p.28). Therefore they are necessary as a guide for professional nurses to measure their aptitude in operating room professional nursing practice and improve their skills for excellence to provide quality of nursing care (Weston et al., 1998, p.306; AORN online, n.d. c, p.1).

Other than being a guide for performance practice, standards can serve as a guide for peer evaluation, employee assessment, and self-assessment (Fairchild, 1996, p.33). Preddy (1997, pp.55,56) emphasises the fact that the service and quality of nursing care for the operating room personnel should not differ from one setting to another. The results of the latter author's

research show that the Department of Health, the South African Nursing Council, the South African Theatre Sister, the nursing colleges, and other academic institutions all have their own individual standards. Currently, the Ministry of Health and Social Services has no proof of Namibian National Standards for Standards of Professional Performance, Standards of Operating Room clinical practice or Competency Statements in operating room professional nursing practice that can serve as a guide for quality operating room professional nursing practice. The aim of these standards is to guide professional practitioners towards excellent performance that leaves the patient free from injury related to any surgical interventions (Seifert, 1996, p.329), and in so doing, emphasising the importance of predetermined standards and criteria before the

implementation of any nursing actions (Delaune & Ladner, 2002, p.164).

Although the entire health care system is faced with many new technological and surgical advances that will affect operating room professional nursing practice, providers still need to be competent, skilled and efficient in their practice to be able to render high quality nursing care (Geoghegan, 2000, p.3). Therefore, professional nurses should know and adapt to relevant changes in their profession in order to be competent in their practice. As Geoghegan (2000) states, the definition of quality delineates the purposes and content of the assessment, self-assessment and evaluation process, for the benefit of consumers and the guidance for health care providers.

Donabedian's standard model (Katz & Green, 1997, p.25)

classifies standards as structure standards, process

standards and outcome standards:

Structure standards portray the ability of health care

departments to offer and meet client service needs

according to legal and professional standards (Delaune & Ladner, 2002, pp.165, 166). This standard can be linked to the concept of management support elicited from the perceptions of the participants in phase 1 and categorised as a key theme for this study.

Process standards assess nursing activities. This assessment determines the ability of professional nurses to establish an environment conducive to quality patient/client care. This standard also measures the effectiveness and quality of professional nursing practice (Delaune & Ladner, 2002, p.166).

Outcome standards judge the effectiveness of nursing intervention against the expected outcomes of any health care intervention (Delaune & Ladner, 2002, pp.165,166). Outcomes of standards can only be measures if detailed indicators (criteria) are established that reflect the level of competence by percentage as prescribed by individual institutions.

3.2.1.4.1 Subthemes of standards

Criteria

Booyens (1998, p.308) defines criteria as practical scales for assessing the quality of care.

Participants' statements identifying the need for standards and criteria.

"We need standards and criteria too".

"We sometimes don't know what to do because we don't have standards and criteria".

Criteria are statements that describe performance, behaviour, circumstances or clinical status that represents a positive, satisfactory or excellent state of affairs. Criteria are related to standards in the sense that they serve as detailed indicators of the standard and thus make the standard functional. These indicators can be used to indicate whether a goal has been achieved by the demonstrated behaviour (Delaune & Ladner, 2002, p.164). Criteria cannot be established without procedures because the execution of procedures step by step in sequence is presented as the criteria of a standard.

Procedures

Procedures are guidelines for implementing policies laid down in chronological order (Rothrock, 2003, p.13).

One participant's statement identifying the need for structured procedures to meet preset standards was supported by other participants.

"We need standards for procedures. It will help to come to the normal standard".

Institutional assessment policies and procedures are very important if the promotion of self-regulated learning is to be instituted (Osborn, 1996, p.195) and these policies and procedures define competence (AORN online, n.d. b, p.1).

Standardised procedures provide guidance, increase competence, and efficiency, and improve accuracy and patient and personnel safety (Petersen, 2001, p.1).

Procedures serve as guidelines for professional nurses pertaining to the what, how, when and where of nursing activities.

Assessment instruments and checklists are subthemes of the theme of standards discussed next.

Assessment instruments and checklists

A checklist is a list of expected actions associated with a particular aspect of practice. The written list has a space for ticking off whether or not the particular action has been done/performed or not (Quinn, 2000, p.232).

Here are some statements from participants regarding the need for checklists. On the tape recording, sounds of approval may be heard from the other participants.

"You need a checklist to be able to check what you are doing right".

"It you want it to be positive you have to have a tool or instrument to measure the performance against".

A checklist is defined as "a list of specific activities to be observed" providing a sequence to follow when performing procedures and/or techniques (Oermann & Gaberson, 1998, pp.183,184). Stufflebeam (n.d., p.1) regards a checklist as a valuable evaluation device that can clarify the criteria that should be considered. Quinn (2000, p.231) argues that it is of

“paramount importance” to use specific assessment criteria in the form of rating scales or checklists as a guide for measuring quality performance. Moreover, checklists help to ensure that important criteria are included and they enhance the objectivity, credibility and reproducibility of the assessment process. Checklists can be used by professional nurses to judge personal performance before formal evaluations by management (Hodson-Carlton, 1998, p.302; Bourke & Ihrke, 1998, p.357).

An assessment instrument is a tool that can be used to provide an opportunity to learn from past experience (World Bank Group, n.d. b, p.1). Assessment instruments and checklists can also be used effectively as guidelines to give professional nurses an idea of expected actions and behaviour.

Guidelines

Guidelines are written plans presented as indicators specifying the procedure to be followed in the provision of nursing care in a specific situation (Hilgart & Hytry Karl, 1995, p.93).

Participants think that guidelines are important for operating room professional nursing practice to execute self-assessment.

“Self-evaluering is wel goed, maar dan moet daar ‘n ‘guide’ wees”. [Self-evaluation is good, but there must be a guide].

Guidelines are important elements in operating room professional nursing practice care and must reflect current standards of care (Hilgart & Hytry Karl, 1995, p.93). Hence, the notion of compiling a self-assessment guide for operating professional nursing practice.

From the discussions of the themes it is evident that professional nurses need direction and support in order to attain quality operating professional nursing practice competence through self-assessment.

3.3 SUMMARY

This chapter described the four key themes and subthemes derived from the perceptions the participants have of self-assessment. Tesch's open coding was used for data analysis. The concepts elicited were categorised into subthemes and then into four key themes as follows.

Self-assessment was perceived to be a need for improving professional competence. There was an indication that the participants are not conversant with the term **assessment** but responded with the term **evaluation**. Self-assessment and an alternative view on self-assessment, referred to as a systematic continuous process done by others as well, were indicated as important aspects of professional and personal development.

Managerial support was identified because the participants voiced their perceptions of the lack of supervision, staff shortage, limited physical resources, absence of effective in-service training, importance of feedback of practice performance, need for policies, procedures.

Personal values encompass characteristics such as caring attitudes, trust and honesty, integrity, development of the self, responsibility, accountability, interest and internal and external motivation, which should all be present in the execution of operating room professional nursing practice.

Standards, criteria, procedures, guidelines and checklists were voiced as essential to being able to assess professional performance by means of self-assessment. These written documents were identified as being absent in the nurses' current educational system.

These results emphasised the need for a system to address operating room professional nursing practice competence.

Chapter 4 focuses on the conceptualisation and framework of the concepts elicited from the focus group discussions in phase 1.

CHAPTER 4

CONCEPTUALISATION AND FRAMEWORK

“We can’t solve problems by using the same kind of thinking we used when we created them” (Albert Einstein, 1879-1955).

4.1 INTRODUCTION

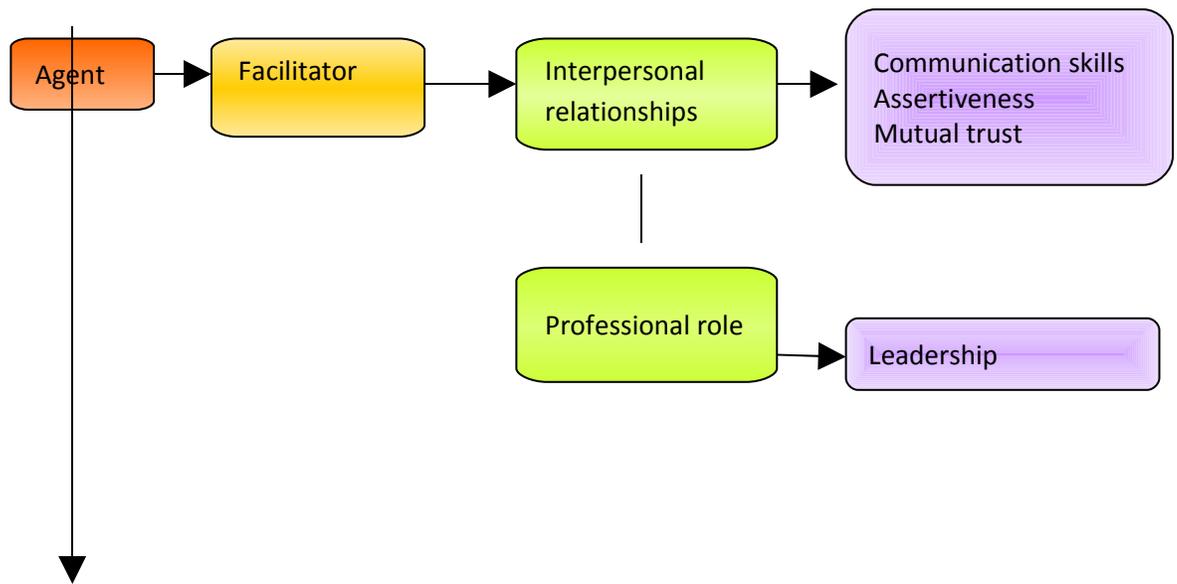
In phase 1 of the study, the perceptions of operating room professional nurses were elicited. These perceptions were categorised into four key themes and their respective subthemes in accordance with Tesch’s open coding (Tesch, 1995, p.90).

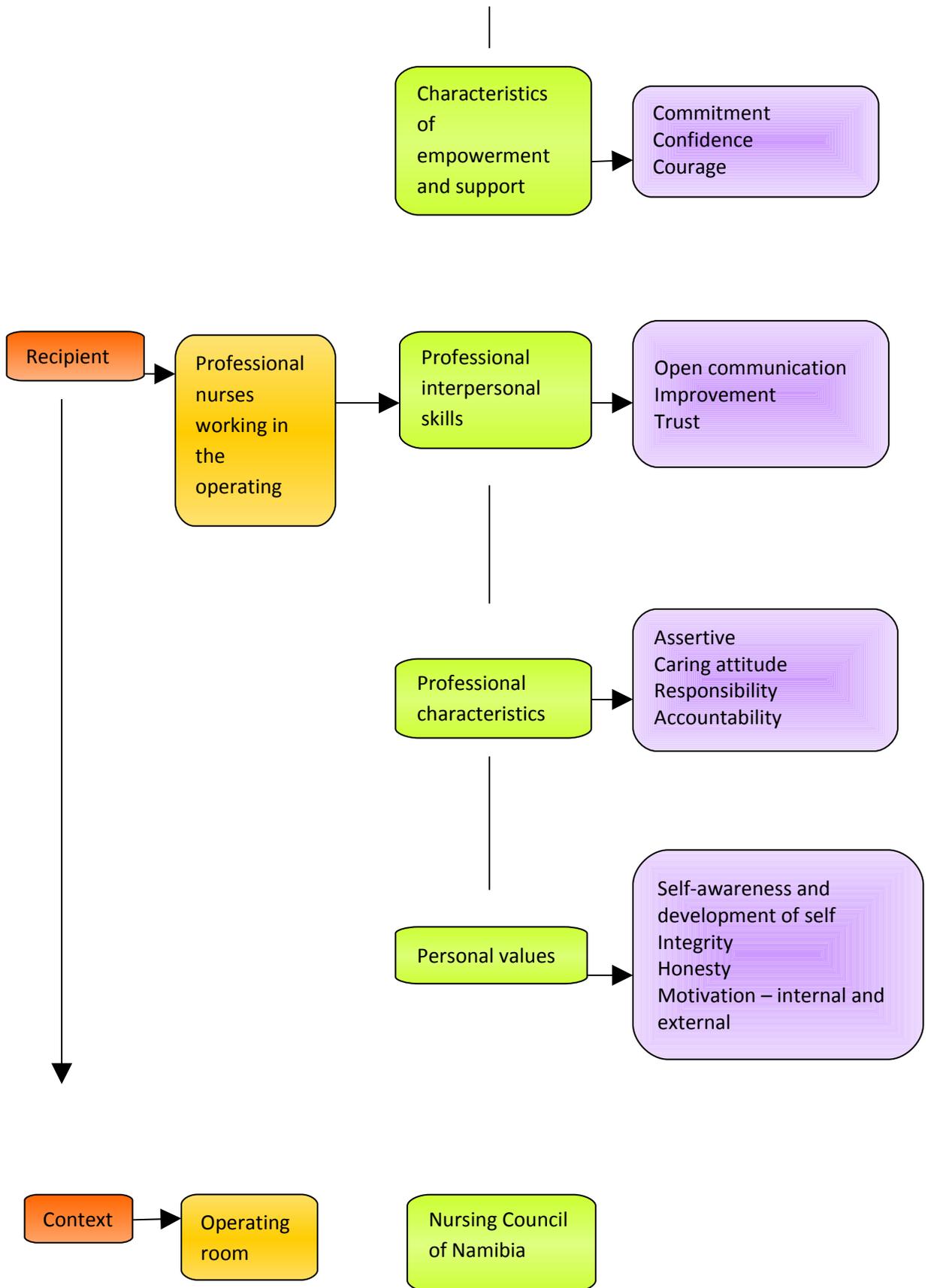
The purpose of this chapter is to conceptualise the empirical findings and link them to operating room professional nursing practice using the practice-orientated theory described by Dickoff, James and Wiedenbach (1968, pp.438-448).

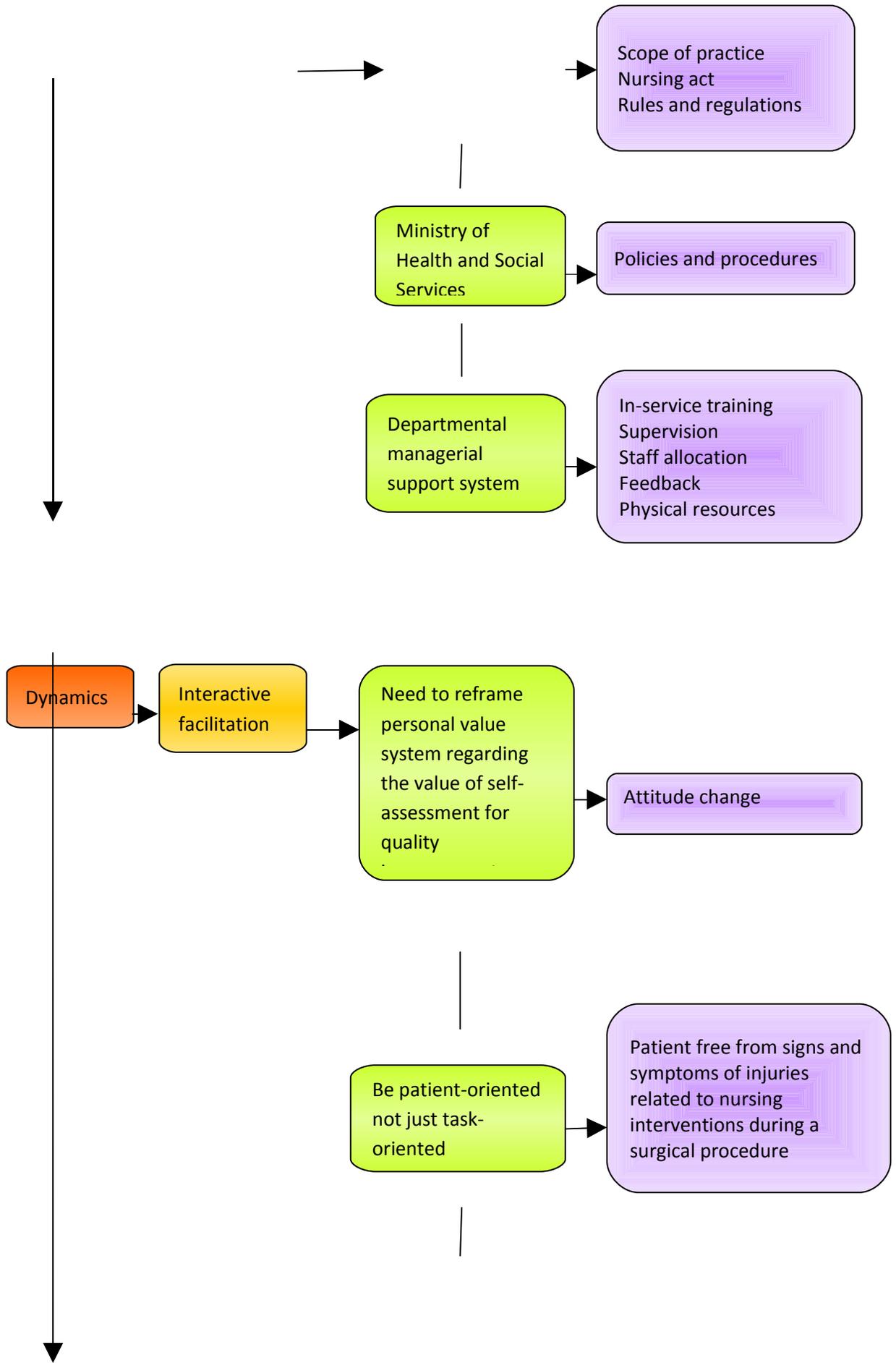
4.2 REASONING MAP

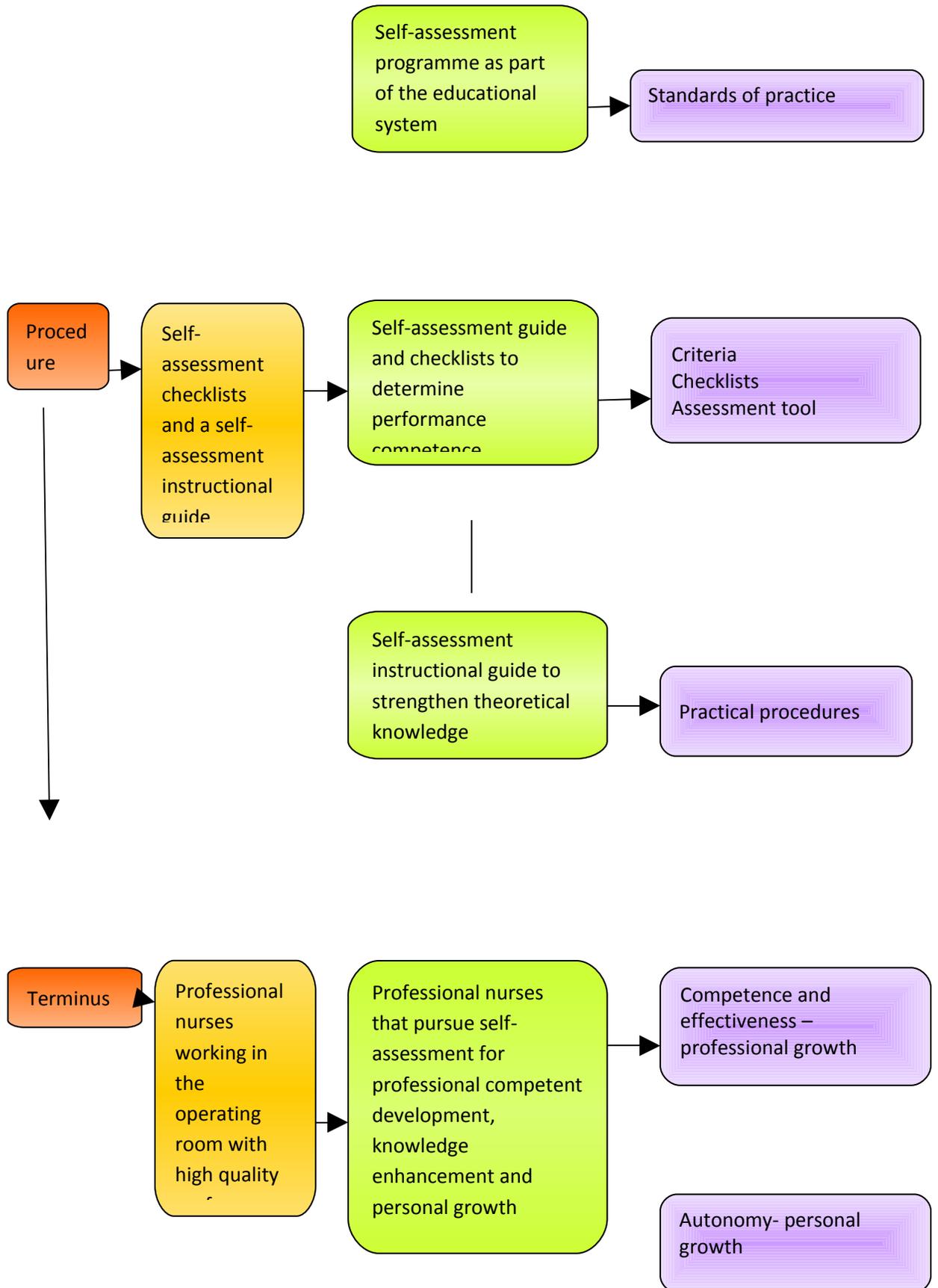
The reasoning map reflected in figure 4.1 presents the structure of the concepts. These were derived from phase 1 and refer to the perceptions professional nurses have regarding self-assessment according to the practice-orientated theory described by Dickoff et al., (1968, pp.438-448).

Figure 4.1 Reasoning map











Source: Dickoff et al, 1968, pp. 438–448

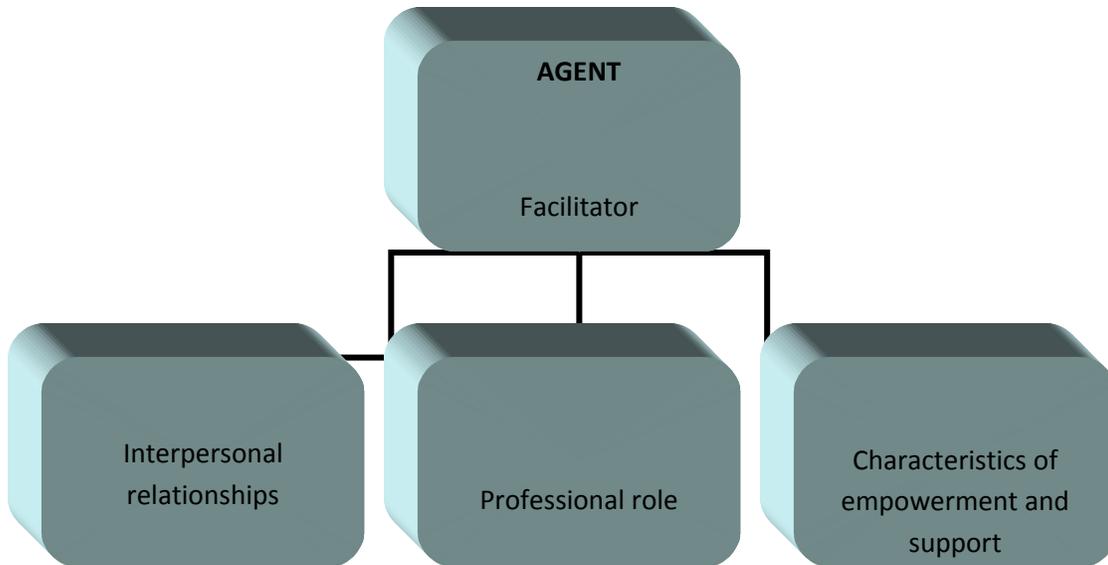
4.3 CONCEPTUAL FRAMEWORK

For the purpose of this study, aspects of activity termed the agent, recipient, context, dynamics, procedure, and terminus (Dickoff et al., 1968, p.433) incorporate characteristics, activities and behaviour that are linked to the concepts derived from the focus group discussion in phase 1.

The first aspect of activity in the practice-orientated theory described by Dickoff et al., (1968, pp.438-448) is the agent. The agent for this study is the researcher acting as the facilitator.

4.3.1 Agent: facilitator (researcher)

Figure 4.2 Agent: facilitator (researcher)



For the purpose of this study the facilitator (researcher) was the agent who provided the self-assessment programme for operating room professional nursing practice quality improvement. The results of a study done by Carlisle and Ibbotson (2005, p.539) suggest that it is important to maintain consistency in the style and purpose of facilitation. In addition to the above-mentioned aspect, it is important that the facilitator as an agent (researcher) employ interpersonal aspects of communication and social skills in one-to-one, small group and large group encounters to build a relationship for the effective execution of the intervention with professional nurses during the study (Kagan & Evans, 1995, p.1). Mutual trust, effective

communication skills and collaboration are essential attributes for attaining the goal of this study.

Because things in the operating room can change at a moment's notice, the agent had to be flexible. One example is when meetings had to be cancelled owing to changes in surgical lists and emergencies.

4.3.1.1 Interpersonal relationships

A relationship is defined as the way in which people behave towards each other (Hornby, 2005, p.1229). The agent should be able to build personal relationships with professional nurses to facilitate the use of a self-assessment programme for practice competence and enhancement of theoretical knowledge. The fact that the facilitation of this study was effective is directly linked to the satisfactory relationship between the facilitator (researcher) as the agent and the professional nurses as the recipients (Ellis, Gates & Kenworthy, 2003, p.3). In order to establish good relationships the facilitator needs to have good communication skills, to express assertive behaviour, and have the ability to gain respect and trust from others.

Communication

Communication skills refer to the ability of the individual to interact effectively with others (Dickson, Hargie & Morrow, 1997, p.29). The facilitator had to ensure that the participants

understood what was expected of them by giving them clear precise instructions on the implementation of the self-assessment programme. If communication is ineffective there is a possibility that the message will not get through to the participant and/or instructions will be disregarded (Ellis et al., 2003, p.15) or misinterpreted with misleading results.

It is the facilitator's responsibility to ensure that the task of implementing the self-assessment programme is communicated clearly to recipients to ensure effective collaboration (Ellis et al., 2003, p.183), thus ensuring that professional nurses internalise the fact that assessment and professional and personal development are an individual responsibility.

The agent had to have good listening skills and give the participants ample time to state their concerns and/or problems and had to encourage them to find and communicate their ideas and opinions on possible solutions. The ones who have the problems usually have the solutions (Ellis et al., 2003, p.172). By listening to the recipients the facilitator will gain their trust and give them a feeling of self-worth.

Assertiveness

Assertiveness is a way of effectively communicating the value you have of yourself and of others. With assertive communication the agent and the recipient can engage respectfully ensuring that no one is hurt, violated or used. The agent expressed assertiveness by explaining

clearly with confidence what was expected of the recipients during the research of this study (BUPA's Health Information Team, 2004, pp.1,3). The agent needed to recognise the situation in the operating room but still had to stand firm in requesting the collaboration of the participants for the study (Counseling and Mental Health Center, n.d., p.2). Being assertive and unaggressive will contribute to a trust relationship in the sense that recipients' believe that they can rely on an honest response from the facilitator.

Mutual trust

Positive relationships are based on mutual trust. The agent and the recipient depend on one another to do what is expected (Hornby, 2005, p.1586) without looking over each other's shoulders. Trust is earned through transparency and integrity (Anastasi, 2004, p.13); it is built on demonstrated actions and when the incentives of others are aligned with one's own. The facilitator has to accept the uniqueness of the individual by demonstrating the acceptance of professional nurses as people in their own right worthy of respect and care (Quinn, 2000, p.54). Mutual trust is critical in interdependent relationships, as it enhances productivity, morality and communication resulting in quality solutions to problems and a better working environment (Reinertsen, 2000, pp.1, 2).

4.3.1.2. Professional role

The professional role refers to the part a person plays in a job that needs special training and a high level of education (Hornby, 2005, pp.1159, 1268). The facilitator (a lecturer acting as the agent in this study) has to have a clearly identifiable professional role to guide and support professional nurses in using the self-assessment programme for quality improvement of operating room professional nursing practice. It is imperative that the lecturer possesses in-depth theoretical knowledge on which her clinical expertise is built in order to guide and support professional nurses in adopting self-assessment as part of the educational process. Desforges (2003, p.7) states that expertise is the ability of the teacher (i.e. the agent in this study) to have an extensive understanding of the terms and conditions of their responsibility as a leader in respect of the guidance towards the professional and personal development of professional nurses. A good leadership style forms part of the agent's professional role.

Leadership

Leadership is a critical skill in the operating room professional nursing practice environment (Cox & Miranda, 2003, p.127). Dimmock and Walker (2005, p.11) state that the concept of leadership is difficult to define. Some recognise it as a process influencing relationships between leaders and followers. Others say the process influences staff to agree to act in a way that they would not otherwise consider. Another perceives leadership as inspiring "performances and achievement amongst staff" beyond their expectations (Dimmock & Walker, 2005, pp.11,12). Jooste (2003, p.5) is of the opinion that leadership is an influential relationship between leaders and followers with the intention of establishing real changes that

reflect their shared goals. For this study, in the context of the agent, leadership is defined as an interactive process with good communication, self-confidence, determination, effective actions, integrity and flexibility to change (Kagan & Evans, 1995, p.19). The facilitator should be aware of the needs of the group and be flexible with regard to environmental changes (Ellis et al., 2003, p.164). The agent as a lecturer (theory and practice) is in constant contact with the environment and the personnel during clinical teaching. Therefore, she has close relationships with the environment, situational changes and personnel in the operating room. Thus she is in a position of power regarding specialised operating room professional nursing practices.

4.3.1.3 Characteristics of empowerment and support

The aim of the self-assessment programme is to provide motivation and instil confidence in professional nurses with regard to their professional performance (empowering relationship) (Ellis et al., 2003, p.171).

Empowerment reflects the authority someone has to do something and/or to control a situation (Hornby, 2005, p.479). Empowerment is defined as a process of enhancing “feelings of self-efficacy”, confidence to change powerlessness and a feeling of being in control of a situation (Menon, 2002, p.29). Power is also defined as the influence of a particular area of activity (Hornby, 2005, p.1136). It is a capacity or potential that may exist but that is not imposed. It is the ability to act, meet a goal, accomplish a task, promote change and/or influence others (Jooste, 2003, p.117). The exercise of power is not the destruction of others

but rather an action over the actual or possible actions of others (Peter, Lunardi & Macfarlane, 2004, p.404). For the purpose of this study power refers to the ability of the agent to make her concerns count (Ellis et al., 2003, p.37).

As a lecturer in operating room nursing science and clinical training, the facilitator (researcher) conforms to the notion of expert power because of her specialised knowledge and practice (Kagan & Evans, 1995, p.182). Furthermore, by her legitimate power (her position as lecturer) she has a right to influence professional nurses positively regarding the challenge of implementing self-assessment as part of the educational process (Kagan & Evans, 1995, p.182). Characteristics of empowerment and support incorporate aspects such as commitment, confidence and courage.

Commitment

The agent needs to feel an inner commitment to give her/his time and energy (Hornby, 2005, p.290; Spry, 1997, p.83) to challenge and influence professional nurses to think positively regarding the notion of high quality operating room professional nursing practice and its improvement if needed. By embracing this personal responsibility to the success of the outcomes of the use of a self-assessment programme the agent vouches for the growth and development of operating room professional nursing practices (UICOMP – Vision – Commitment, n.d., p.1). To facilitate the successful implementation of a self-assessment

programme the facilitator has to be confident of the outcome of the activity and approach challenges self-confidently.

Confidence and courage

To be confident the agent has to value her own quality (Hornby, 2005, p.304). For this study the facilitator has to be confident that the process of self-assessment as part of the educational system is the way to improve the quality of operating room professional nursing practice. Therefore the agent should have the ability to continue even when there are opposing arguments regarding the idea of self-assessment in the operating room. The agent showed courage by continuing with the research no matter the circumstances (Wikipedia, n.d. b, p.2).

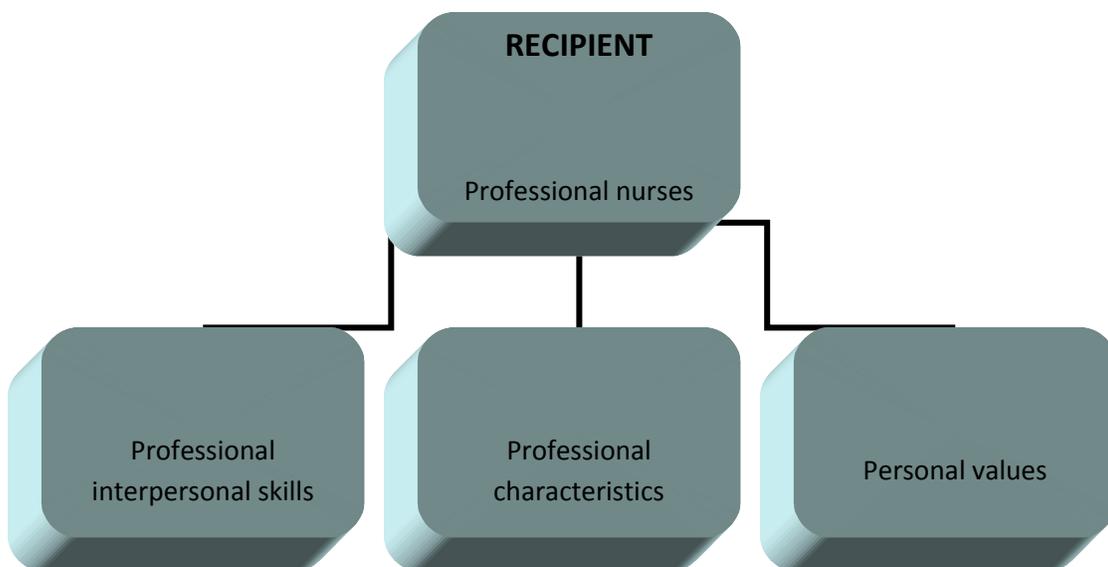
Concluding remarks regarding the agent (facilitator)

It is concluded that for the successful participation of the recipient the facilitator should possess good personal and professional qualities that facilitate interaction. Personal relationships, which are essential for collaboration between the parties, demand an effective leadership style and communication skills. The ability to be assertive, give clear instructions and to listen respectfully to the inputs of others may enhance mutual trust. Furthermore, it is deemed necessary for the facilitator to demonstrate characteristics of empowerment and support through commitment, confidence and courage for successful collaboration.

As described by Dickoff et al., (1968, pp. 438–448), the second aspect of activity in practice-orientated theory is the recipient. For this study the recipients are professional nurses working in the operating room.

4.3.2 Recipient: professional nurses working in the operating room

Figure 4.3 Recipient: professional nurses working in the operating room



Professional nurses need to feel an inner commitment to give their time and energy and to adhere to policies, standards and procedures of operating room professional nursing practice

(Hornby, 2005, p.290; Spry, 1997, p.83). There are no grounds for blaming management for the neglect of the individual professional nurse as far as quality improvement is concerned, because individuals have the capacity for self-knowledge, self-expression and self-regulation (Beck, 2006, p.5). Therefore, there should be a platform for everyone to express themselves regarding their professional growth and the means for improving professional nursing practice.

Professional nurses are individuals that need to be in contact with themselves (self-awareness) and in a constant process of the development of the self. Professional nurses need to understand the operating room as a specialised environment in the context of social behaviour and social problem solving (Kagan & Evans, 1995, p.4). Thus they ought to establish and portray characteristics that embody professional relationships, professional characteristics and personal values.

4.3.2.1 Professional relationships

Interaction between members of a group influences and enhances group performance and experience (Kagan & Evans, 1995, p.176). In order to attain excellence individuals should have an eagerness to help, teach and/or support each other. Professional relationships encompass open communication, a record of improvement, and trustworthiness through honest endeavours.

Open communication.

Interpersonal skills are based on effective and open communication. The development of good interpersonal skills is needed to assess data and information so as to make a competent response (Ellis et al., 2003, p.83). Communication is described as the main medium for relating to patients and other team members. It also forms the basis for “teaching, learning, assessment, evaluation and interpersonal relationships” (Burnard, 2005, p.167). The development of communication skills is a very important part of professional interpersonal relationships in the operating room in the context of standards, policies and procedures for quality operating room professional nursing practice. According to the data collected during the focus group discussions in phase 1 it is evident that there is no time and/or a lack of staff for one-to-one verbal communication for teaching or assessment by others for professional performance competence. They just do not talk to one another. Therefore, a self-assessment programme could be used as a tool for enhancing and developing skills at an individual level and in their own time for operating room professional nursing practice quality improvement.

Improvement

The Joint Commission on Accreditation of Health Care Organizations emphasises the importance of routine reporting on indicators of quality care. These organisations rely on the existence of a formal mechanism to report standards for clinical quality and efficiency. These measurements include an “ever-repeating cycle of improvement” in professional nurses who are committed to complying with preset standards and the expectations of the patients (Rothrock, 1996b, p.21). Professional nurses become

trustworthy if there is proof that they have met the expectations of others and the health care institution.

Trust

Surgical patients have an unwritten contractual relationship with health professionals reflecting the trust that they have that nursing care rendered to them is of the highest quality (Searle, 2004, p.204). Furthermore, there is a tacit belief that professional nurses will be honest in their actions and that patients can rely on their integrity. The employers should also be able to believe that a report given by professional nurses regarding on operating room professional nursing activity is true and reliable.

4.3.2.2 Professional characteristics

Professional characteristics that the recipients have to internalise and exercise for this study are assertiveness, a caring attitude, responsibility and accountability.

Assertiveness

Timmins and McCabe (2005, pp.38,43) are of the opinion that the structure of health care systems does not encourage professional nurses to be assertive. These authors further state that there is little empirical evidence of the assertiveness abilities of professional nurses or of the benefits of assertive practice for them; in fact there is a lack of research on the potential

barriers that prevent professional nurses from demonstrating assertive behaviour in the workplace. The results of the research done by Timmins and McCabe show that assertive behaviour may be in conflict with the caring behaviour expected from professional nurses. It is, however, in the interests of the individual and the health service that professional nurses be encouraged to develop their assertiveness skills through education and training (Timmins & McCabe, 2005, p.43). The researcher is of the opinion that a self-assessment programme may be of assistance in this regard.

To be assertive is not being aggressive, defensive and/or manipulative, but to never compromise one's self-worth (Kagan & Evans, 1995, p.119). Professional nurses need to be able to express their needs as a right to change, enhance and develop. However, they have to remember that being assertive is not a guarantee for them to always get what they want. It will, however, communicate their feelings and the needs they have in rendering quality operating room professional nursing care (UIUC Counseling Center, n.d., p.1-3). Furthermore, professional nurses should be assertive in their actions to maintain quality operating room professional nursing practice at all times, because they are advocates for the patients. Assertive behaviour in the interests of the patient proves that they care for the patients' wellbeing.

Caring attitude

There is a possibility that the state of the environment in which professional nurses practice may change practitioners' attitudes. For example, professional nurses have a moral obligation

to ensure that equipment is functional for the sake of the patient and the personnel. The perception as present may be that, if any equipment is defective and there is the possibility that the patient and/or other personnel may come to harm, it is management's responsibility. Although management may be expected, as part of its responsibility, to ensure that the environment is conducive to optimal performance, professional nurses need to express a caring attitude by assisting management in the delegated aspects of ordering a therapeutic environment (Gunter, 1997, p.5) and take responsibility for their actions. They also have to remind themselves constantly that they are held accountable for their actions and any omissions regarding patient care.

Responsibility and accountability

Responsibility and accountability for one's own successes require a person to constantly adjust their thinking, regard each day as an opportunity to do the right thing, upgrade their skills, learn new things and make things happen (Kaye-Petersen, 2001, p.3). The latter statement addresses the mindset of professional nurses towards the use of any kind of information, activities, literature, inputs from others, self-assessment and continuous education as a responsible approach to personal and professional growth.

4.3.2.3 Personal values

The identification and recognition of personal values may lead to empathetic concern for other people. The ideal is to foster unselfishness, a moral self and self-integrity (Osborn, 1996, p.12). In the context of this study, professional nurses' personal values have to express how connected they are with themselves, the importance of developing themselves, integrity, honesty and motivation.

Self-awareness and the development of self

Self-awareness allows professional nurses to have insight into their strengths and weaknesses and to identify where they need improvement (Jooste, 2003, p.146). Stein-Parbury (2000, p.57) is of the opinion that professional nurses need to develop an awareness of how effectively they use their skills. This enables them to evaluate their own performance and be open and honest about the results.

Self-awareness can help professional nurses to be aware of the obstructions that prevent them from listening and responding to others effectively (Kagan & Evans, 1995, p.22). It is also a process of encouraging self-growth; allowing people to learn from their experience; having self-confidence and being aware of the effect their feelings have on their professional performance (Stein-Parbury, 2000, p.61; Jooste, 2003, p.146). It is the opinion of the researcher that people who are in contact with their inner self possess inner strength with integrity.

Integrity

Professional nurses should be trustworthy and incorruptible. Furthermore, a person with integrity is incapable of being false with regard to any responsibility or trust (Online Merriam-Webster, n.d., p.1) and a minor lapse of integrity is not defined by any standard (Weston et al., 1998, p.307). According to these authors, there is no separation between integrity and quality of services, which indicates that professional nurses are obliged to assess their inner selves with regard to their trustworthiness towards their professional practice. Honest people are usually trustworthy.

Honesty

An honest person follows the highest code of conduct, is deeply committed to development and keeps honesty as a constant principle on which to build relationships. Honest professional nurses never misuse resources provided for the wellbeing of humanity (Living Values Education, n.d., p.3) whether they are human or physical resources. Honesty implies an anxious regard for the standards of operating room professional nursing practice (Online Merriam-Webster, n.d., p.1) that offers you a sense of integrity and wellbeing (Emotional Intelligence, n.d., p.4). It is the opinion of the researcher that internal motivation leads to honest conduct.

Motivation – internal and external

Motivation is to a large extent a personal endeavour. External motivation does not last long if internal motivation is not present. It is, however, possible for management to stimulate employees to maximum performance by acknowledging the needs, values and skills of individual practitioners and allocating jobs accordingly (Muller, Bezuidenhout & Jooste, 2006, pp.353-354), thus influencing job satisfaction and enhancing motivation.

Pervin (1996, p.94) states that motivation suggests that a person have inner qualities that influence thinking and behaviour, and cognition and action. Hence, the different levels of commitment observable in operating room professional practice may be due to the internal motivation of an individual.

Some people have little capacity for internal motivation and therefore need to be constantly guided and reinforced. This may be identified when a person experiences feelings of satisfaction when doing something. The latter statement emphasises the fact that internal motivation is longer lasting than external motivation (Weller, 2005, p.1).

Concluding remarks regarding the recipient

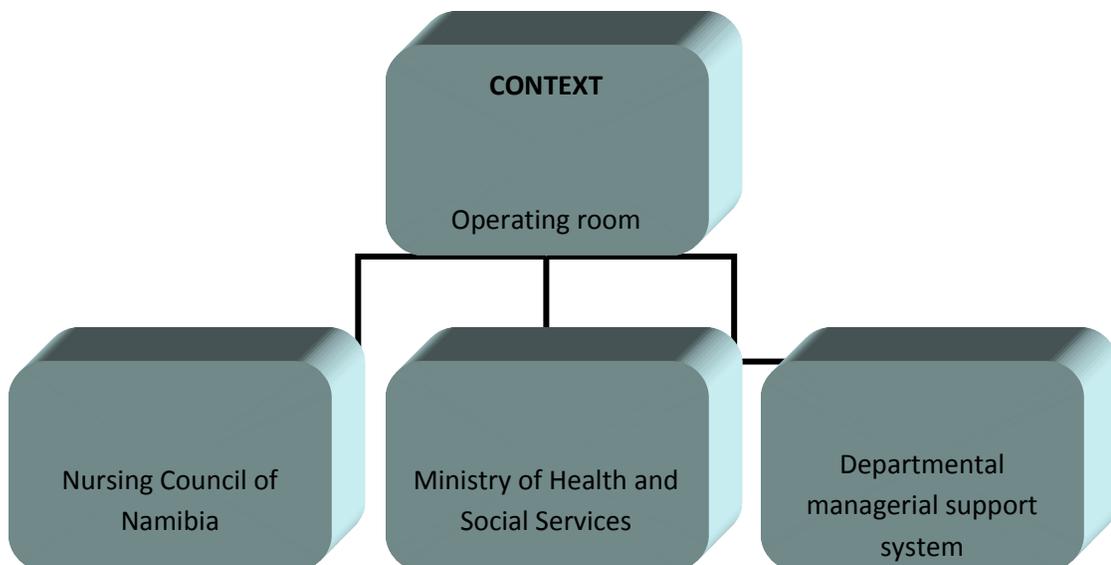
It is evident that professional nurses need to possess personal values of honesty, integrity and internal motivation to provide high quality operating room professional nursing practice. To integrate these personal values a person has to be in contact with him or herself. Self-

awareness is the ability to assess who you are, what your strengths and weaknesses are, where you want to be at any given time and what you want to do as a professional. Professional skills such as communication and trustworthiness, should be developed and improved continuously for professional and personal growth. Assertiveness, a caring attitude, accountability and responsibility have proved to be the basis for professional characteristics for high quality operating room professional nursing practice.

The third aspect of activity of the practice-orientated theory described by Dickoff et al., (1968, pp.438-448) is the context. In this study it is the operating room.

4.3.3 Context: operating room

Figure 4.4 Context: operating room



Operating room professional nursing practice is authorised, guided and supported by statutory bodies and government departments. The Nursing Council of Namibia, Ministry of Health and Social Services and departmental managerial support services are relevant for this study.

4.3.3.1 Nursing Council of Namibia

Operating room professional nursing practice is shaped by social, political, economical, scientific and technological forces which protect the rights of the individual and dictate professional nursing actions that must reflect the protection, promotion and restoration of health to all (Fairchild 1996, pp.378, 379). The Nursing Council of Namibia provides the Scope of Practice of Nursing. The Nursing Act serves as the guidelines used as a framework within which nursing professionals may practice.

For the protection of the citizens of Namibia, a constitution of personal rights has been compiled and published. This constitution also guides professionals in their practice and inform the public of their rights regarding each profession. Protection of the public also takes place through the monitoring of educational and practice standards by the Nursing Council of Namibia (Kaye-Petersen, 2001, p.5)

Scope of practice of nursing

The scope of practice regarding acts and omissions by registered nurses stipulates that the Nursing Council of Namibia guides professional nurses in their professional practice activities and may conduct inquiries and take disciplinary action if nurses omit to act as an advocate for the patient or to carry out any act required of a registered nurse. Other prescriptions are the care of the unconscious patient that have to be correctly identified and the prevention of injury (Government Notice No.10, 1999, p.3).

The scope of practice of registered nurses, 2(g) (Government Notice No.13, 1999, p.65) is directly related to operating room professional nursing practice and stipulates the “prevention of bodily deformities in a patient in the execution of a nursing regime”. Such injuries may occur during the positioning of the patient on the operating table. The “preparation for and assistance with operative acts” (Government Notice No.13, 1999, p.66) reflects the activities of operating room professional nurses during the preparation for and assistance with a surgical intervention.

The scope of practice of registered nurses 2(s) (Government notice No.13, 1999, p.66) stipulates that professional nurses should provide “effective patient advocacy to enable the patient to obtain the health care he or she needs”. These prescribed acts refer to the

responsibility of professional nurses assisting with a surgical procedure to voice and correct any actions or interventions that may harm the patient. It is therefore imperative for professional nurses to define and direct their practices according to the needs of the patient as observed in practice (Operating Room Nurses Association of Canada, 1998, p.1).

The Nursing Act (Act No.8 of 2004)

The Nursing Council of Namibia is a statutory body governed by the Nursing Act (Act No.8 of 2004). It states that the standards of “professional practices and conducts must be improved continuously” (Government Notice No.10, 1999, p.9). One of the objectives of the Nursing Council of Namibia is to “establish, develop and maintain universally acceptable standards of control” over education, training and nursing practice, thus expecting health care institutions to comply with the requirements by implementing and maintaining a formal educational system.

Rules and regulations

By means of “rules relating to the acts or omissions by registered or enrolled persons constituting conduct or misconduct”, the Nursing Council of Namibia expects competent performances from all professional nurses (Government Notice No.10, 1999, p.3). In this context, the Ministry of Health and Social Services has the authority over operating room professional nursing practice competence through management and the execution thereof. Therefore, management’s responsibility includes a process of assessment in the education system for quality improvement in operating room professional nursing practice.

4.3.3.2 Ministry of Health and Social Services

The Constitution of Namibia guarantees basic human rights and awareness among health care providers and consumers in order to ensure that a steady improvement of service is rendered (MOHSS, 1998, p.i). Therefore, it is the responsibility of professional nurses, individually and as a group, to assess their strengths and weaknesses in order to improve their competence in their professional practice. The Ministry of Health and Social Services has the responsibility to prescribe actions of professional nurses through rules and regulations, policies and procedures.

Policies

Most professionals regard quality improvement as a policy function (Thompson & Koranacki, 1993, p.3). Health institutions worldwide have compiled policies based on the recommendations of the Association of Operating Room Nurses regarding operating room professional nursing practice. Although some of the policies differ because of the physical structures of operating rooms and equipment, the basis for the desired outcomes for the patient, stipulating that each patient should be free from operating room professional nursing practice injury, is included and practised (Spry, 1997, p.151). Fairchild (1996, p.20) recommends that policies should be “well-delineated, established, written, enforced without exception” and standardised throughout the institution. Policies regarding the physical preparation of the patient for any surgical procedure should be communicated to the wards and reinforced by continuous in-service training. Although policies and procedures are regarded as important

guidelines for nursing practice they cannot guarantee quality care (Brazen, 2000, p.740). At present there is evidence of very few written policies in the operating rooms of state hospitals in Namibia, however, the desired outcomes are still applicable for all nursing interventions during a surgical procedure.

Procedures

Procedures are practical guidelines and must be acceptable to providers, disseminated widely and used in a day-to-day practice so as to be effective in operating room professional nursing practice (Rothrock, 1996b, p.20). Procedures guide operating room professional practice. They focus on the activities carried out by professional nurses during surgical interventions and represent the standards and criteria for operating room professional nursing practice. Managerial support is a key aspect in the effective implementation and sustainment of policies and procedures in any given department. At present there is evidence of very few written procedures in operating rooms in Namibian state hospitals.

4.3.3.3 Departmental managerial support system

The management team of the operating room has the responsibility and accountability for formulating a philosophy, a purpose and objectives with an organisational plan and mechanisms for assuring optimal patient care. They also have a responsibility to communicate them to all staff members (Fairchild, 1996, p.25).

To ensure high quality nursing care, hospitals and health care institutions are supposed to compile their own policies, principles and procedures on different departmental levels. Expectations for the health care institutions in Namibia do not differ from hospital to hospital. When these documentations had been completed it will be approved by the Permanent Secretary of the Ministry of Health and Social Services.

These policies can only be executed by means of measurable standards and criteria that serve as guidelines for the day-to-day practice of professional nurses. Fairchild (1996, p.25) suggests written standards of nursing care for operating room professional nursing practice. The competence and skills whereby these activities are performed can be identified as the quality of nursing care on different scales of percentages as determined by departments through a quality improvement programme including a full circle of needs assessment, training/education, evaluation and feedback. All of the above highlight the importance of guidance for professional nurses through structured policies, standards, criteria, procedures, supervision, appropriate staff allocation, efficient resource support, in-service training programmes and a sound, achievable evaluation system that includes formal and informal assessment, peer assessment and self-assessment.

In-service training

Management should promote staff development programmes with the emphasis on discovering and integrating new knowledge (Fairchild, 1996, p.25). A very important advantage of in-service training is the promotion of group interaction and peer support (Puterbaugh & Anderson, 1991, p.1).

The general functions of the Nursing Council of Namibia stipulate the inspection of professional nursing practices of individual professionals to protect the interests of the public and to guide the professionals. The Nursing Council of Namibia also protects the public by ensuring that professional nurses meet certain educational standards which are recognised nationally (Nursing Council of Namibia, 2004, p.5).

Many professional nurses working in operating rooms have not obtained an Advanced University Diploma in Nursing Science (operating room) and have had to learn and gain experience in the department while they work. For some this is very challenging especially if they have had to learn from others and/or books, because of the practical hands-on status of operating room professional nursing practice. This may be further complicated by an absence of defined guidelines and the lack of a structured evaluation system for professional competence. This therefore emphasises the need for the inclusion of a self-assessment programme as part of the educational system to provide the opportunity for professional nurses to enhance their professional knowledge and develop clinical skills.

Supervision

In participatory management, supervision is facilitative rather than directive. The task of supervision includes planning, coordinating, guiding, instructing, regulating and monitoring all aspects of operating room professional nursing activities. Management is responsible for the implementation of managerial decisions. Therefore management is liable if delegated tasks to be performed by others are neglected (Muller et al., 2006, p.351-352). In the context of this study, supervision is an integral part of the departmental managerial support system for guiding and assessing competent professional practice with the aim of improving the quality of operating room nursing practice.

Feedback

Osborn (1996, p.109) is of the opinion that individuals are motivated to give feedback to themselves, casting them in a positive light that may enhance the feeling of self-worth. Muller (1993, p.600) states that the first step in the process of quality improvement will be the setting of standards, where after the job performance of practitioners will be evaluated with immediate feedback and remedial action. To sustain excellence in operating room professional nursing practice it is imperative that new information is disseminated, and guidance, support, feedback and direction are given by management and to one another and oneself through reflection (Weston et al., 1998, p.314).

Staff allocation

Management has a responsibility to plan the appropriate use of human resources (Fairchild, 1996, p.25). Foster (2003, p.5) states that the staff shortage in general was recognised and acknowledged by the Honourable Minister of Namibia in 2003 and a 15% increase in the number of nurse posts proposed. This author did not indicate the numbers for the shortage of staff specifically in operating rooms.

According to reports by the American Operating Room Nurses (AORN), the National Conference of State Legislatures (USA) reported that 17 states indicated that staffing is considered to be a legislative priority (Habgood, 2000, p.2). When a surgical case is scheduled for the operating room, management should first of all consider the clinical needs, staff availability and their level of experience, and access to the equipment and environment bearing the safety of the patient and the quality of care in mind (Franklin, 2002, p.1-2). Physical resources are very important entities for successful safe surgical interventions.

Physical resources

It is important to assess the link between the ability of professional nurses and the working conditions in delivering quality nursing care. Although it is the responsibility of professional nurses to comply with the standards of operating room clinical practice, it is

the responsibility of the employers of health care professionals to provide adequate environmental working conditions and the resources needed to support professional nurses in attaining these standards (Rothrock, 1996a, p.5). Management should provide the resources that are essential for the implementation of “quality policies and the achievement of quality objectives” (Dale & Oakland, 1994, p.51). During the process of reviewing and updating policies and procedures, the appropriateness of technology, equipment and supplies can be evaluate at the same time (Armstrong, 2007, p.2). It should be noted that staff members may express an attitude of ‘what do I care’ if resources are not available

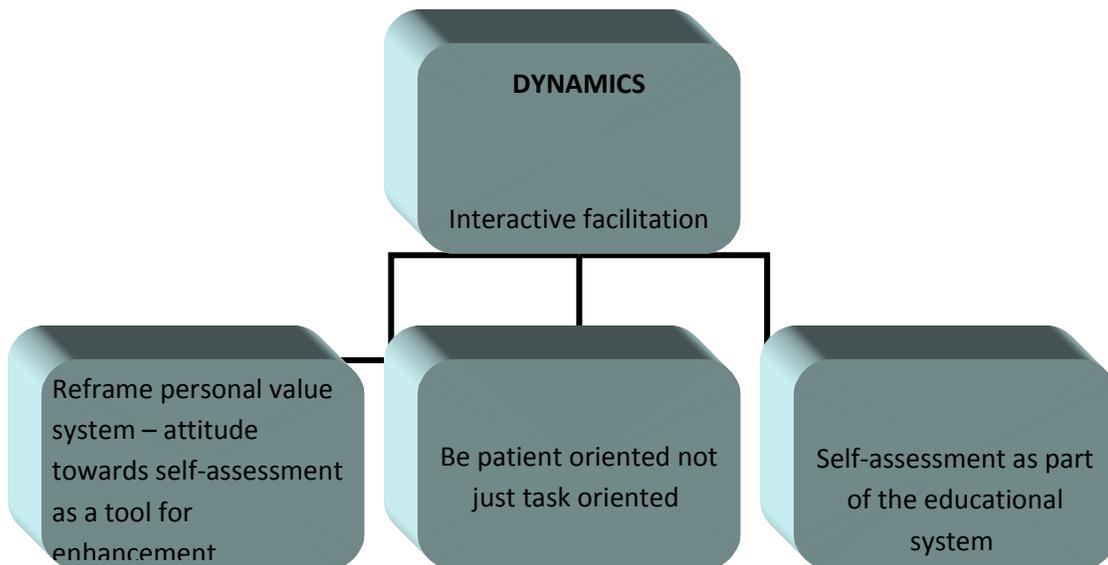
Concluding remarks regarding the context

In conclusion one may state that the quality of operating room nursing practice is facilitated by the Ministry of Health and Social Services and the departmental managerial system under the direction of the Nursing Council of Namibia. The scope of practice of registered nurses, contained in the rules and regulations, policies, procedures, standards and criteria, comprises of the guidelines that professional nurses have to comply with for professional excellence. Therefore the importance of departmental managerial support, by means of in-service training, supervision, staff allocation, physical resource availability to ensure safe patient care, the development of skills and job satisfaction, cannot be over emphasised.

Dynamics is the fourth aspect of activity contained in the practice-orientated theory (Dickoff et al., 1968, pp.438-448). For this study, dynamics refers to interactive facilitation.

4.3.4 Dynamics: interactive facilitation

Figure 4.5 Dynamics: interactive facilitation



The concept “interactive” may be defined as a situation in which people are involved with each other and influence one another (Hornby, 2005, p.777).

The term “facilitation” has different meanings to different people. Its general definition is that it is a process where a neutral person (facilitator) helps a group of people to work together, stay on task, make decisions, be effective and be more productive (Spangler, 2003, p.1). These two definitions describe interactive facilitation as a dynamic through which the utilisation of a self-assessment programme may be enabled.

The role of a facilitator is to lead participants towards the development of mutual respect and trust amongst the group to encourage the team work that is essential for the successful utilisation of a self-assessment programme (Bonner Curriculum, n.d., p.3). It is important for the facilitator to keep the goal of the utilisation of a self-assessment programme in mind. During the process of interactive facilitation, the reason for the activities of participants must be clear and explicit to prevent any misinterpretation of the instructions. Dickoff et al., (1968, p.447) argue that performance may be influenced by the way activities are conceived. Therefore, facilitator and participants should both be motivated, skilled and knowledgeable on their respective level of academic status in order to implement a self-assessment programme effectively and successfully.

Mode of interaction and facilitation

Effective leadership is a highly skilled and complex task (Ellis et al., 2003, p. 95). The researcher facilitated the group and acted as leader by common consent of operating room management and formal appointment with the participants.

Creating an assessment system in the operating room

The absence of an assessment system hampers the improvement of operating room professional nursing practice in the sense that professional nurses are not forced or given the opportunity to identify their level of competence according to preset standards. Medical personnel sometimes give feedback on the performance of professional nurses according to their own expectations, which is mostly negative. This negative feedback may be because they are not aware of the standards expected of operating room professional nurses. For example, medical personnel sometimes consider the time intervals of surgical counts during an abdominal surgical procedure to be time wasting. Positive feedback, on the other hand, may be subjective and could be because professional nurses are fast workers or gives instruments quickly because they have learnt the instrument sequence for certain surgical procedures, with no regard for or with a lack of knowledge of prescribed standards.

Self-assessment checklists will provide operating room professional nurses with immediate feedback on their strengths and weaknesses. On reflecting on their strengths and weakness and using a self-assessment instructional guide as part of the programme, there could be a change in knowledge that should lead to a change in attitude, thinking and action patterns.

4.3.4.1 Reframe personal value system (personal values)

Reframing one's personal value system is possible if there is knowledge enhancement with resulting attitude change.

Attitude change

Throughout history the nursing professional has been challenged and has responded to educational, social and technological change (Reilly & Perrin, 1999, p.1). Research results presented by Thurston and King (2004, p.244) show that participants regard change as good but "evidence for change is great". The process of change is often perceived as uncomfortable and a loss of habitual activities (Whitehead & Russe, 2004, p.164). Professional nurses who choose to change are choosing to learn. As professional nurses cannot be isolated from scientific and technological change in the operating room, it is imperative for them to adapt and support colleagues in the change process (Brazen 2000, p.752).

An experiment done by Ozozoma (Wikipedia, n.d. c, p.2) shows that attitude changes occurs as a response to communication, which is the ultimate goal for the implementation of a self-assessment programme. Attitudes are hypothetical constructs that cannot be seen but can be experienced in a person's behaviour (Kagan & Evans, 1995, p.11). Ellis et al., (2003, p.61) attest that professional nurses with low self-esteem

will most probably be likely to be persuaded to except the challenge of a self-assessment programme for quality improvement for operating room professional nursing care. Another opinion is that people with moderate self-esteem are more easily persuaded than those with low or high self-esteem (Wikipedia, n.d. c, p.2).

According to Ellis et al., (2003, p.60) attitudes have three components, namely a thinking component, an emotional component and an action component. These authors argue that change in one of these components should bring about change in the others. Furthermore, it is also stated that some attitudes result from observational learning in the person's environment (Wikipedia, n.d. c, p.1). The researcher envisages that, as soon as professional nurses gain knowledge, their attitude towards their interaction with the patient as prescribed by the standards of competence will change positively and that the change in one person will create a chain reaction within operating room professional practice as a whole.

4.3.4.2 Be patient oriented not just task oriented

According to Holmström and Larsson (2005, p.149) nursing education make students more task oriented and less sensitive to patients' needs. Operating room professional nursing practice is very clinical and hands on. There is a perception that operating room professional nursing practices are "mechanical techniques and an execution of the surgeons' orders" (Rothrock, 2003, p.4). Moreover, there is a tendency by some professional nurses to concentrate mainly

on carrying out the actions without being conscious of the patient as a human being with personal dignity and needs, thus reflecting only on the task at hand to prepare the setting and assist the surgeon with instrument and supply feeding. Task competencies are referred to as “routine, sequential, procedural, predictable” (Uys & Gwele, 2005, p.49). The latter is very true in the operating room in the sense that the preparation for and the surgical procedure is very sequential and surgical procedures have a step-by-step pattern of action. It is also very easy to forget the human being under the draping, especially during a difficult surgical procedure and when the professional nurse (scrub nurse) lacks experience in the procedure (Dickson et al., 1997, p.364). This is when operating room professional nursing practice becomes task oriented.

Foster (2003, p.2) states that quality service cannot be rendered without “tender loving care”. Liaschenko and Peter (2004, p.491) further state that completion of tasks does not constitute a practice without the engagement of a caring relationship with the patient and/or particular needs or concerns of operating room professional nursing practice. Hence the expectation that such practice must include both the technical expertise and the personal involvement of the patient’s emotional needs. Anyone can do technical work, but professional nurses need to be skilled, knowledgeable, and have good judgement, which forms the basis of quality operating room professional nursing practice that patients can expect and rely on (De Calonne, n.d., p.2).

It is a known fact that technology is taking over very quickly. This is evidenced in an article written by Cabe (2001, pp.1, 3) which states that the Food and Drug Administration in the

United States of America has approved the development and use of robots for minor invasive surgical procedures. The use of robots as assistants to the surgeon started in 1992 and there are currently 300 such systems in operating rooms worldwide. The people involved with these robots argue that it is to patient's benefit to use robots and computer software that eliminates human judgement (Lilly, n.d., pp.1,3; Cabe, 2001, p.1; Adonion Media Group, n.d., p.1).

Although some situations in operating rooms have an overall trend of pushing operating room professional nursing practice into task oriented activities, professional nurses have to remember that patient oriented practices are care delivered through the framework of the nursing process with specific outcomes identified. One such desired outcome is that the patient is free from signs and symptoms of injury related to the specific surgical procedure (Rothrock, 2003, pp.1,11). This indicates the responsibility of professional nurses to be advocates for the patient. Furthermore, it can be argued that patient oriented operating room professional nursing practice can help build quality operating room professional nursing practice services and the effective use of resources because resources are focused on the patient (Hill & Howlett, 1997, pp.48-49). The self-assessment instructional guide, as part of the self-assessment programme, indicates the activities (task) and the rationale (patient care) for the activities. Hence the vision that professional nurses can use the self-assessment programme as a guide for both patient oriented and task oriented practice.

4.3.4.3 Self-assessment as part of the educational system

According to Gabel et al., (1999, p.76) most problems in the operating room are not caused by deficiencies by professional nurses' performance, but by inadequacies in the systems. Another problem identified is that the goals of the people who inhabit the operating room, namely the surgeons, anaesthesiologists, nurses and others, are often not congruent with the goals of the hospital and/or department. This is evident in situations where a surgeon requests a specific professional nurse to assist in all the operative procedures he/she performs robbing others of the opportunity to learn and gain experience. Management, on the other hand, have to make sure that all professional nurses are multi skilled and capable of assisting with all operative procedures to facilitate cross-coverage when necessary (Gabel et al., 1999, p.75). It is also the responsibility of the individual professional nurse to ensure that she/he is capable of assisting with all surgical procedures within his/her academic status and clinical experience. Hence, the expectation that a self-assessment programme as a mode of communication and part of the educational system can be used to sensitise professional nurses to their responsibility with regard to the patient's needs and the vulnerability of the patient during a surgical intervention (Attitudes-behaviour consistency, n.d., p.1).

Concluding remarks regarding dynamics

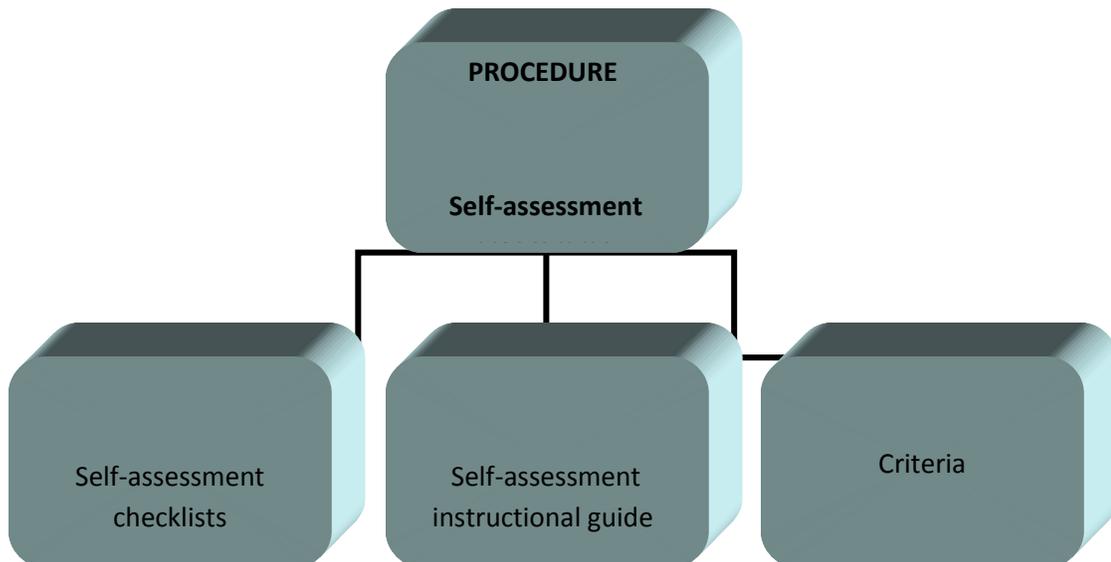
It is concluded that there should be collaboration between the facilitator and the participants for the effective use of a self-assessment programme as part of the educational system. To stay abreast with the rapid changes in technology, operating room professional nurses should be

able to measure their performance quantitatively. Hence the argument that the process of self-assessment may change attitudes which will influence professional nurses to be patient oriented and not just task oriented.

The fifth aspect of activity of Dickoff et al's., (1968, pp.438-448) practice-orientated theory is the procedure. For this study the procedure refers to the self-assessment programme.

4.3.5 Procedure: self-assessment programme

Figure 4.6 Procedure: self-assessment programme



According to Government Notice No.13 (1999, pp.65,70) the Nursing Council of Namibia expects professional nurses to practise independently and autonomously at the functional level. From the results of the data analysis of phase 1 it is evident that the process of self-assessment and the development of self-assessment checklists for a self-assessment instructional guide and its use will enable professional nurses to identify strengths and weakness in order to improve quality operating room professional nursing practice. Self-assessment checklists and a self-assessment instructional guide addresses the concerns and needs identified from the data analysis. Reframing the personal value system of professional nurses may influence them to be patient oriented and not just task oriented. An attitude change should result from this process of reframing with the concomitant improvement in the quality of operating room professional nursing practice

Self-assessment has a number of important characteristics. It is based on the principles of adult learning and will provide the opportunity for operating room professional nurses to gain in-depth knowledge and develop their professional performance competence. An adult learner usually brings her/his life experience to their learning situation. Therefore, one can assume that they are problem oriented and capable of self-directed learning. In this respect adults need to be involved in the process of assessing their own progress towards self-chosen goals (Knowles, 1990, p.22).

Self-assessment can guide the individual to reflect on the enhancement of his/her knowledge (cognitive domain) in order to understand why it is important to do certain activities in a certain way and not just because someone has told them to do so. Through self-assessment they can identify their beliefs and feelings (affective domain) regarding the patient as a human being with specific needs and then go on to meet the needs. Professional nurses also need to develop their skills (psychomotor domain) for competent quality operating room professional nursing practice (Aucoin, 1998, pp.213, 216). Self-assessment will reflect the collaboration of professional nurses with management to improve their practice by identifying the compliance with and/or the lack of policies and procedures and individuals' involvement in the establishment thereof.

4.3.5.1 Self-assessment checklists

Self-assessment focuses on the comprehensive learning outcomes of the individual professional nurse. It provides an opportunity to take responsibility for identifying their own strengths and weaknesses and correcting shortcomings in their own time. It also encourages a sense of independence with resulting enhancement of self-discipline towards self-empowerment so as to improve quality operating room professional nursing practice (Searle, 2004, p.204).

In the self-assessment programme checklists state the sequence of specific activities to be carried out in performing procedures and/or techniques (Oermann & Gaberson, 1998,

pp.183,184). Moreover, they help to ensure that important criteria are included and to enhance the objectivity, credibility and reproducibility of the assessment process. The aim is for professional nurses to use the checklists to judge their personal performance before their formal evaluation by management (Hodson-Carlton, 1998, p.302; Bourke & Ihrke, 1998, p.357). The key themes, self-assessment, managerial support, personal values and standards are used in the discussion that follows to illustrate the benefits of self-assessment checklists for professional nurses.

Self-assessment

The self-assessment statements in the checklist will enable professional nurses to assess whether self-assessment can help them to identify their beliefs regarding self-assessment as a valuable activity for improving quality operating room professional nursing practice.

Managerial support

For the concept “managerial support” a self-assessment checklist guides professional nurses on a functional level to identify their expectations regarding support from management. It may sensitise them to the importance of written standards, policies and procedures. The aim of the self-assessment checklist is to help professional nurses to think about their degree of involvement in the decision-making process when determining the content of standards, policies, and procedures and their implementation.

Furthermore, the items on managerial support in the checklist will enable professional nurses to determine their expectations of and the degree to which they are involved in the process of managerial support. There is a tendency to blame management for everything that goes wrong in the operating room without reporting prior to procedures, making suggestions and/or helping to plan activities.

Personal values

Personal characteristics such as commitment, interest, honesty, integrity, trustworthiness, responsibility, accountability and motivation form the basis for personal values. It is a fact that the working climate is mainly determined by individual personalities, which in turn may affect individual performance. Professional nurses need to know themselves in order to be able to understand others so as to work together as a team.

The items on personal values in the checklist will enable professional nurses to reflect on their own character to establish whether they contribute to a working environment that is conducive for quality performance. If they disagree with most of the items they need to reframe their personal value system to fit in with the team in order to improve the quality of operating room professional nursing practice.

Standards

The items on this checklist represent the activities expected for each standard to reflect the current status of competence of professional nurses during a surgical intervention.

Standards of professional nursing practice are necessary to measure the aptitude of professional nurses working in the operating room and improve their skills for excellence (Weston et al., 1998, p. 306). Foster (2003, p.2) states that standards are one of the most important tools for managers to ensure that staff members are providing quality service.

The assessment tool as a form of written communication must be clear, simple and structured. Self-assessment checklists for quality improvement in operating room professional nursing practice can be seen as an assessment tool

4.3.5.2 Self-assessment instructional guide

A self-assessment instructional guide can be used by professional nurses and other members of the operative and invasive procedure nursing team. It can be used before a surgical intervention as guidance and/or after assessment for knowledge enhancement. This guide focuses on standards and contains practical procedures for operating room professional practice activities.

Practical procedures

The practical procedures for the self-assessment instructional guide address activities of professional practice in the intra-operative phase of the peri-operative period of a surgical intervention (refer to page 24). The procedures start with the admission of the patient to the operating room and end with the report on the patient intervention given by the professional

nurse (scrub nurse) to the recovery room personnel. The procedures address the activities expected and the rationale for each activity.

4.3.5.3 Criteria

Criteria describe the performance, behaviour, circumstances or clinical status that represents a satisfactory, positive or excellent state of affairs (Booyens, 1998, p.308). Criteria are related to standards in the sense that they serve as detailed indicators of the standard and thus make the standard functional. Criteria can be seen as clinical indicators which are powerful tools for the assessment of quality. The frequency of an event as a negative indicator can be a warning of a performance area that needs attention (Rothrock, 1996b, p.22).

Concluding remarks regarding the procedure

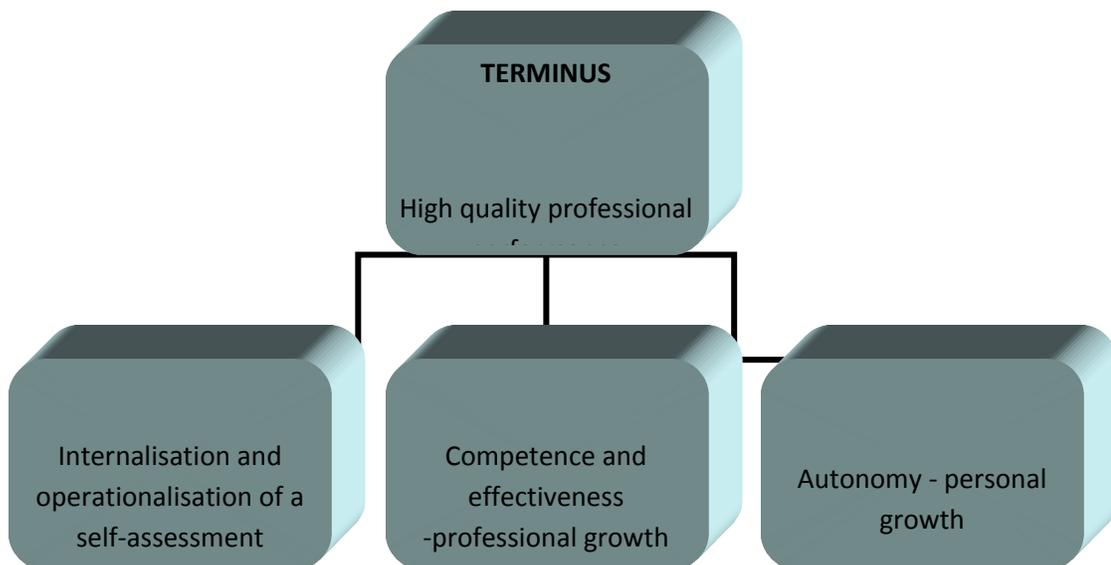
The use of a self-assessment programme will ensure knowledge enhancement and clinical practice development with resulting quality patient care.

The last aspect of activity of the practice-orientated theory described by Dickoff et al., (1968, pp.438-448) is the terminus. For this study the terminus refers to the internalisation and operationalisation of the self-assessment process.

4.3.6 Terminus: high quality professional performance

For this study the terminus represented the expectations of high quality performance of professional nurses.

Figure 4.7 Terminus: high quality professional performance



Engelbrecht (2003, p.1) is of the opinion that professional and personal development is essential for the rendering of high quality nursing care.

4.3.6.1 Internalisation and operationalisation of the self-assessment programme

In order to achieve excellence in operating room professional nursing practice, professional nurses are expected to acknowledge and understand the value of self-assessment and to accept self-assessment as an important part of the learning process. The notion of internalisation finds application in education and training and is often associated with learning and making use of it in future (Wikipedia, n.d. d, p.1).

Operationalisation refers to the process of defining the concept through the measuring actions used (Wikipedia, n.d. e, p.1).

4.3.6.2 Competence and effectiveness through reflection (introspection) – professional growth

Competence is defined as a “level of performance demonstrating the effective application of knowledge, skills and judgment” (Kaye-Petersen, 2001, p.1). Competence is a multifaceted phenomenon (Gannon et al., 2001, p.5,34) and is referred to as “a quality, an attribute, a trait and an ability” (Brazen, 2000, p.739). It is a generic term for the “knowledge, skills and attitudes required for adequate functioning in a profession” (Van der Schaaf, Stokking & Verloop, 2003, p.397). These authors state that competence can

be made visible in actions and is seen as a combination of behaviour, motives and the underlying intentions. Hence, professional nurses need to reflect on their behaviour and analyse the motives and intentions driving their actions during the process of self-assessment.

According to a research presented by Karaöz (2005, p.37), student nurses believe that the giving of care depends on the competence of the nurse. If it can be argued that competence is the ability to perform a task, then professional nurses should have a means for assessing their progress through self-assessment (Vittanen, Niemi, Nevgi, Raehailme & Launonen, 2003, p.2). It should be remembered that competence makes provision for change. Professional nurses should not only be prepared to do the activity/job at a given moment, but should also be able to do the same activity/job in the future (Uys & Gwele, 2005, p.48).

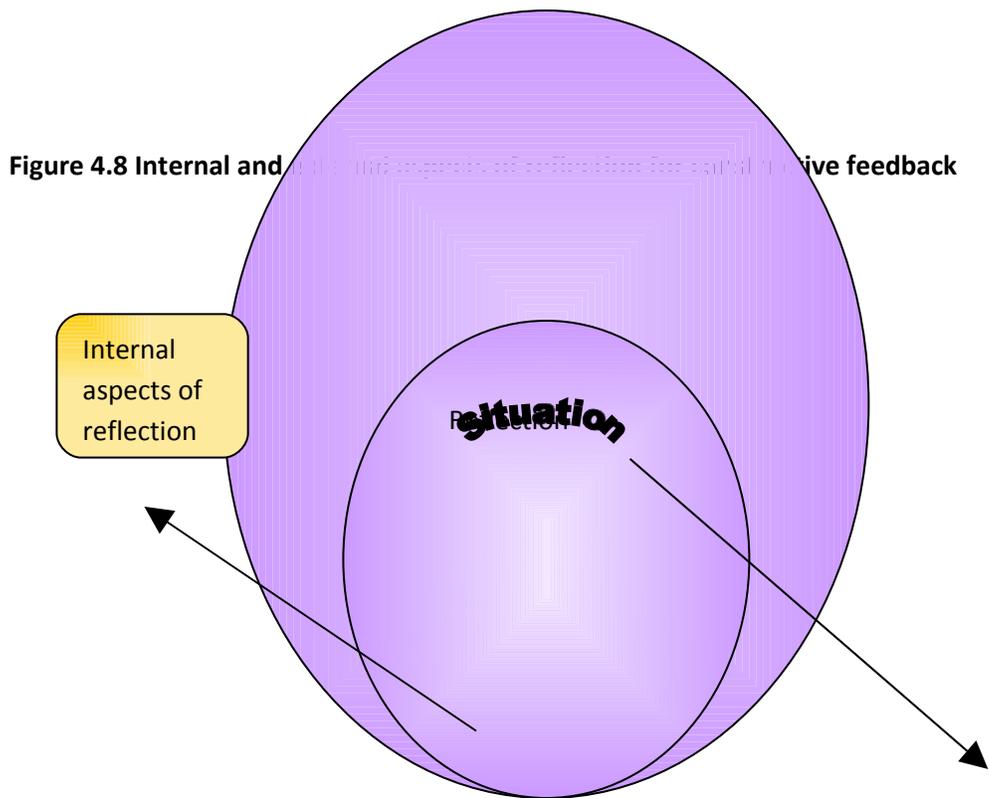
Professional nurses are expected to be competent in that they are able to practise their professional skills with safety and efficiency. This is made possible by the continual application of knowledge and skills to achieve the desired quality of operating room professional nursing practice (Fairchild, 1996, p.38). Although practice competence is usually externally imposed by employers and accreditors, it remains an individual responsibility (Lenburg, n.d., p.2). It can therefore be stated that practice, education and the commitment to self-development are pivotal to the development of competence in professional nursing practice (Wilson, Shepherd, Kelly & Pitzner, 2005, p.56).

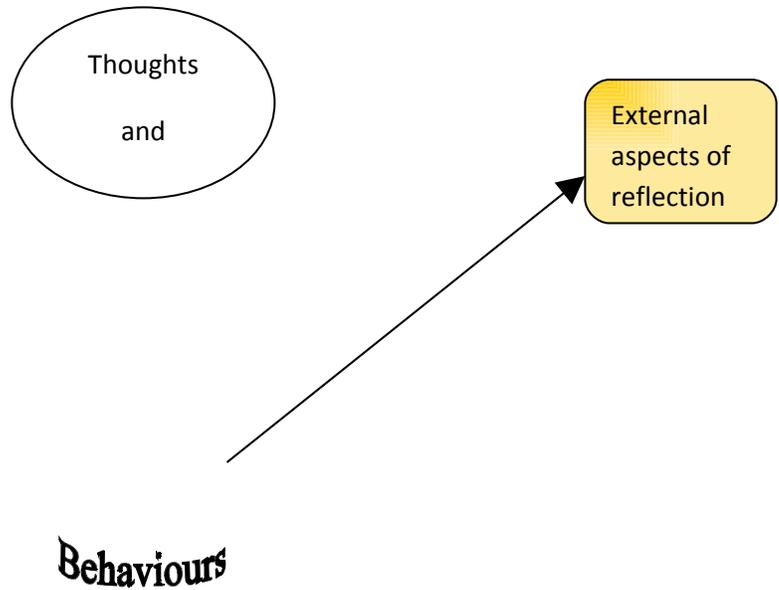
Self-assessment enables professional nurses to evaluate their practical performance through focused feedback. Feedback in this study refers to individual reflection on performance. Reflective practice is an active process, whereby professional nurses can gain an understanding of their cognitive and personal experiences to identify new potentials to challenge their present professional practice (Cadman, Clack, Lethbridge, Millward, Morris & Redwood, 2003, p.11). Results of research conducted by Kyrkjebø and Hage (2005, p.172) show that students experienced reflection as a useful tool in their learning process. Clouder and Sellars (2004, p. 263) view reflection in the context of learning as a generic term used for “intellectual and affective activities” individuals engage in to explore their experiences “to lead to new understandings”. When professional nurses reflect on their own performance, they can confirm what they have done correctly and what not (Ellis et al., 2003, p.79). According to Pollard (2002, p.13) reflection requires an “attitude of open-mindedness, responsibility and wholeheartedness”.

Effective reflection is a creative process that can bring about change either to oneself or one’s actions (Williams & Walker, 2003, p.131). Listening to oneself gives a sense of trusting oneself, accepting oneself, being honest with one and sometimes challenging oneself to exceed expectations. The reflection process can be used effectively after the experience as a purpose of learning and/or prior to an experience for considering intentions and planning nursing interventions (Stein-Parbury, 2000, p.62–63,65). Furthermore, reflection is a useful exercise for

individual professional practitioners on a day-to-day basis to achieve international benchmarking (Kaye-Petersen, 2001, p.5).

Figure 4.8 illustrates the internal and external aspects of reflection for constructive feedback.





4.3.6.3 Autonomy –personal growth

Currie, Harvey, West, McKenna and Keeney (2005, p.74) state that the quality of patient care can be linked directly to nurses' level of autonomy and decision-making skills. Autonomy, as part of the terminus of this study, may be linked to the explicit need for professional nurses to become aware of the development of the self within themselves. It is important that they recognise their capacity to be their own person, and live according to their own motives and not as a product of external forces (Stanford Encyclopedia of Philosophy, 2003, p. 1). Autonomy is described as a law to oneself; the value of which can be linked to the value of self-integration. Therefore, one needs to be accountable for one's actions (Stanford Encyclopedia of Philosophy, 2002, p. 1). Autonomy also refers to the right of self-governing reflecting personal

growth. It reflects the capacity of a rational individual to make informed, uncoerced decisions. As the advocate of the surgical patient, professional nurses are autonomous in making decisions and judging activities to the benefit of the patient (Wikipedia, n.d. f, p. 2). They are, however, under the authority of the Nursing Act (Act No.8 of 2004) and the Scope of Practice for professional nurses stipulated by the Nursing Council on Namibia, which guides their decisions as professional practitioners. Through the process of internalisation, self-assessment may be used as a tool for improving personal growth and gaining autonomy. In this context this refers to self-sufficiency, learning, development and situatedness within the sphere of operating room professional nursing practice.

Concluding remarks regarding on terminus

The expected outcomes are that operating room professional nurses will be skilled in self-assessment to render high quality operating room professional nursing practice through the processes of professional and personal growth.

4.4 SUMMARY

This chapter described the conceptual framework of the study. The reasoning map/conceptual frame used was based on the survey list suggested by Dickoff et al., (1968, p.435). The survey list noted that the agent, recipient, context, dynamics, procedure, and terminus incorporate activities that are linked to the concepts derived from phase 1 of the study.

As already explained, the researcher was the **agent** who developed a self-assessment programme consisting of checklists and an instructional guide for the internalisation and operationalisation of the self-assessment process aimed at improving the quality of operating room professional nursing practice. The researcher needed to have certain characteristics and to demonstrate certain behaviour in order to build special relationships with the recipients.

Professional nurses (with or without the special education in operating room professional nursing science) working in the operating rooms were the **recipients** of this self-assessment programme. This required adherence to professional values and ethics and the demonstration of personal values in providing quality care.

This form of professional nursing practice is performed in a highly specialised environment. These operating rooms are noted as the **context** for this study. Within this context professional nurses are guided by acts, rules and regulations stipulated by national statutory bodies and supported by the management of the health care institution and the department.

The dynamics (interactive facilitation) involved the positive participation of professional nursing practitioners in evaluating their own value system. This involved them in assessing their knowledge base, their strengths and weakness with regard to professional competence and

their shortcomings. An important factor in the study was their reframing of their personal value system. The ideal in a rapidly developing technical environment is for professional nurses to be patient oriented and not just task oriented.

The **procedure** described the self-assessment programme from which internal and external consumers and operating room professional nursing practitioners may benefit if effectively used.

Terminus refers to the internalisation and operationalisation of a self-assessment programme in the operating rooms of training hospitals in Windhoek and Oshakati. In using a self-assessment programme, professional nurses learn to reflect on actions carried out with the idea of correcting any faults. Their involvement in the process of self-assessment may lead to personal growth ensuring autonomy that is in line with the expectations of professional statutory regulations. Table 4.1 summarises the link between the conceptual framework, the key themes and the self-assessment programme.

Table 4.1 Summary of the conceptual framework, key themes and the self-assessment programme

Conceptual framework	Key themes	Self-assessment programme
Context – operating room	Managerial support	Self-assessment checklists
Dynamics – interactive facilitation	Personal values	Self-assessment checklists
Procedure – self-assessment checklists and a self-assessment instructional guide	Standards	Self-assessment checklists and a self-assessment instructional guide
Terminus – professional nurses working in the operating room with high quality performance	Self-assessment	Self-assessment checklists

The development of a self-assessment programme will be discussed in the next chapter.

CHAPTER 5

**DEVELOPMENT OF A SELF-ASSESSMENT PROGRAMME
(CHECKLISTS AND AN INSTRUCTIONAL GUIDE) (Addendums E
AND F)**

“...everything that moves or change is caused to move or change by some other thing”

(Aristotle, 384-322)

5.1 INTRODUCTION

The previous chapter described the conceptual framework using a reasoning map based on the survey list suggested by Dickoff et al., (1968, p. 435). Empirical findings were linked to operating room professional nursing practice using the practice-orientated theory these authors describe (Dickoff et al., 1968, pp. 438–448). This chapter (phase 2) focuses on the development of a self-assessment programme consisting of checklists and an instructional guide for improving the quality of operating room professional nursing practice. The draft was validated by operating room professional nursing experts and finalised by the researcher.

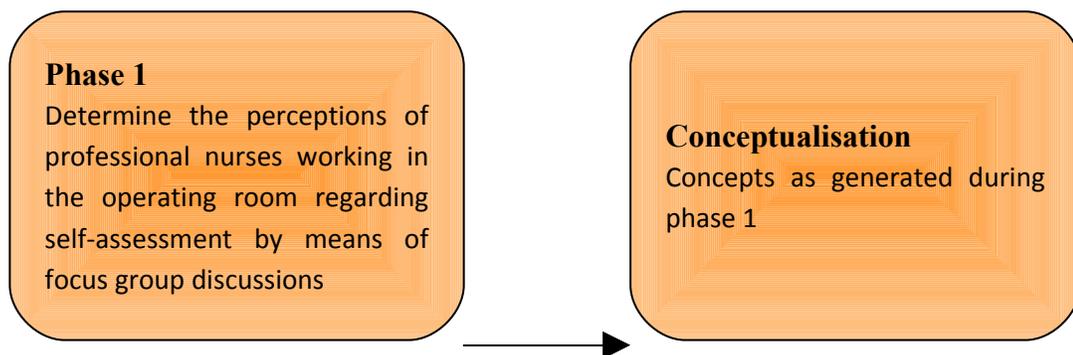
The self-assessment programme was intended for professional nurses as adult learners with the expectation that learning would take place resulting in the development of professional nurses, professionally and personally. Hence the choice to use nursing and educational philosophies, Bloom’s taxonomy of learning, Knowles’s andragogical learning theory and Donabedian’s standard model as bases for the development of this programme.

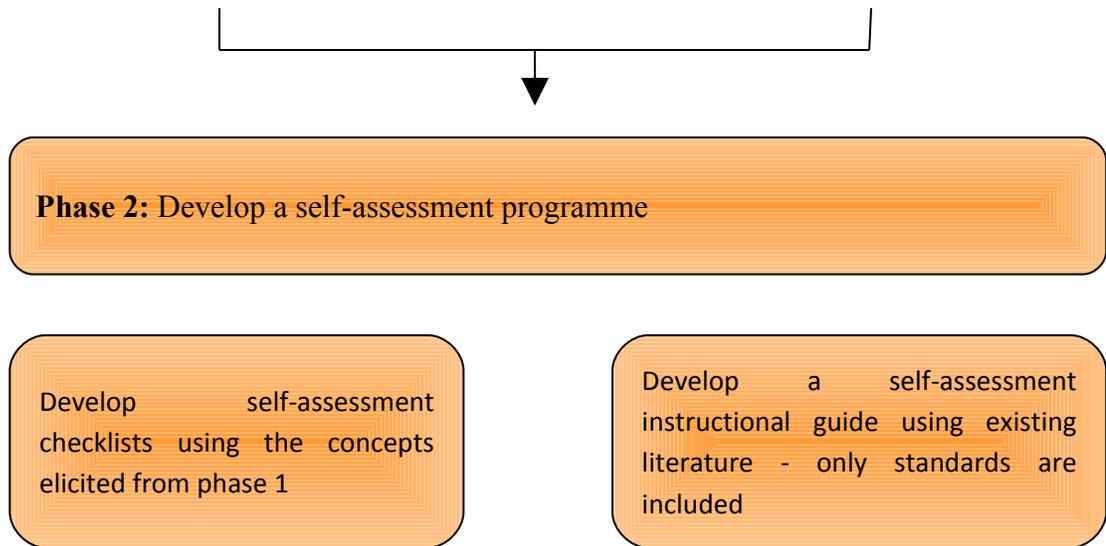
The self-assessment programme provides professional nurses with an opportunity to reflect on what they do, why they do it and the reason for the way it is done (UNCKLE Guide to subject review, n.d., p.2). Concepts elicited from the focus group discussions in phase 1 formed the basis for developing the programme, which consists of self-assessment checklists and a self-assessment instructional guide. All the concepts, self-assessment, managerial support, personal values, and standards derived from phase 1 are included in these checklists while the self-assessment instructional guide consists only of standards. The rationale behind the latter will be discussed in this chapter.

This phase is highlighted in the graphical representation in figure 5.1. As illustrated in this figure, phase 2 is the result

of both phase 1 and the conceptualisation done and framework designed for the study. Inductive and deductive methods were used.

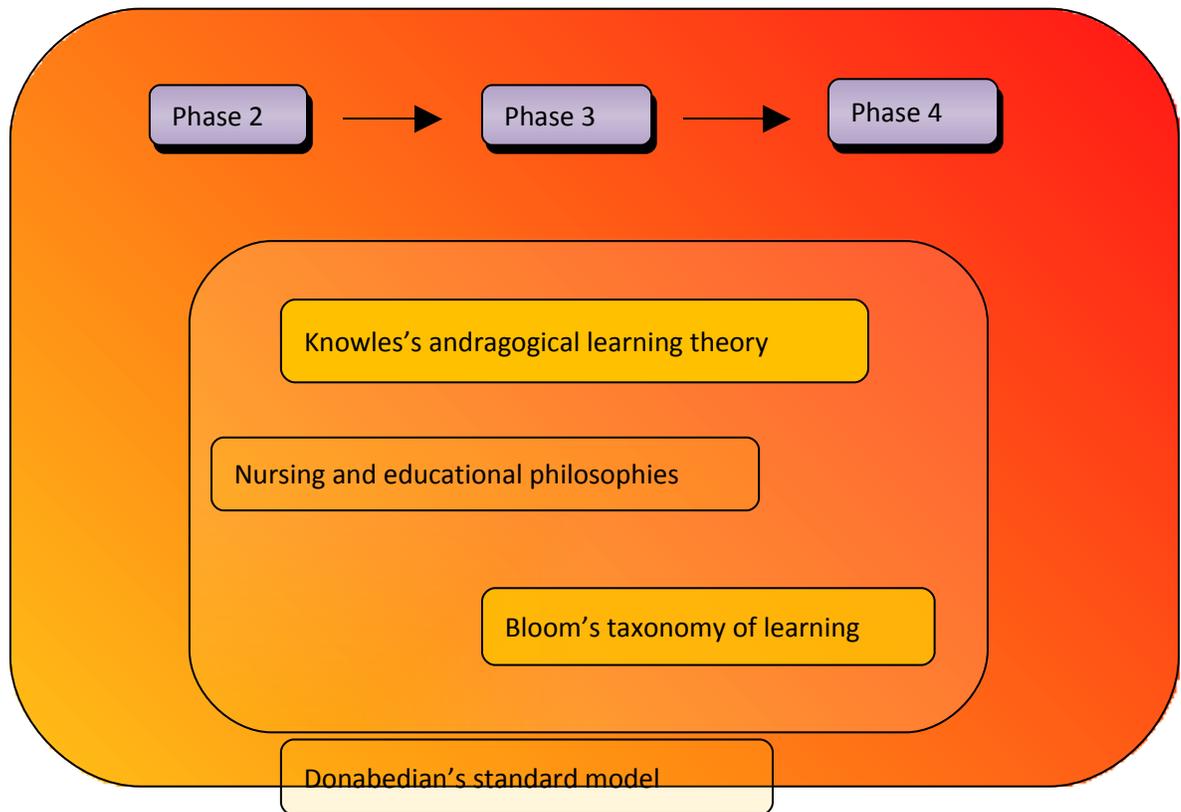
Figure 5.1 A graphical representation of phase 2 of this study.





Educational philosophies, Bloom's taxonomy of learning, Knowles's andragogical learning theory and Donabedian's standard model were used as the theoretical bases for developing the self-assessment programme. The illustration in figure 5.2 presents the application of the philosophical and theoretical approaches in the phases of the study.

Figure 5.2 The application of the philosophical and theoretical approaches in the phases of the study



5.2 PROGRAMME DEVELOPMENT

A self-assessment programme will add content to the situation that is inherent in the tasks and that gives meaning to the real daily activities and the ongoing experience of operating room professional nursing practice in attaining knowledge and skills (Stein, n.d., p.1). In some

instances a programme can stand alone, but for this study it forms part of the educational system in the operating room. It aims to fulfil unmet needs; to encourage commitment by professional nurses to quality professional performance; to encourage the commitment of management to providing resources and supporting the effort and to guide professional nurses in self-directed, lifelong learning to promote professional and personal growth. Professional nurses, however, should be ready for self-directed learning through their attitudes and abilities and their qualities of commitment and motivation (Fisher, King & Tague, 2001, p. 517).

The objectives of the development of the self-assessment programme were:

- ❖ to provide professional nurses with a structured measurement tool to assess their own level of operating room professional nursing practice competence in their own time and at their individual level of experience to enhance their knowledge and develop their skills
- ❖ to sensitise professional nurses to identify the feasibility of implementing self-assessment as part of a structured educational system for quality improvement of operating room professional nursing practice.

5.2.1 Rationale for the development of a self-assessment programme (self-assessment checklists and a self-assessment instructional guide)

The researcher's interest with regard to the participants' perceptions of self-assessment was aroused owing to the fact that there is a lack of evidence of any assessment and/or evaluation system in the operating rooms in state hospitals in Windhoek. As mentioned previously in the

study (refer page 13), assessment and/or evaluation is seldom done in operating rooms in Namibia (Kloppers, 2002, p.79). According to the American Nurses Credentialing Center (ANCC) nursing practitioners enter the nursing profession at a certain entry-level standard of knowledge, skills and abilities (Whittaker et al., 2000, p.13). In Namibia, the expectations for operating room nursing practice are that professional nurses should have basic theoretical and practical knowledge. Currently in Namibia, professional nurses are allocated anywhere after they have qualified, mostly with only basic knowledge and no post-basic experience. Those allocated to the operating room are often faced with situations they have never encountered in their years as student nurses. Furthermore, there are often few field experts to instruct them. Hence, the relevance of a self-assessment programme with a specified structure for self-assessment.

From the themes categorised in phase 1, it came to light that professional nurses need an educational structure to help them to develop their professional competence. Therefore, the development of a self-assessment programme for operating room professional nursing practice is of paramount importance.

Comments from participants during the focus group discussions in phase 1 reflected the need for an appraisal system. There was an atmosphere of dispiritedness linked to all the concepts mentioned by the participants. The following statement by the researcher is very subjective, but needs to be mentioned because of its relevance to the concepts mentioned by the

participants. The fact that there is no evidence of an educational system in the operating room challenges professional practitioners as it has implications for practice. This is even more serious for professional nurses without a formal qualification in operating room nursing science and those with little experience. The situation also affects professional nurses who have worked in the operating room for many years as they are also affected by the lack of an educational system that includes in-service training, a continuous development programme, and informal and formal performance appraisal. Quality performance cannot be determined in the absence of an assessment system. Such a system is also very important for professional nurses to stay abreast of the technological explosion worldwide.

The purpose of an educational system in operating room professional nursing practice is to guide professional nurses towards the expected level of excellence. This could be identified by means of an assessment process. It is imperative that any educational system be based on a philosophical framework.

5.2.2 Philosophical approach as a basis for developing a self-assessment programme

In the fields of nursing and education, complementary philosophical views are to be found that are relevant to this study, namely human existentialism, existentialism, essentialism and progressivism. These are discussed next.

The self-assessment programme was developed within the principles of a **humanistic-existentialist nursing philosophy**. Humanistic existentialism, as a philosophy of nursing, is applicable to nurses and patients as individuals in health care situations with their own experiences, values and expectations. Both parties have freedom of choice, are self-determined and have to realise that they are responsible for themselves in any given situation (Praeger, 1995, pp.302-303). This philosophy supports the essentials of a self-assessment programme to improve the quality of operating room professional nursing practice. It may be linked to the expectations of the participants regarding management support and personal values as identified in phase 1 (refer pages 51-52).

The **philosophy of education** is eclectic for the purpose of this study. **Existentialism** as a philosophy of education argues that individuals have the freedom to develop as they wish. At the same time, this philosophy demands the development of the person as a whole and not just the development of the mind (Shaw, n.d. c, p.2). This philosophical approach supports the concept of the self and the personal values elicited from participants in phase 1 (refer page 51-52). The nursing profession demands that professional nurses enhance their academic knowledge and also expects character development to take place at the same time.

For operating room professional nursing practice the philosophy of **essentialism** addresses the development of academic knowledge and character (Shaw, n.d. a, p.1). Specialised knowledge that forms the basis in a specific field is organized, tested and applied to form an integrated

whole for the execution of professional practices (Chinn & Kramer, 2004, p.1). The application of academic knowledge is described as the “most significant educational trend” operating worldwide (Makoni, 2000, p.3). Within the operating room, knowledge enhancement and skill development is a non-negotiable aspect of quality nursing practice; thus the need for written policies and procedures, which form the basis for developing a structure for knowledge enhancement and skill development, being readily available in operating rooms. The researcher believes that knowledge enhancement and skill development predict personal and professional performance in tasks entrusted.

The philosophy of **progressivism** proclaims that learning can be based on experience, interest and the ability of the learner to change (Shaw, n.d. b, p.3). One of the key themes identified from the concepts derived from phase 1 (refer page 51) was personal values. The expectations that professional nurses should be interested and display an attitude of caring were a couple of the subthemes mentioned by participants in phase 1 (refer page 51-52). The researcher argues that there must be written proof of a process of ongoing personal and professional growth towards excellence in improving quality operating room professional nursing practice. In support of this argument, Lockett and Sutherland (2000, p.112) are of the opinion that self-assessment can guide individuals to become more reflective and effective learners. Professional nurses as adult learners should have an inner need for developing on their own. Furthermore, for professional excellence the individual must develop as a whole; cognitively, affectively and psycho-motor. In support to this statement, Cowan, Norman, Vinoda and

Coopamah (2005, p.359) suggest that cognitive, affective and psychomotor attributes should all be viewed as crucial components of competence development.

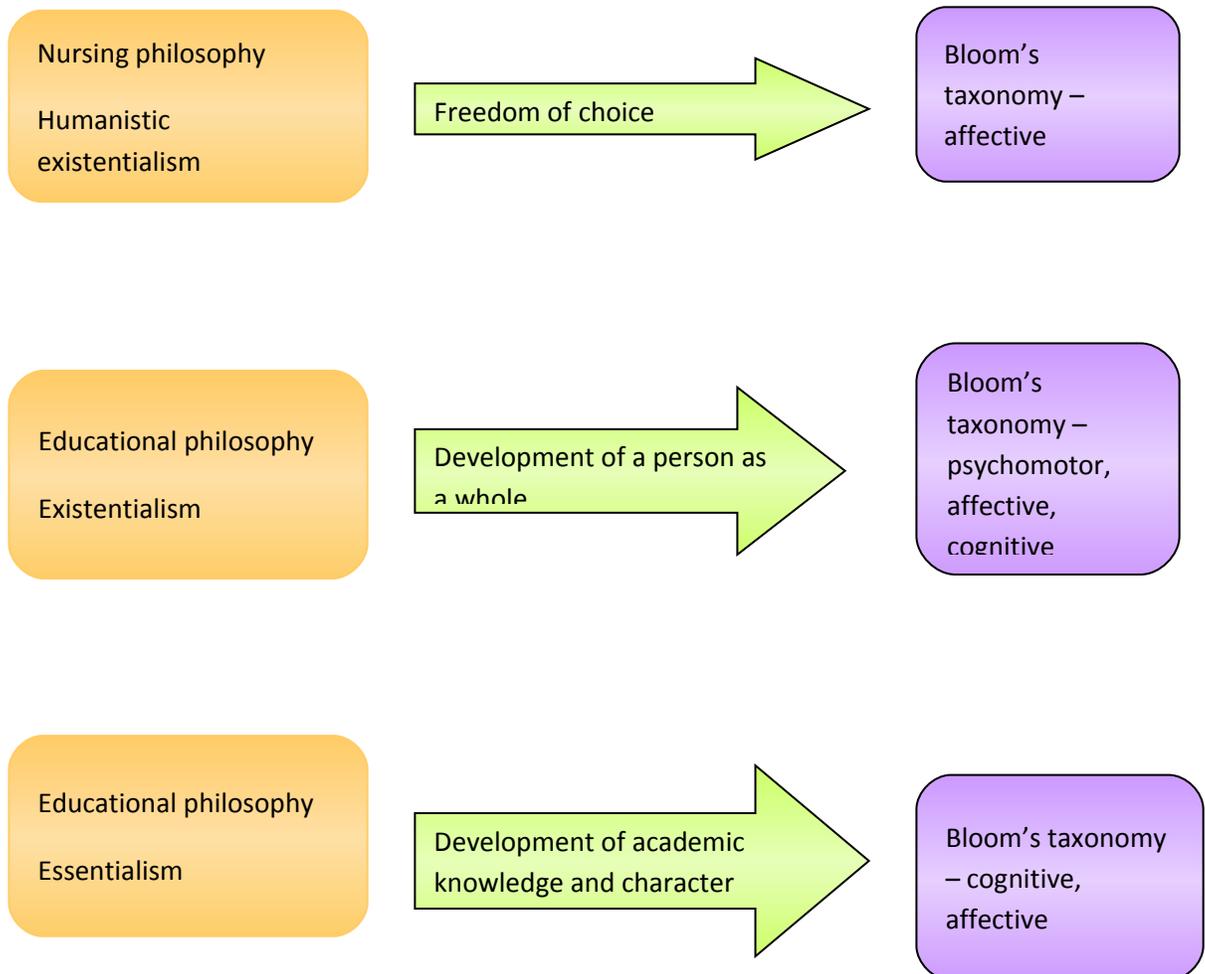
Bloom's taxonomy of learning supports the philosophies mentioned. Professional nurses are expected to enhance their knowledge and intellectual abilities (cognitive domain) (Quinn, 2000, p.140). They need to have knowledge to help them to solve problems and make sound judgements in order to acquire functional knowledge (Tiwari & Tang, 2003, p.270).

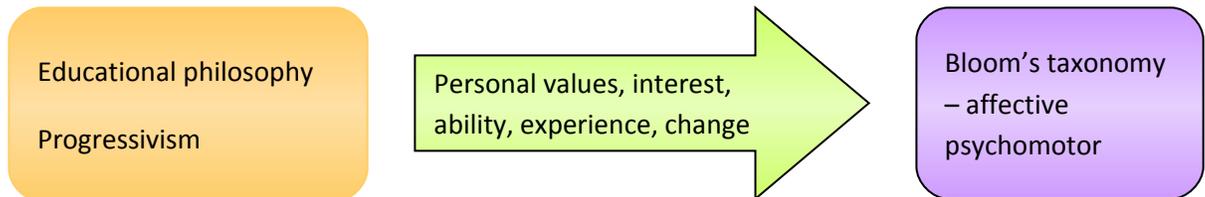
The affective domain needs to be developed in order to understand why it is important to carry out certain activities in a certain manner, and to identify values and feelings regarding the patient as a human being with specific needs. The concepts derived from phase 1, such as caring, responsibility, accountability, honesty, integrity, attitudes, interest, commitment and motivation (internal and external), were categorised and grouped to form a key theme of 'personal values'. The identification of personal values focuses on the affective domain (Quinn, 2000, p. 140).

Development of the psychomotor domain enhances professional skills for competent performance. This is extremely important because professional nursing practice is largely a practical endeavour (Aucoin, 1998, pp.213,216; Quinn, 2000, p.140). The fact that participants mentioned the need for standards, criteria, checklists, procedures and

assessment tools for their practice reflects the need for psychomotor development. Figure 5.3 illustrates the link between nursing and educational philosophical frame and Bloom's taxonomy of learning as applied for this study.

Figure 5.3 The link between the nursing and educational philosophical frame and Bloom's taxonomy of learning as applied for this study





5.2.3 Theoretical approach as a basis for developing a self-assessment programme

There is a need for a clear theoretical framework for assessing professional nursing competence and distinguishing between the different levels at which practitioners are operating in the operating room (Gannon et al., 2001, p.538).

The self-assessment programme was based on Knowles's andragogical learning theory. Andragogy was promoted by Malcolm Knowles (1980) and refers to adult learning based on belief that learning is a lifelong process and is self-directive (Brazen, 2000, p.740). The notion of lifelong learning as a practical activity increased in the nursing professional following ongoing development and changes in health care services and became part of jobs and careers (Gopee, 2001, p.607-608). Self-directed learning has received increasing attention in recent years in higher education. It gives individuals an opportunity to develop their own learning according to

what is relevant to their own needs and personal growth (Kenny & Kendall, 2001, p.649). It is believed that self-directed learning allows learning to progress beyond knowledge acquisition to being more memorable and motivating with the understanding that it increases learners' confidence in and capacity for independent learning in dynamic and challenging educational and work environments (Levett-Jones, 2005, p.364). As stated in the research done by the latter author, self-directed learning was met with resistance and resentment particularly in nursing faculties.

Professional nurses as adult learners should be able to plan and manage their own learning (Quinn, 2000, p.52). For this reason, the researcher found it relevant to illustrate the application of Knowles's andragogical learning for the development of a self-assessment programme.

Knowles's andragogical learning

The mode of andragogical learning is based on mental inquiry and not passive reception of transmitted content (Knowles, Holton & Swanson 2005, p.35). Adult learning is self-directed and self-controlled and emphasises independent study (Candy, 1991, p.11; Barnett, 1992, p.17). Knowles et al., (2005, p.175) describe adult learning in terms of four phases, which were applied to this study.

Four phases of Knowles's andragogical learning as applied to this study (Knowles et al., 2005, p.175)

McAllister (2001, p.308) argues that self-directed learning indicates that the learner prefers to be alone in their study and does most probably not have the ability to be a critical thinker. The application of the four phases of Knowles's andragogical learning to this study emphasises the importance of support in any situation where learning takes place.

Firstly, professional nurses have to demonstrate a **need** to know their own status regarding their professional performance (Anastasi, 2004, p.10). As adults they have to feel an inner desire to want to know their strengths and weaknesses regarding the performance of their professional practice. Self-assessment checklists provide professional nurses with an opportunity to identify their own status regarding their professional performance. During this self-assessment process they can determine on their own their need for in-service training and/or self-directed learning through existing literature and the inputs of peers. Each individual will have a different need because they are practising at different levels of academic and practical competence.

Secondly, an environment conducive for learning should be **created**. Chan (2001, p.625) asserts that a supportive learning environment is a critical aspect of the development of human resources. Management has a responsibility to provide an atmosphere of enquiry by making available relevant literature, in-service training, informal and formal assessment processes,

feedback sessions, peer assessment, meetings, strategies for encouraging self-assessment, written policies and procedures and a self-assessment process. The development of a self-assessment programme can be valuable to professional nurses as a support in knowledge enhancement and skill development.

The third phase is to choose and implement appropriate strategies for effective learning (Kenny, 1998, p.2). The **implementation** of a self-assessment programme by individuals as self-directed learning within the educational system for quality improvement in operating room professional nursing practice is an important aspect. Therefore the relevance of self-assessment checklists with predetermined standards and criteria of competent professional practice performance assessment.

The final phase is the **evaluating of** learning outcomes (Kenny, 1998, p.2). For this study evaluation refers to the feasibility of a self-assessment programme. The aim of this phase is to determine whether the programme can be used with ease by individual professional nurses to assess strengths and weaknesses in professional nursing practice performance. It also aimed at identifying problems, as well as the nature of the problems, and how this affects the use of a self-assessment programme as part of the educational system in the operating room (Wikipedia, n.d. g, p.1). Figure 5.4 illustrates the phases of Knowles's adult learning applied to this study as described above.

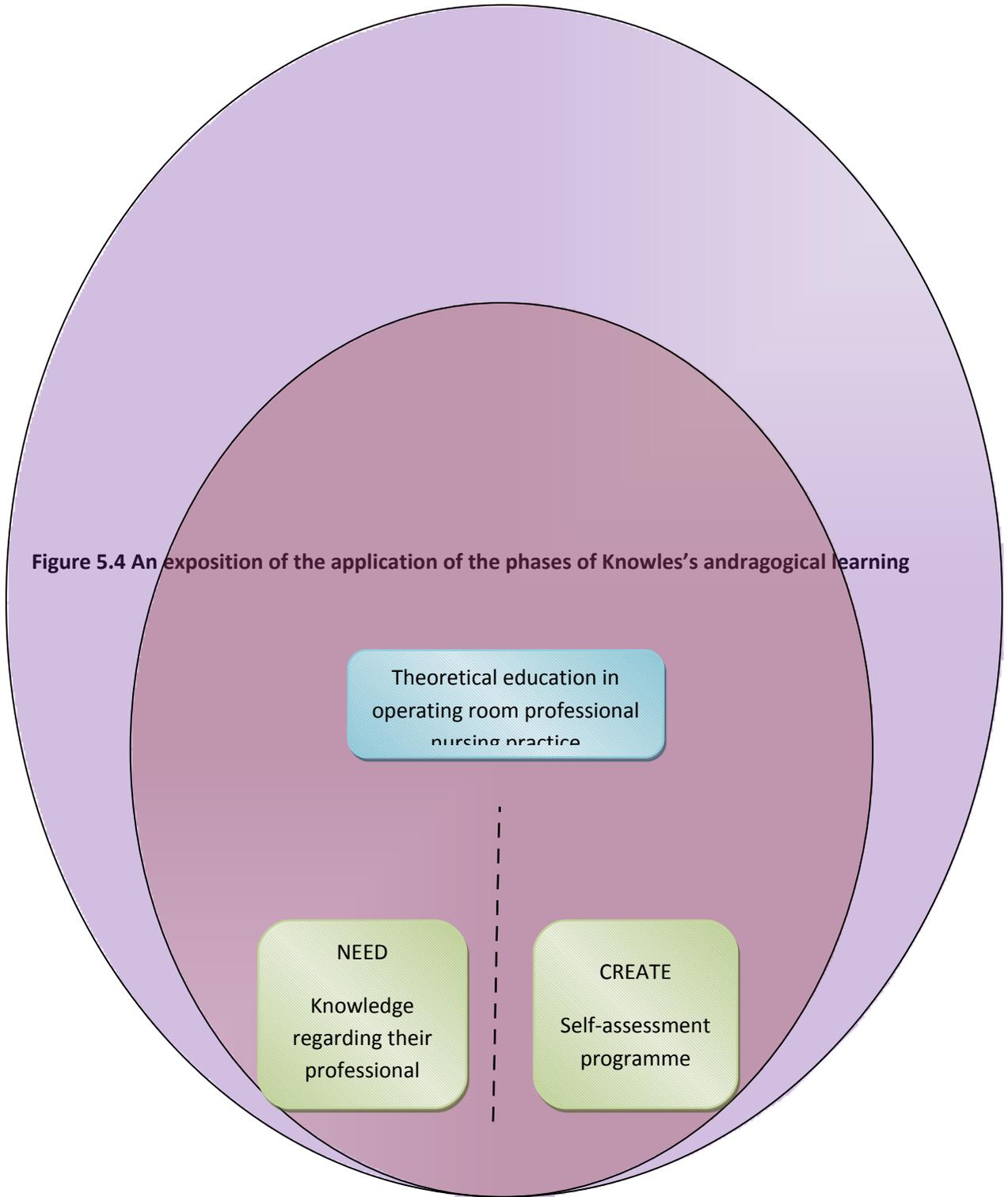
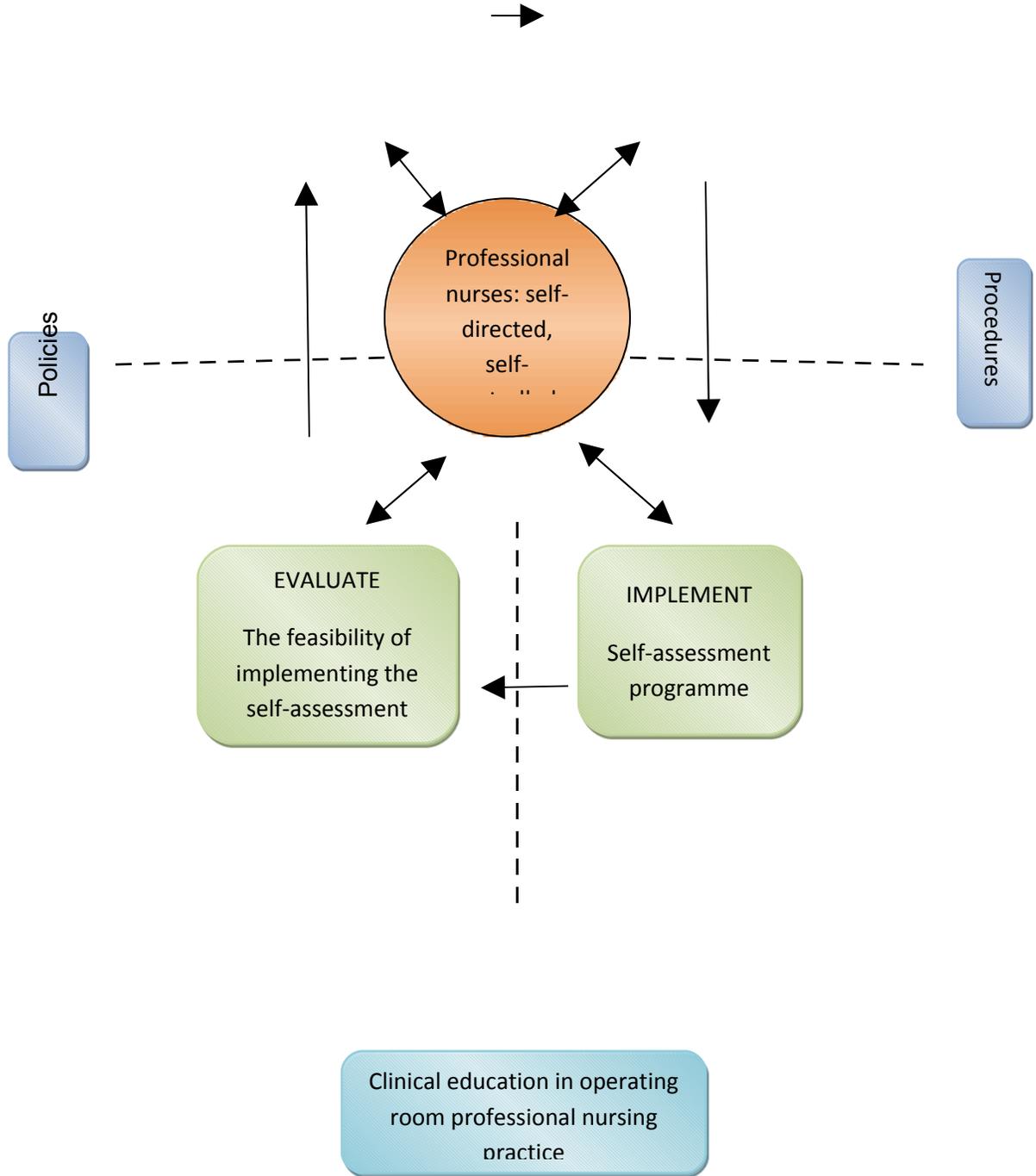


Figure 5.4 An exposition of the application of the phases of Knowles's andragogical learning



5.2.4 Development of the self-assessment checklists (Addendum E)

As part of the checklist, condensed literature information on each key theme was presented as guidance for professional nurses. For the key theme 'standards', Donabedian's standard model was applied.

The rationale for developing the checklists for the key themes of self-assessment, managerial support and personal values separately from standards is that almost all of the attributes of these key themes cannot be measured by observation, but are portrayed by the actions and behaviour of individuals and assessed by means of a structured measuring instrument. In operating room professional nursing practice, this is incorporated into the standards. For developing the key themes self-assessment, managerial support and personal values, a Likert scale was used. The researcher realised that although the concepts of self-assessment and personal values were not unfamiliar, they were also not words used every day by the participants. It also seemed as if the influence of the level of development of these concepts could not be linked to operating room professional nursing practice performance. The idea of managerial support was familiar but the extent of their involvement with managerial support was not voiced. The researcher also noted that there were no specific responsibilities linked to management. These observations forced the researcher to conclude with only five statements for each of the key themes self-assessment, managerial support and personal values, so that professional nurses would be able to internalise these concepts.

A Likert scales was used with responses indicating 1 as fully disagree to 5 as fully agree with an uncertain indicator in the middle (Black, 2003, p.228).

5.2.4.1 Self-assessment checklists for the key themes “self-assessment, managerial support and personal values” (Addendum E)

Self-assessment

Self-assessment is a clinical environment/practice-orientated field of study. It focuses on addressing aspects of the integration of theory and practice in the educational sphere of operating room professional nursing practice.

Development of the key theme self-assessment was based on the assumption that professional nurses will be able to acknowledge the fact that they have to engage in lifelong learning and should understand the integration of knowledge and practice. For lifelong learning it is imperative that professional nurses use personal qualities appropriately and effectively in

familiar and unfamiliar situations (Lockett & Sutherland, 2000, p.98). The subthemes of self-assessment and the alternative view on self-assessment referred to as a systematic continuous process done by others as well, support the argument that professional nurses should develop as a whole, cognitively, affectively and psychomotor

It is imperative that individuals first of all know themselves. If an individual is aware of his/her abilities, attitudes and values it will be easy for them to concentrate on the areas that need development after assessment. Professional nurses need to understand and believe that self-assessment can provide them with the choice to take responsibility for their own learning in their own time and encourage a sense of independence and responsibility for critical judgement about their performance. Self-assessment can form the basis for the development of character, and enhance self-discipline and self-empowerment. This represents the terminus in Dickhoff et al.'s practice-oriented theory (refer pp.157-162).

Refer to Addendum E (pp.7–10) for the checklist for the key theme of self-assessment.

The next discussion will be the development of the checklist for the key theme of “managerial support”.

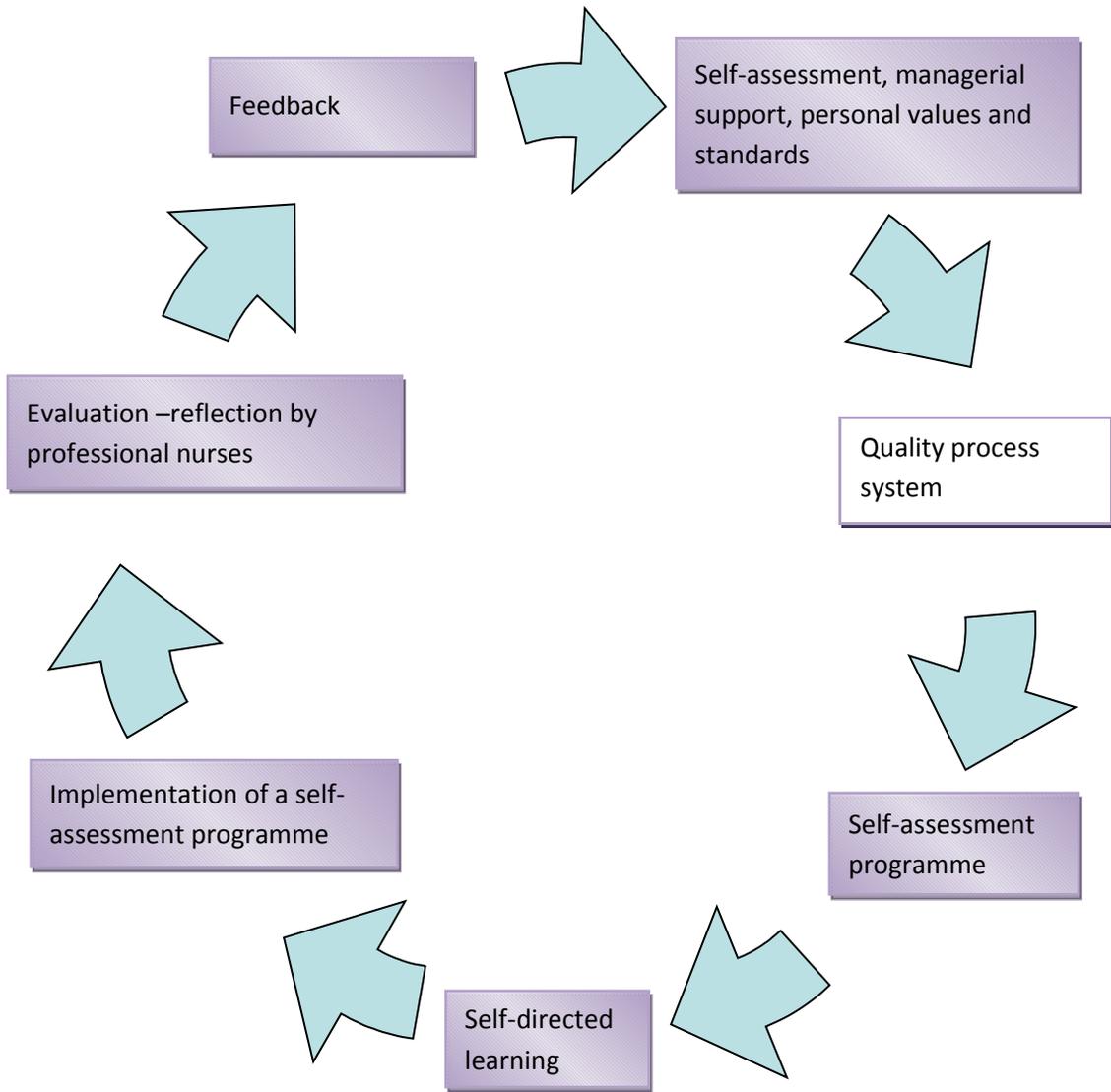
Managerial support

Managerial and educational structures form the basis for quality operating room professional nursing practice. Thus a well-organised managerial and educational system is required to enhance practice for excellence. Continuous and in-service education based on the principles of adult learning provides opportunities for professional nurses to gain in-depth knowledge and enhance their professional performance competence and personal growth.

The key theme of managerial support refers to staff allocation, in-service education, supervision, feedback and resource support. This theme was included in the self-assessment programme because professional nursing performance and support are interlinked with one another. Anastasi (2004, p. 10) supports the latter statement by stating that adult learners need to know; must be ready to learn; and their learning must be meaningful and related to their real situation. In addition, the learning process must support the learners' self-concept. Therefore the inclusion of the concept of managerial support is to provide professional nurses with an opportunity to determine the value of management, their own involvement in the managerial process, the support they render in their own management success and their expectations of managerial support. It is the opinion of the researcher that there is a distinct circle within managerial support that determines the quality of health care in a department. The self-assessment checklist for managerial support will remind professional nurses of the expectations for their involvement in the management process. For clarity, figure 5.5 illustrates the latter explanation by means of the quality system circle illustrating the link between managerial support and operating room professional nursing practice quality improvement as components of a self-assessment programme as described by Dale and

Ockland (1994, p.14). Refer to Addendum E (pp.11-12) for the checklist for the key theme managerial support.

Figure 5.5 Quality system circle



The development of the checklist for the key theme of “personal values” will be discussed next.

Personal values

Although quality performance is measured by preset standards and criteria, an excellent performer must be committed to adhere to and comply with these standards. The inclusion of personal values in the self-assessment programme was to sensitise professional nurses to the importance of being aware of their personal values regarding operating room professional nursing practice and their influence on their performance and the wellbeing of the patient.

Personal values address the concepts of caring, responsibility, accountability, honesty, integrity, attitudes, behaviour, interest, commitment and motivation. A responsible committed honest person will feel the need to internalise and operationalise standards and adhere to them, while a person who is not interested in operating room nursing will ignore basic operating room principles when they are under stress without thinking of the safety and wellbeing of the patient. An example is not carrying out the aseptic techniques of surgical skin preparation, which could lead to secondary wound sepsis in the patient. Patients rely on the integrity of professional nurses to acknowledge and meet their needs. Personal values incorporate all the attributes mentioned as being inseparable from the quality of operating room professional nursing practice and can be identified by the honest and committed care give even when nobody is looking and under all circumstances.

Refer to Addendum E (pp.13-16) for the checklist for the key theme of personal values.

The next discussion will be the development of the checklist for the key theme of “standards”.

5.2.4.2 Self-assessment checklist for the key theme “standards” (Addendum E)

For this study the researcher did not develop standards of operating room professional nursing practice because these are already in existence and utilized by professional nurses universally under titles such as Clinical Practice Performance and others. To develop the self-assessment checklist for standards for this study the researcher used standards and criteria developed and predetermined by the Association of Operating Room Nursing (AORN), Joint Commission for Accreditation of Health Care Organization (JCAHO), American Nurses Association (ANA) (Fairchild, 1996, p.38.) and the South African Theatre sister (SATS) (SATS, 1994, n.p.; Rothrock, 2003, p.3-4). Currently there is no evidence of operating room professional nursing practice standards or a nursing process guiding the implementation of operating room standards in Namibia.

On the evaluation of the situation of operating room professional nursing practice performance, the researcher found it appropriate to develop a checklist for the Namibian context based on the accepted universal standards. Furthermore, she contemplated the geographical setting of hospitals and the academic qualifications and practical experience of the professional nursing population serving the nation in this specialised field. For the checklist for the concept “standards”, the standards and criteria were changed so that they could be optimally utilised by professional nurses in the Namibian context. Thus, the setting of criteria for the checklist reflected activities in sequence for each standard, which also serves as a guideline for performance requirements for professional nurses (refer Addendum E pp.18-54).

As mentioned (refer to pp. 3, 4) the cognitive and affective skills of professional nurses cannot be experienced by patients, but can be experienced by professional nurses them-selves, demonstrated by their psychomotor skills and observed by others. Their activities will represent principles that describe their competence step-by-step for specific surgical interventions (Lenburg, 1999, p.10).

Therefore the criteria are more detailed and extensive than those in the other themes of the study.

This document should reflect current operating room professional nursing practice actions that identify both strengths and weaknesses. Therefore, in the standards checklist, Yes, No or N/A serves as indicators of performance (UNCKLE Guide to Subject Review, n.d., p.2).

For this study, 12 standards were identified. Each standard is represented by criteria in the checklist. Checklists for the standards include all operating room activities starting with the admission of the patient to the operating room and conclude with the report on the patient intervention given by the professional nurse (scrub nurse) to the recovery personnel in line with the intra-operative phase of the peri-operative period of a surgical intervention (refer p. 23).

The standards for this study

The researcher shares the opinion of Rothrock (2003, p. 3) who states that operating room professional nursing practice is “a systematic planned process – a series of integrated steps”. For argument’s sake, it is possible but not recommended to make a skin incision before surgical skin preparation and surgical draping is done. The latter argument supports the choice for the sequence of the standards of operating room professional nursing practice for this study.

Standard 1: Admission of the patient to the operating room. This is the first contact between the operating room personnel and the patient in the intra-operative phase of a surgical intervention.

Standard 2: Informed consent for an operative procedure. Informed consent is a legal document whereby permission is given by the patient that a specific test, diagnostic procedure and/or operative procedure can be performed.

Standard 3: Preparation for and execution of the operative positioning of the patient on the operating table. Operating room professional nurses should demonstrate knowledge of the different operative positions, different operating tables and their specific fittings, and should be able to change the position of the table without any risk to the patient or personnel. The specific operative position for certain operative procedures and the actions for prevention of risks for the patient and personnel should be demonstrated by preparations and/or instructions by the professional nurse (scrub nurse) if needed.

Standard 4: Preparation for and execution of surgical scrub, sterile gowning and gloving. Adherence to aseptic practices and techniques is required and should be demonstrated.

Standard 5: Preparation for and setting of sterile trolleys (instruments, drapes and sterile supplies). Professional nurses should adhere to the principles pertaining to the sterile field by carrying out the correct preparations and actions to prevent secondary infection of patient.

Standard 6: Preparation for and execution of swab management during an operative procedure. The activities of professional nurses should reflect the planning for swabs needed; the implementation of the process of swab counting throughout the operative procedure and the evaluation of the process.

Standard 7: Preparation for and execution of surgical instrument management during an operative procedure. Professional nurses should have knowledge and be able to carry out the activity of formal instrument management as prescribed to ensure that the patient is free from injuries related to extraneous objects after surgery.

Standard 8: Preparation for and execution of surgical suture material and surgical needle management during an operative procedure. Professional nurses should manage and care for suture material and surgical needles competently and effectively during a surgical procedure without risks to the patient and/or the personnel.

Standard 9: Preparation for and execution of surgical skin preparation. Surgical skin preparation should be done effectively and competently without any harm to the

patient as a result of the aseptic solution and to prevent bacteria on the skin surface from entering the incision.

Standard 10: Preparation for and execution of sterile draping. Activities of professional nurses should reflect careful planning to acquire desired types and sizes of surgical drapes and implementation of the draping method should reflect high quality of professional performance according to prescribed principles.

Standard 11: Safe handling and transfer of the patient from the operating table to the patient transport trolley in the operating room immediately after surgery. The patient will be transferred from the operating table to the patient transport trolley without loss of dignity, maintenance of baseline neuromuscular functions, intact skin, patent airway and free from any injury related to transfer of a patient.

Standard 12: Report on patient's interventions by the professional nurse (scrub nurse) to the recovery room personnel. All interventions carried out should be reported on completely and competently to ensure high quality continuous nursing care in the recovery room and later in the ward.

The following description will explain how the researcher used existing standards of clinical nursing practice based on the nursing process to comply with the prescribed standards within a Namibian context. The nursing process as described by Rothrock

(2003, p.4,11) includes assessment, nursing diagnosis, outcomes identified, planning, implementation and evaluation. Activities in the nursing process do not exist in operating room professional nursing practice in Namibia at present. Therefore, the chosen format of the standards is described below.

An example of a standard developed for this study. The information given as part of the checklist is taken from existing literature and represents the structure standard, process standard and outcomes standard. The criteria in the checklist confront professional nurses with the question “Did you?” and follow with the activities as they happen step by step in practice. The self-assessment document serves as a guide and a checklist. This structure was chosen to guide professional nurses, especially those with little experience, step by step through the activities of operating room professional practice during a surgical intervention. Although the information for this standard does not indicate the nursing process step by step, it addresses every part of it. This format also serves as a guide to the steps involved in the prevention of harmful practice.

The example only includes certain criteria for demonstrating the presence of all aspects of the nursing process. Refer to Addendum E (pp.18-54) for the complete checklist.

EXAMPLE

Standard 9: Preparation for and surgical skin preparation is used as an example of how existing standards were changed to suit the Namibian context.

Standard statement

The skin incision line and surrounding areas should be surgically cleaned with an aseptic solution that will not harm the patient. This statement reflects the **outcome identified**.

Institutions should have written policies and procedures to guide the operating room professional nurse to understand the importance of surgical skin preparation and the skills to be acquired to perform the procedure competently (**structure standard**).

The actions of the operating room professional nurse should reflect knowledge of the process of surgical skin preparation with the aim of preventing bacteria from entering the wound through the incision (**process standard**).

The outcome identified is that surgical skin preparation is done effectively and competently without any harm to the patient as a result of the aseptic solution and to “prevent bacteria on the skin surface” from entering the incision (Rothrock, 2003, p.147) (**outcomes standard**).

Self-assessment checklist for the preparation for and surgical skin preparation

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
9.1. Use the correct antiseptic solution according to any allergies known (assessment and planning of the nursing process)			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
9.3. Order the operating lights to be switched on (implementation of the nursing process)			
9.15. Ask someone to ensure that the patient's neck and diathermy plate are dry (evaluation of the nursing process)			

5.3 DEVELOPMENT OF A SELF-ASSESSMENT INSTRUCTIONAL GUIDE FOR OPERATING ROOM PROFESSIONAL NURSING PRACTICE (STANDARDS) (Addendum F)

The aim of the development of a self-assessment instructional guide is to provide professional nurses with information to sensitise them to the fact that development, learning and their day-to-day practice are related (North Central Educational Laboratory, n.d., p. 1). The objective of compiling a self-assessment instructional guide on operating room nursing practice standards is to provide

professional nurses with a readily available document they can consult immediately when needed.

The content of this document only includes standards of operating room professional nursing practice as arranged by the researcher. The rationale was to make the document user friendly and appropriate for regional and national utilisation. The researcher is of the opinion that professional nurses would rather want to have information on procedural principles guiding them on actions for surgical interventions when needed than on how to develop the self. Although the development of the self is important, the development of the individual as a whole is realised through the hands-on practical expression of professional nurses.

The self-assessment instructional guide was compiled using different sources on operating room professional nursing practice. The content presents standards, criteria, and procedural activities prescribed for operating room professional nursing practices during the intra-operative phase of the peri-operative period of surgical intervention.

The procedures of each standard include actions and
rationale.

The standards for this section are the same as for those for the self-assessment checklist starting with the admission of the patient to the operating room and ending with the report on the patient's intervention given by the professional nurse (scrub nurse) to the recovery room

personnel. The description of each standard includes the introduction, purpose of the standard, definition, standard statement, structure standard, process standard, outcome standard, objective of the standard and the procedure. The standards are based on Donabedian's standard model of structure, process and output standards (Katz & Green, 1997, p.25).

Refer to Addendum F for the document "Self-assessment instructional guide for operating room professional nursing practice" (standards).

5.4 VALIDATION OF THE SELF-ASSESSMENT PROGRAMME

The draft self-assessment programme was validated by operating room professional nursing experts where after the two documents were finalised before implementation.

An expert is defined as an individual with special knowledge, skills and opinions becoming an authority in a particular field of practice (MacLeod, 1996, p.16).

The population was professional nurses in managerial positions working in the operating rooms in the state and private hospitals in Windhoek. Members from the Directorate of Policy Planning and Human Resource Development of the Ministry of Health and Social Services were included. These members are professional nurses with an additional qualification in Operating Room Nursing Science.

The Chief Matron and Principal Nurse of the Department, the operating room of the two state and three private hospitals in Windhoek and two from the Nursing Division of the Ministry of Health and Social Services were selected

to conduct the validation. The sample size of 12 participants reflects the argument of Lo-Biondo-Wood (1998, p.198) who states that a sample can be either broad or narrow. The purposive sampling method was used (Polit & Hungler, 1999, p.284), which was appropriate because the Chief Matron and principal nurses usually form the management of the department and participate in the developmental process of policies and procedures. It can therefore be assumed that they will be the most informed regarding the expected quality of operating room professional nursing practice and professional competence. Twelve participants were invited but only seven attended the meeting.

The two drafted documents were given to the people selected with an invitation to participate in the study. The instructions gave the participants a choice to consent or decline. A period of one week was given for them to study the contents of the documents. Discussions took place during a scheduled meeting.

The researcher welcomed the participants and explained the reason for the meeting. She introduced the study, explained the aim of the study and the vision of the researcher as regards the use of a self-assessment programme in all operating rooms in state hospitals in Namibia. Participants were instructed to give an overall comment on the feasibility of the self-assessment programme that had been drafted. Participants validated the contents of the self-assessment checklists in the sense that the content addresses the activities that take place during a surgical intervention when the quality of operating room professional nursing practice can be measured. The comment on the content of the self-assessment instructional guide reflected relevance as a support document for theoretical knowledge enhancement and guidance for practical skills. It was important that there was consensus on the structure of the questions posed in the checklists.

The researcher guided the discussion through probing questions examining each page for comments on content relevance. Comments were considered, discussed and agreed by all before the next page was discussed. The amended self-assessment programme was finalised for phase 3 for implementation of the documents.

5.5 SUMMARY

The development of a self-assessment programme consisting of self-assessment checklists and a self-assessment instructional guide was discussed in this chapter. In nursing and education practice, complementary philosophical views are found, namely the human-existentialism of the nursing philosophy and

existentialism, essentialism and progressivism as educational philosophies relevant to this study.

Professional nurses are adult learners within the nursing profession and are expected to commit to lifelong learning. Therefore the discussion reflected the link between the nursing and educational philosophies and Bloom's taxonomy of learning.

An exposition of the application of the phases of Knowles's andragogical learning demonstrated the importance of the fact that the individual is the driving force behind operating room professional nursing practice quality improvement.

An extract of a standard in the self-assessment checklist was presented to illustrate why the researcher changed existing standards and criteria to fit the Namibian context.

Validation of the draft self-assessment programme was done by professional nursing experts where after the two documents were finalised ready for implementation.

CHAPTER 6

IMPLEMENTATION AND EVALUATION OF THE SELF- ASSESSMENT PROGRAMME

“The concepts are interesting and well-formed, but in order to utilize the ideas in a constructive manner the ideas must be feasible” (Gabel et al., 1999, p.21).

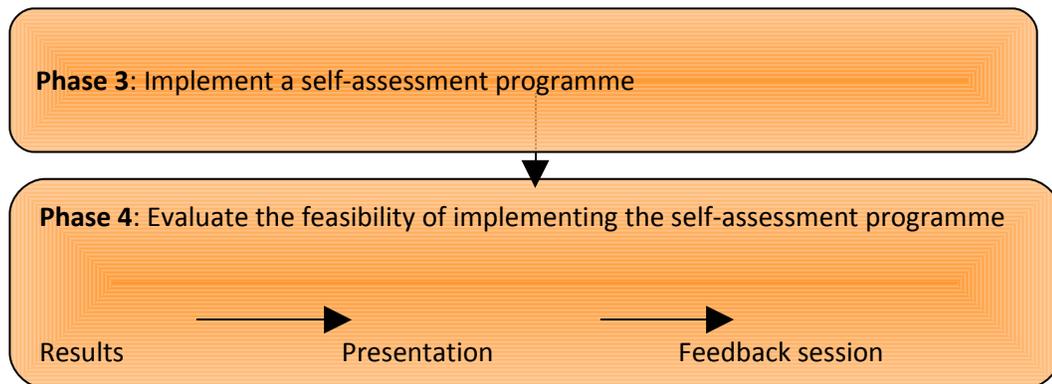
6.1 INTRODUCTION

The previous chapter described the development of a self-assessment programme based on the concepts derived from the focus group discussions in phase 1 of the study. The implementation of this programme and the evaluation of the feasibility of the document were the focus of this chapter.

As the purpose of the study was to develop a self-assessment programme as part of the educational system for improving the quality of operating room professional nursing practice, the feedback from the participants on their experiences during the implementation of the self-

assessment programme as an information tool was an important milestone in attaining that goal. The results of the focus group discussions held were presented in verbatim conversation. The inputs from the participants are presented in this chapter but not analysed. A graphical representation of the current phases (3 & 4) of the study is presented in figure 6.1.

Figure 6.1 A graphical representation of the current phases (3 & 4) of the study



6.2 THE IMPLEMENTATION OF THE SELF-ASSESSMENT PROGRAMME (phase 3)

The purpose of phase 3 was to implement the self-assessment programme developed by the researcher for the purpose of this study. This implementation of the programme had to be successful before the programme could be considered to be effective (Chen, 2005, p. 129).

6.2.1. Information session

All professional nurses (scrub nurses) available on a Wednesday afternoon in hospital A were verbally invited to attend a meeting. This was the same population as in phase 1 in hospital A. They were also given a written letter of invitation with a voluntary consent clause that they completed for participation in phase 3 and 4 of the research (Addendum C). Sixteen voluntary consent forms were completed but only 12 participants attended the information session and ten completed the self-assessment checklists.

The purpose of the study and the responsibilities of the participants regarding the implementation of the self-assessment programme were explained. The researcher stated that participation in this phase was voluntary and they had to sign a voluntary consent form to agree to be committed to meet the expectations. Voluntary consent was given after information was disseminated and participants understood the information and decided to participate of his/her own accord without undue influence (Burns & Grove, 2005, p. 196). Participants had two weeks in which to complete the self-assessment checklists. For this study the activities of swab, instrument and needle count needed to be included in the surgical procedure chosen by participants.

6.2.2 Implementation of the self-assessment programme

The participants were instructed to complete the checklists immediately or as soon as possible after the surgical procedure had been concluded. Literature accentuates the fact that the aim of immediate assessment is to recall the details of activities sufficiently (SATS, 1992, p.14).

The participants were expected to assist with a surgical intervention, complete the checklists in the document, calculate their score and compare it with the percentage indicated on page 5 of the document. These calculations were for their information only in order to assess their practical competence and give them an opportunity to find out whether they were able to use the document for their own benefit and that of the patient.

The calculations were not used in this study. They could have repeated the process according to their own needs and could have used the self-assessment instructional guide to find out if it could be used to gain theoretical knowledge and enhance their affective facet of the self if they concentrated on the rationale/explanation of the procedures. The most important aspect was to reflect on their feelings; the ease or difficulty of use of the document; and the frustrations experienced during the assessment of their performance.

6.3 EVALUATION OF THE FEASIBILITY OF THE IMPLEMENTATION OF THE SELF-ASSESSMENT PROGRAMME (Phase 4)

The purpose of phase 4 was to evaluate the feasibility of the self-assessment programme for operating room professional nursing practice quality improvement. It was important to determine whether a self-assessment programme could be integrated into the educational system for operating room professional nursing practice and used effectively and successfully. The key to a successful

programme is evaluation that provides feedback on the implementation of the programme; whether the goal and objectives of the programme were accomplished and how the programme affected the participants. For this phase the feedback from the participants on the implementation of the self-assessment programme was essential. The latter is supported by Chen (2005, p.5) who state that a programme “flies blind and is bound to deteriorate and eventually die” without feedback.

6.3.1 Objectives

The objectives of this phase were to:

- ❖ present participants with the results of their self-assessment

- ❖ determine the feasibility of the self-assessment programme as part of the system for operating room professional nursing practice quality improvement
- ❖ identify problems regarding the implementation of the self-assessment programme.

6.3.2 Feedback session

Two weeks after the information session on the implementation of the self-assessment programme the researcher invited the participants back for a feedback session. In order to be able to include all the participants who implemented the self-assessment programme, four feedback sessions were held owing to the working conditions in the operating room. The researcher opened the discussion by presenting participants with the results of

the checklists completed by the participants. Percentages of the different checklists were calculated and presented as a group percentage. This was done to emphasise the aim for use of the self-assessment programme, to expose realities and to capture their attention.

The discussion started with a general question bearing in mind the overall experience of the participants. To give direction to the discussion the results of their assessment were presented under the key themes as identified for this study, but was not discussed. The feedback from the participants was audio taped and field notes were taken.

The following question was posed:

What was your experience during the implementation of the self-assessment programme?

The atmosphere during the feedback sessions was relaxed and the participants responded spontaneously. The outcomes of the feedback session will be discussed in the section on the feasibility on the self-assessment programme and problems that were encountered during its implementation. The researcher wanted to know whether these documents were something they would like to use and whether they could result in quality improvement in operating room professional nursing practice.

The verbal responses will not be reinforced by literature, but some may be used as recommendations.

6.3.3 Feasibility of implementing the self-assessment programme

According to the responses of the participants it can be stated that the self-assessment programme can be implemented to the advantage of operating room professional nursing practice in Namibia.

After asking the general question, probing questions resulted in responses as follows:

“Die document kan gebruik word. Dit hou die standaarde op en is guideline”.

[The document can be used. It will keep the standards up and are guidelines].

“To me it was very interesting. It was a teaching method”.

“It was a learning method”.

“To me it was a challenge because to really evaluate yourself. You do not know the things that you do wrong. I did not go through the self-assessment instructional guide”.

"The documents can be used as a standard of practice. We can use it as standards and stick to it. If there is an office in the theatre that takes responsibility to use the documents for in-service training and orientation then there is only one office responsible for the quality of operating room nursing care".

"These instruments are valuable".

"It can be done every month because it will help you to update your knowledge and skills".

When utilising the self-assessment programme professional nurses will be able to learn all the essential concepts needed for their practice. They will also be able to always know exactly what is expected of them because the self-assessment checklists are guidelines for quality practice. Self-assessment has the advantage of immediate feedback to the performer and allows critical self reflection and revision at any given time (Infonet, n.d., p.1; Scribd, n.d., p.2). Self-assessment can be done by many people at the same time. This in itself is an advantage to quality development.

During the feedback session the respondents shared problems they encountered during the implementation of the self-assessment programme.

6.3.4 Problems encountered during the implementation of the self-assessment programme

Although the responses were in favour of the utilisation of the self-assessment programme as part of the system, participants encountered general problems which are presented next.

"It was time consuming".

"It is very difficult to evaluate yourself because you do not know what you do is correct".

"The documents can be used if it is reduced to only critical points".

"People are not honest".

Assessment is a time consuming activity. Self-assessment may therefore provide an important complementary tool for testing (Allen & van der Velden, 2005, p.11). Uk Centre for Legal Education (n.d., p.2) attest that although self-assessment may not be reliable and that people can be too lenient on themselves, this exercise can help to improve the individuals understanding of how and what they are learning and to review, plan and take responsibility for their own learning. Some people may experience self-assessment as a difficult activity, but the process of self-assessment can help individuals understand the value added through

learning about themselves by themselves of not just their skills but also other facets of their being.

According to the responses of the participants it is evident that there may be disadvantages to the implementation of the self-assessment program.

6.4 SUMMARY

In this chapter the implementation of the self-assessment programme done by professional nurses from the hospital A was discussed. The feasibility of the implementation of the self-assessment programme and the problems encountered during the implementation of these documents, were discussed.

After completion, a feedback session was held and results were presented for the sake of interest. A general question was posed on the experiences of the participants during the implementation of the self-assessment programme. The results of the feedback session held were presented in conversation.

In the next chapter the researcher will conclude the study, make recommendations and discuss the limitations of the study.

CHAPTER 7

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

“The world is moving so fast these days that the man who says it can’t be done is generally interrupted by someone doing it (Elbert Hubbard, 1856-1915).

7.1 INTRODUCTION

The previous chapter described the results of the self-assessment programme that was implemented and the responses of the participants in this regard. The purpose of this chapter is to justify the study in terms of the aim and objectives of the study, as well as to evaluate the study in terms of a positive contribution to the body of scientific knowledge on operating room professional nursing practice and discuss the limitations of the study. Recommendations were made to ensure the ongoing utilisation of the self-assessment programme for professional and personal development in order to improve the quality of operating room professional nursing practice. Further research to be done will be discussed and final concluding remarks on the study will be made.

The self-assessment programme aims to encourage professional nurses to become capable of independent, reflective and lifelong learning and to highlight the importance of management involvement in the whole process (UCE Birmingham Faculty of Health, n.d., p.1).

7.2 CONCLUSIONS

Objectives were set for developing a self-assessment programme for operating room professional nursing practice quality improvement. Each objective was linked to phases of the study.

7.2.1. Objective 1: To determine the perceptions of professional nurses working in the operating room regarding self-assessment.

7.2.1.1 CONCLUSION

Objective 1 is concluded in phase 1 of the study. To meet objective 1 the researcher held focus group discussions with professional nurses, irrespective of their years of experience in operating room nursing practice or their academic qualifications, in the state hospitals in Windhoek (Windhoek Central and Katutura) and Oshakati. The focus groups met several times until the data was saturated. The researcher deemed the data saturated when no new statement were made and there was a sense of silent agreement on what was mentioned in the groups.

It may be concluded that operating room professional nurses perceive self-assessment as a concept that is professional, personal and important. The data obtained was analysed according to Tesch's open coding, which is a qualitative, descriptive and systematic approach to data reduction (Tesch, 1995, p.90) and then categorised into four key themes namely self-assessment, managerial support, personal values, and standards, as well as subthemes, which formed the basis for the study.

7.2.2 Objective 2: Develop a self-assessment programme for operating room professional nursing practice for the state hospitals in Namibia

7.2.2.1 CONCLUSION

Phase 2, that represents objective 2, focused on the development of a self-assessment programme based on Knowles's andragogical learning theory, with a link between the nursing and educational philosophy, Bloom's taxonomy and existing literature on standards according to the Donabedian's standard model.

To meet objective 2 the researcher used the themes and subthemes of self-assessment, managerial support, personal values and standards to develop checklists (refer Addendum E).

The self-assessment instructional guide was developed from literature on operating room professional nursing practice and consists of just the standards including activities and rationale/explanation to guide professional nurses during their encounter with a patient undergoing surgery (refer Addendum F).

7.2.3 Objective 3: Implement the self-assessment programme

7.2.3.1 CONCLUSION

Objective 3 is concluded in phase 3 of the study. The implementation of both documents required commitment from the participants. The researcher concluded that there is a lack of commitment evidenced by the fact that 16 participants signed the voluntary consent for participation, 12 attended the meeting for instructions and only ten completed the self-assessment.

7.2.4 Objective 4: Evaluate the feasibility of implementing the self-assessment programme
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7.2.4.1 CONCLUSION

Objective 4 was concluded in phase 4. To meet objective 4 the researcher had to collect and process the data and present the data to the participants. Although the performance of the participants was not part of the study, the researcher deemed it necessary to present the results to the participants to elicit their feelings and opinions on the feasibility of the self-assessment programme. In this regard feedback sessions were held.

Professional nurses at the time of the study were in favour of utilising the self-assessment programme. Hence the conclusion that the self-assessment programme is feasible for improving the quality of operating room professional nursing practice.

Feasibility of utilising a self-assessment programme

The eagerness shown by participants to know the results of the self-assessment programme was a very positive sign. Statements were made that the self-assessment

programme can be used as standards of practice that can guide professional nurses to update their knowledge and skills. Others experienced the use of the self-assessment programme as a teaching and learning experience. Respondents voiced the opinion that they felt that evaluating themselves to estimate the level of their competence measured against predetermined standards was a challenging experience.

7.3 RECOMMENDATIONS

Several recommendations were made as a result of the research study. These recommendations will not be made according to the themes elicited because these complement each other and are interlinked for operating room professional nursing practice quality improvement. Recommendations on how to establish a sound structured educational system with self-assessment as part of the appraisal process for operating room professional nursing practice quality improvement will be presented followed by recommendations for other research projects.

7.3.1 Recommendation for establishing a self-assessment process as part of the educational system for operating room professional nursing practice quality improvement

Continuous education for all staff member should be a must in all facilities. Educational time should be set aside weekly or monthly (Gabel et al., 1999, p.91) and should be nonnegotiable.

Self-assessment is an individually driven activity. The functional core of self-assessment is a well-established quality assurance committee with supporting focus group areas.

Recommendation 1: Establish a quality assurance committee in operating room professional nursing practice incorporating a system audit process.

It is recommended that the operating room community establish a quality assurance committee according to the guidelines of the Ministry of Health and Social Services. Initiating, establishing, and maintaining self-assessment in the operating rooms should be the responsibility of the departmental manager in collaboration with the quality assurance committee of the institution. This requires a positive attitude, values, necessary knowledge, skills and competence regarding self-assessment for quality improvement within a structured educational system.

Aspects that the quality assurance committee is responsible for should comply with current legislation on health care systems. Policies, standards, criteria, principles and procedures regarding operating room professional nursing practice should be in place and updated. The didactic concept of adult learning should be discussed, accepted and adhered to. Management should evaluate the environment for current academic trends,

and its conduciveness for learning and the application of theoretical knowledge. The quality assurance committee is also responsible for determining the feelings, competencies and satisfaction of personnel regarding operating room professional nursing practice as a whole, and implementing corrective measures if needed. Other important aspects under the control of the quality assurance committee are to foster an ethos of value for human life, to promote team work and collaboration, and to nurture the operating room as a department of excellence with zero defects. Another important factor is the system's audit process which forms an integral part of the quality assurance committee.

The reason for establishing a self-assessment system audit process is to provide answers relating to the quality of operating room professional nursing practice. It is recommended that all staff members participate in this audit process and people responsible should plan, implement and evaluate the results. The system should incorporate data collection, data analysis and a feedback system that will benefit the individual and the department as a whole. It is important for written presentations to be made to the quality assurance committee on a regular basis.

Management should provide clear departmental quality assurance procedures and a "forum in which quality issues are discussed" (UNCKLE Guide to Subject Review, n.d., p.4). Criteria should be evaluated every three years to allow for changes that may have occurred changing consumer expectations (internal and external) for nursing care and the management of new

technology (Delaune & Ladner, 2002, p.164.). Policies and procedures should be reviewed to ascertain whether operating room professional nursing practice complies with regulations (Delaune, & Ladner, 2002, p.166.) and ministerial requirements. It is recommended that individual self-assessment be done monthly and auditing by the committee every three months. As stated by Neary (2001, p.7), successful performance on one day is no guarantee for success on another.

Recommendation 2: Establish an in-service educational system taskforce for operating room professional nursing practice

The focus of an in-service educational taskforce is staff members and management and these groups should evaluate current educational legislation. It is important to evaluate and manage the educational system in relation to its ability to fulfil the vision and mission of operating room professional nursing practice in Namibia. The educational system should comply with the expectations of statutory bodies and functional groups at grassroots level and should include teaching and learning and the assessment thereof. The self-assessment programme content should be relevant for regional and national needs and be used for continuing professional development (CPD). The structure of guides should include tools/methods to measure outcomes of learning and quality of performance and to provide guidance for improvement towards excellence.

Supervision, appraisal, and performance review that will enable development strategies to be anticipated and communicated to others (Kagan & Evans, 1995, p.201) should be

part of the responsibilities of an educational taskforce. The fact that professional nurses are in different stages of knowledge and skill development should be considered. It is therefore recommended that they work as a team to develop and gain knowledge in operating room professional nursing practice (Kagan & Evans, 1995, p.184).

Expectations are that professional nurses will follow these policies in striving for professional excellence. It is recommended that in-service training take place weekly, with a continuous professional development programme as indicated by the institution. Spot evaluation with immediate constructive feedback is a very powerful method of teaching.

Recommendation 3: Establish an orientation and mentoring programme

The fact that professional nurses at the beginning of their professional career are placed in the operating room with no or little experience in this discipline calls for a well established mentoring programme. It is recommended that the mentoring programme consists of an orientation section and a monitoring section, where experienced staff members mentor and guide the beginners to competent professional practice. The self-assessment programme, that can be used individually and in a group, for teaching and assessment, could contribute to quality care during the intra-operative phase of surgery if implemented correctly. Another very important method of progressing is peer group interaction.

Concluding remarks on the recommendations

The researcher conclude that the self-assessment programme be implemented as in the current format. The researcher further proposes that the self-assessment programme be implemented without change in other health care institutions. The format of the self-assessment checklists for the concepts self-assessment, managerial support and personal values are developed in manner that professional nurses can only concentrate on one or all of these concepts at a given time. For the concept standards the required activities of professional nurses (scrub nurse) that start with the admission of the patient to the operating room and conclude with the report on the patient intervention given by the professional nurse (scrub nurse) to the recovery personnel is in line with the intra-operative phase of the peri-operative period of a surgical. This sequence also correspond with the activities and rationale illustrated in the self-assessment instructional guide. When the individual professional nurse identified her/his weakness in only one of these standards, she/he can concentrate on that specific standard and does not need to complete the whole self-assessment. It is, however, a worthwhile exercise to complete the whole self-assessment programme to make sure of continuous high quality operating room professional nursing practice.

7.3.2 Recommendations for further research

Recommendations for further research are as follows:

- ❖ Research on the utilisation of the nursing process in operating room professional nursing practice in Namibia

- ❖ Research on personal values in terms of their influence on operating room professional nursing practice performance
- ❖ Research on a measuring tool to determine the competence of operating room professional nurses regarding each discipline in surgical interventions, for example ophthalmology
- ❖ Research into job satisfaction of operating room professional nurses
- ❖ Research on staffing, staff allocation, recruitment and attainment of personnel
- ❖ Research based on the educational needs of sub-professional categories working in the operating rooms.
- ❖ Research based on a situation analysis of the placement of beginner professional nursing practitioners in accordance with own personal interest.

7.4 LIMITATIONS

Restrictions in the study that may have decreased the credibility of the study will be discussed next (Burns & Grove, 1995, p.33).

Limitations with regard to the environment

The place where an interview is held has an effect on the outcomes (Rapley, 2004, p.18).

The focus group discussions were held in the tearoom of the operating rooms because

nurses always had to be available for any eventualities in the operating room. As a result there was constant interference from people entering and leaving the tearoom.

Limitations with regard to the participants

Another limitation is the “Pygmalion effect”, which could have affected the outcomes of the results if the participants had answered positively with regard to self-assessment because they thought the researcher expected them to answer positively (Babbie & Mouton, 2001, p.221).

Limitations with regard to data collection

Personal interviews would have been a more effective method of data collection. An independent person could have been requested to facilitate during the focus group discussions to ensure truthful responses.

The use of anonymous naïve sketches could have been instrumental to elicit more information with regard to the participant’s true experiences of this programme.

Limitations with regard to the central question for phase 4 (feedback session)

The central question could be rephrased to: “How did the self-assessment programme work for you?” The central question should have been tested on participants and changed before implementation as part of the research.

7.5 ORIGINAL CONTRIBUTION

The development of the self-assessment programme is an original contribution to the body of scientific knowledge of operating room professional nursing practice.

The original contribution of the study may be summarised as follows:

No literature is available in Namibia that focuses on the expectations of operating room professional nurses with regard to self-assessment as part of the educational system. The opinions and ideas of operating room professional nurses regarding self-assessment were elicited in phase 1 and reported on. Although these concepts are known in general and applied to other speciality fields of employment in Namibia, they have not been applied to the field of operating room professional nursing practice. The importance of this is that it provided the researcher with data for developing a self-assessment programme.

A conceptual framework for operating room nursing practice was developed based on the concepts derived from the focus group discussion in phase 1. The conceptual framework encapsulates the entire process of self-assessment. This includes and describes the

expectations of all parties involved in the process, that is, the facilitator, the recipient, the statutory bodies, the procedures, the interaction between the contents and the expected outcomes of the process. The descriptions of each of these aspects enriched the scientific knowledge of operating room nursing science in the sense that they confront professional nurses with their expected characteristics and behaviours.

The self-assessment programme consists of self-assessment checklists and a self-assessment instructional guide. The checklists were developed from the concepts of self-assessment, managerial support and personal values pertaining to operating room professional nursing practice. The checklists provided for the standards derived from existing international standards, but were changed to represent operating room professional nursing practice for the sequential activities of professional nurses during the intra-operative phase of a surgical intervention and for easy application by the practitioner irrespective of their academic or clinical level of qualifications and experience. For operating room personnel these checklists are particularly valuable in hospitals in the rural areas of Namibia where support from other nursing professionals and/or other health services is not always available. One example would be a novice who is allocated to an operating room without the support of an experienced professional nursing staff member or an anaesthesiologist.

A self-assessment instructional guide was developed from existing universal standards of operating room professional nursing practice. These standards were changed to represent the

activities of professional nursing practice from the admission of the patient to the operating room to the point where the professional nurse (scrub nurse) reports on the patients' intervention to the recovery room personnel. For each standard, a standard statement, structure standard, process standard, outcomes standard, objectives and procedures consisting of activities and rationale have been included as a guide for operating room professional nursing practitioners.

The self-assessment programme was operationalised. Professional nurses can use the self-assessment programme to empower themselves and become autonomous in operating room professional nursing practice.

Another contribution was the evaluation process of the self-assessment programme. The significance of this process to the body of scientific knowledge on operating room professional nursing practice is the introduction of an assessment tool for professional nurses and to sensitise them to a process of identifying their own strengths and weaknesses and correct any backlog and/or incompetent practice by self-directed, self-controlled, lifelong learning.

7.6 CONCLUDING REMARKS

The aim of the development of the self-assessment programme was to assist individual professional and personal growth and knowledge enhancement and to improve performance skills. It is concluded that the utilisation of the self-assessment programme

in the operating room is feasible. The programme is also valuable in the sense that it sensitised the participants to identify their strengths and weaknesses. Hence, it was observed that the implementation of a self-assessment programme in operating room professional nursing practice is subjected to the professional and personal characteristics of the individual.

The statement by Desforges (2003, p.10) that “educational research will ask us to change our ways rather than put a new tool in our hands” supports the vision of the researcher for the outcome of this study. Surgical patients are at their most vulnerable when they are under anaesthesia and this challenge the quality of operating room professional nursing care performance. Although professional nurses are deemed to be the patient’s advocate, they must always remember that they are never alone during a surgical intervention. There is the patient with his or her specific needs, the medical practitioners with their specific needs, professional nurses with their specific needs and the ward personnel with their specific needs. Maintaining the quality of operating room professional nursing practice depends on dealing successfully with the complexity of its internal relationships and having effective ways of relating to others (Ellis et al., 2003, p.3).

Education forms the basis for quality improvement and incorporates formal and informal instruction and assessment. With the incredible growth in technology, the value system of professional health care has changed from the personal human touch to excelling

academically and mastering technical roles (Stanfield & Hui, 2002, p.10). This portrays the task oriented tendencies of operating room professional nursing practices. In this day and age where technology and machines are replacing human resources we have to consider modern developments versus quality professional nursing practice. It still remains a personal obligation to gain as much knowledge and develop practical skills in order to serve the nation optimally. Hence the relevance of the suggestion by Kitson, (2001, p.95) that the concept of competencies should be refined and models of self-directed, self-controlled, lifelong learning be developed.

Can any health professional honestly say that they are competent? The individual needs to subject himself/herself to constant reflective practice to assess their professional competence (Kaye-Petersen, 2001, p.2). Honest assessment with the aid of the self-assessment programme can be used as evidence of “learning, experience and achievement” by professional nurses in the educational process (Gannon et al., 2001, p.539). Kaye-Petersen (2001, p.4) recommends that professional nurses should rather be honest and not blame their incompetence on restrictive regulations and policies, staff shortages and lack of equipment.

Be positive about the outcomes of your professional practice. Be actively involved in the development of operating room professional nursing practice and the improvement of the quality of clinical practice. Assess your skills and knowledge. Never stop learning and be the best you can be.

8. BIBLIOGRAPHY

Adconion Media Group. (n.d.). *Robots in the operating room: Cover story*. Retrieved September 18, 2007, from: <http://findarticles.com/p/articles/mi-m1370/is-n6.v27/ai-14046478>.

Addis, G., & Karadag, A. (2003). An evaluation of nurses' clinical teaching role in Turkey. *Nurse Education Today*. *The Journal for Health Care Education – An International Journal*, 23(1), 27-33.

ADEA - American Dental Education Association, Commission on Change and Innovation in Dental Education. (2006). Education strategies associated with development of problem-solving, critical thinking, and self-directed learning. *Journal on Dental Education*, 70(9), 925-936.

Akerström, M., Jacobsson, K., & Wästerfors, D. (2004). Reanalysis of previously collected material. In C. Searle, G. Gobo, J. F. Gubrium & D. Silverman (Eds.), *Qualitative research practice* (pp.344-356). London: Sage.

Alberta Assessment Consortium about Classroom Assessment for Learning. (n.d.). *Questions and answers: Q&A*. Retrieved September 17, 2004, from <http://www.aac.ab.ca/aboutqa.html>.

Allen, J., & van der Velden, R. (2005). *The role of self-assessment in measuring skills*. Retrieved September 8, 2004, from <http://www.fdewb.unimaas.nl/roa/reflect/documents%20public/publications/REFLECT%20Working%20paper%2002%20Role>.

American Association for Higher Education. (n.d.). *Nine principles for good practice for assessing student learning*. Retrieved September 17, 2004, from <http://www.aahe.org/assessment/principi.htm>.

Anastasi, J. (2004). Re-entry to nursing: Student focus in the competence assessment service programme. *Studies in*

Learning, Education Innovation and Development, 1(1), 8-15.

AORN Online. (n.d. a). *It's important to know...* Retrieved February 8, 2005, from <file:///A/assess2.htm>.

AORN Online. (n.d. b). *AORN Official statement on unlicensed assistive personnel.* Retrieved February 8, 2005, from <file:///A/assess5.htm>.

AORN Online (n.d. c). Statement on mandate for the registered professional nurse in the perioperative practice setting. Retrieved February 8, 2005, from <file:///A/assess6.htm>.

AORN Online (2000). *AORN Reports shortage of registered nurses in the operating room.* Retrieved April 7, 2003, from <http://www.aorn.org/Press/Shortage.htm>.

AORN Online (2002). *Perioperative nurses: Your safety is our job...We take it seriously*. Retrieved April 8, 2003, from <http://www.aorn.org/about/nurseweek.htm>.

Armstrong, K. (2006). Fit or purpose: An interview with Jane Reid. *HES*. June 22, 2006. Retrieved September 14, 2007, from <http://www.hesmagazine.com/storyprint.asp?sc=2036430>.

Asia Market Research Dot Com (n.d.). *Qualitative research*. Retrieved September 2, 2006, from <http://www.asiamarketresearch.com/glossary/qualitative-research.htm>.

Atkinson, L. J., & Fortunato, N. (1996). *Berry & Kohn's operating room technique*. (8th ed.). London: Mosby.

Attitude-behaviour consistency. (n.d.). *Attitudes drive behaviour*. Retrieved September 14, 2007, from <http://www.as.wvu.edu/~sbb/comm221/chapters/abc.htm>.

Aucoin, J.W. (1998). Programme planning: Solving the problem. In K. J. Kelly-Thomas (Ed.), *Clinical and nursing staff development: Current competence, future focus* (pp.213-238). (2nd ed.). New York: Lippincott.

Babbie, E., & Mouton, J. (2001). *The practice of social research*. Cape Town: Oxford University Press.

Badley, G. (1992). Institutional values and teaching quality. In R. Barnett, (Ed.), *Learning to effect* (pp.21-37). Buckingham: SRHE and Open University Press.

Banta, T. (n.d.). *Developing assessment methods at classroom, unite, and university-wide levels*. Retrieved May 8, 2007, from www.enhancementthemes.ac.uk/documents/events/20040319/Bantapaperrevised.pdf.

Barnett, R. (1992). What Effect? What Outcomes? In R. Barnett (Ed.), *Learning to Effect* (pp.3-16). Buckingham:SRHE and Open University Press.

Beck, C. (2006). Postmodernism, pedagogy, and philosophy of education. *Philosophy of Education Society*. Retrieved September 23, 2006, from

<http://www.ed.uiuc.edu/eps.pes-yearbook/93-docs/beck.htm>.

Berlandi, J. (2002). Ethics in perioperative practice: Accountability and responsibility. *AORN Journal*, June, 2002. 1-3. Retrieved September 14, 2007, from

<http://findarticles.com/p/articles/mi-mOFSL/is-6-75/ai-88575988>.

Beyea, S. C. (2002). AORN's response to the nursing shortage in perioperative settings: Headquarters report.

AORN Journal, August, 2002. Retrieved September 14, 2007, from [file://findarticles.com/p/articles/mi-mOFSL/is-](file://findarticles.com/p/articles/mi-mOFSL/is-2-76/ai/90749847)

[2-76/ai/90749847](file://findarticles.com/p/articles/mi-mOFSL/is-2-76/ai/90749847).

Black, T. R. (2003). *Doing quantitative research in the social sciences: An integrated approach to research design, measurement and statistics*. London: Sage.

Bohner, G., & Wänke, M. (2004). *Attitudes and attitude change*. East Sussex: Psychology Press.

Bonner Curriculum. (n.d.). *Facilitation 101: Roles of effective facilitators*. Retrieved October 02, 2007. from <http://www.bonner.org/resources/modules.pdf/BonCurFacilitation101.pdf>.

Booyens, S. W. (1998). *Dimensions of nursing management*. Cape Town: Juta.

Borden, L. M., & Perkins, F. D. (1999). Assessing your collaboration: Self-evaluation tool. *Journal of Extension*, 37(2), 1-6. Retrieved August 15, 2004, from <http://www.joe.org/1999april/ttl.html>.

Bourke, M. P., & Ihrke, B. A. (1998). The evaluation process: An overview. In D.M. Billings & J. A. Halstead (Eds.), *Teaching in nursing: A guide for faculty* (pp.349-366). London: W. B. Saunders.

Boyle, J. S. (1981). An application of the structural-functional method to the phenomenon of caring. In M. M. Leininger (Ed.), *Caring: An essential human need. Proceedings of the Three National Caring Conferences* (pp.37-48). Detroit: Wayne State University Press.

Brazen, L. (2000). Nursing staff development. In M. L. Phippen & M. P. Wells (Eds.), *Patient care during operative and invasive procedures* (pp.737-752). London: W.B. Saunders.

Brewer, C. S., & Nauenberg, E. (2003). Future intentions of registered nurses employed in the western New York market: Relationships among demographic, economic and attitudinal factors. *Applied Nursing Research*, 16(3), 144-

155.

Brodie, D. A., Andrews, G. L., Andrews, J. P., Thomas, G. B., Wong, J., & Rixon, L. (2004). Perceptions of nursing: confirmation, change and the student experience.

International Journal of Nursing Studies, 41(7), 721-731.

Bruwer, A. (1992). Opening address. *SATS: South African Theatre Sister*, 17(39), 4-5.

SATS: Western Cape.

BUPA's Health Information Team. (2004). *Improving assertiveness*. Retrieved September 14, 2007, from <http://hcd2.bupa.co.uk/fact-sheets/html/improving-assertiveness.html>.

Burgess, H. (n.d.). Assessment 2: Self and peer assessment. *SWAP*. Retrieved September 14, 2007, 1-4. from <http://www.swap.ac.uk/learning/assessment2.asp>.

Burnard, P. (2005). Issues in helping students from other cultures. *Nurse Education Today: The Journal for Health Care Education, An International Journal*, 25(3), 176–180.

Burns, N., & Grove, S. K. (1997). *The practice of nursing research: Conduct, critique & utilization*. (3rd ed.). London: W. B. Saunders.

Burns, N., & Grove, S. K. (2005). *The practice of nursing research: Conduct, critique & utilization*. (5th ed.). Missouri: Elsevier Saunders.

Cabe, D. K. (2001). Robots move into operating room.

Harvard University Gazette. October 25, 2001. Retrieved

September 18, 2007, from:

<http://www.hno.harvard.edu/gazette/2001/10.25/11-robot.html>.

Cadman, K., Clack, E., Lethbridge, Z, Millward, J.,
Morris, J., & Redwood, R. (2003). Reflection: A casualty
of modularisation. *Nurse Education Today. The Journal
for Health Care Education. An International Journal*,
23(1), 11–18.

Calpin-Davies, P. J. (2003). Management and leadership:
A dual role in nursing education. *Nurse Education Today.
The Journal for Health Care Education. An International
Journal*, 23(1), 3–10.

Calpoly. (n.d.). *Learning outcomes assessment planning
guide*. Retrieved September 17, 2004, from

<http://www.academics.calpoly.edu/assessment/assessplanguide.htm>.

Candy, P. C. (1991). *Self-direction for lifelong learning*. San Francisco: Jossey-Bass.

Career Counseling. (n.d.). *Self-evaluation clears all obstacles*. Retrieved August 07, 2004, from: <http://www.indieducation.info/careercenter/self-evaluation/-2k>.

Carley, S. (n.d.). *Stop looking for external motivation: 43 things*. Retrieved September 14, 2007, from <file://www.43things.com/things/view/95057>.

Carlisle, C., & Ibbotson, T. (2005). Introducing problem-based learning into research methods teaching: Student and facilitator evaluation. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 25(7), 527-541.

Carper, B. (1999). Fundamental patterns of knowing in nursing. In E.C. Polifroni & M. Welch. (Eds.), *Perspectives on philosophy of science in nursing: A historical and contemporary anthology* (pp.12–18). New York: Lippincott.

Chabeli, M. M. 2001. *A model to facilitate reflective thinking in clinical nursing education*. Unpublished.

Chan, D. (2001). Development of an innovative tool to assess hospital learning environments. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 21(8), 624–631.

Changing minds. (n.d.). *Intrinsic motivation*. Retrieved September 14, 2007, from <file://changingminds.org/explanations/theories/intrinsic-motivation.htm>.

Chen, H. (2005). *Practical programme evaluation: Assessing and improving planning, implementing, and effectiveness*. London: Sage.

Chinn, P. L., & Kramer, M. K. (1999). *Theory and nursing: A systematic approach*. London: Mosby.

Chinn, P. L., & Kramer, M. K. (2004). *Integrated knowledge development in nursing*. St. Louis: Mosby.

Claveirole, A., & Mathers, M. (2003). Peer supervision:
An experimental scheme for nurse lecturers. *Nurse
Education Today. The Journal for Health Care Education.
An International Journal*, 23(1), 51-57.

Clouder, L., & Sellars, J. (2004). Reflective practice and
clinical supervision: An interprofessional perspective.
Journal of Advanced Nursing, 46(3), 262-268.

College of Nurses of Ontario. (n.d.). *Nursing practice*.

Retrieved February 14, 2002, from

<http://www.cno.org/nursing/qa.html>.

Cope, P., Bruce, A., McNally, J., & Wilson, G. (2003).

Grading the practice of teaching: An unholy union of

incompatibles. *Assessment & Evaluation in Higher Education*, 28(6), 673-683.

Counseling and Mental Health Center. (n.d.). *Learning to be assertive*. Retrieved September 14, 2007, from

<http://www.utexas.edu/student/cmhc/booklets/assert/assertive/html>.

Cowan, D. T., Norman, I., Vinoda, P., & Coopamah, P. (2005). Competence in nursing practice: A controversial concept – A focused review of literature. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 25(5), 355-362.

Cox, L. S., & Miranda, D. (2003). Enhancing student leadership development in community settings nursing. *Nurse Educator*, 28(3), 127-131.

Creativity and the management process. (n.d.). *Nickelodeon creativity: for the young and young at heart*. Retrieved June 2, 2004. from <http://www.creativequotations.com/cm3.shtml>.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. London: Sage.

Currie, V., Harvey, G., West, E., McKenna, H., & Keeney, S. (2005). Relationship between quality of care, staffing levels, skill mix and nurse autonomy: Literature review. *Journal of Advanced Nursing*, 51(1), 73-82.

Dale, B., & Oakland, J. (1994). *Quality improvement through standards*. (2nd ed.). England: Stanley Thornes.

Davis, N. T., Kumtepe, E. G., & Aydeniz, M. (2007). Fostering continuous improvement and learning through

peer assessment: Part of an integral model of assessment.

Educational Assessment, 12(2), 113-135.

De Calonne, C. A. (n.d.). *Perioperative nursing*. Retrieved

September 9, 2007, from

<http://victorian.fortunecity.com/rubens/386/ornursing.html>.

DefineThat. (n.d). *Technical definitions: What is*

feedback? Retrieved March 1, 2008, from

<http://www.definethat.com/define/853.htm>.

Delaune, S. C., & Ladner, P. K. (2002). *Fundamentals of*

nursing: Standards and practice (2nd ed.). Canada:

Thomson Delmar Learning.

Delpont, C. S. L., & De Vos, A.S . (2002). Professional research and professional practice. In A. S. De Vos (Ed.), *Research at grass roots: For the social sciences and human service profession* (2nd ed.) (pp.49-61). Pretoria: Van Schaik.

Dempsey, P. A., & Dempsey, A. D. (1992). *Nursing research with basic statistical applications*. Boston: Jones & Bartlett.

Department of Baccalaureate & Graduate Nursing. (n.d.).

Our philosophy. Retrieved June 28, 2001 from

<http://www.bsn-gn.eku/philos1.htm>.

Desforges, C. (2003). Evidence-informed policy and practice in teaching and learning. In D.M. Anderson, & L. Bennett (Eds.), *Developing educational leadership: Using evidence for policy and practice* (pp.3-10). London: Sage.

De Vos, A. S. (2002). Quality data analysis and interpretation. In A. S. De Vos (Ed.), *Research at grass roots: For the social sciences and human service professions* (2nd ed.) (pp.339-355). Pretoria: Van Schaik.

Dickoff, J., James, P., & Wiedenbach, E. (1968). Theory in a practice discipline part 1: Practice oriented theory. *American Journal of Nursing Company*, 17(5), 438-448.

Dickson, D., Hargie O., & Morrow, N. (1997). *Communication skills training for health professionals*. (2nd ed). London: Chapman & Hall.

Dienemann, J. A. (1998). *Nursing administration: Managing patient care*. Connecticut: Appleton & Lange.

Dimmock, C., & Walker, A. (2005). *Educational leadership: Culture and diversity*. London: Sage.

Docherty, J. (1992). Total quality management within the NHS. *Journal of Theatre Nursing*, June, 1-4.

Ellis, R., Gates, B., & Kenworthy, N. (2003).
Interpersonal communication in nursing: Theory and practice. (2nd ed.). New York: Churchill Livingstone.

Ely, M., Anzul, M., Friedman, T., Garner, D., &
McCormack Steinmetz, A. (1991). *Doing quality research: Circles within circles*. London: Falmer.

Emotional Intelligence. (n.d). *Emotional honesty* Retrieved
September 14, 2007, from <http://eqi.org.ehon.htm>.

Engelbrecht, F. D. J. (2003). Nursing competency: Self-evaluation process. *Conference report. 27-29 August.*
Windhoek.

Engelbrecht, F. D. J. (2005). Assessment and evaluation of instruction: CAA 7309. *Centre for External Studies.*
Windhoek: University of Namibia. Annexure B

Evaluation tools. (n.d.). Retrieved May 05, 2007, from <http://mime1.marc.gatech.edu/MM-Tools/evaluation.html>.

Fairchild, S. S. 1996. *Perioperative nursing: Principles and practice* (2nd ed.). London: Little, Brown and Co.

Feedback. (n.d). Retrieved March 1, 2008, from

<http://www.google.com.na/search?hl=en&defl=en&q=define:feedback&sa=X&oi=glossary...>

Fisher, M., King, J., & Tague, G. (2001). Development of a self-directed learning readiness scale for nursing education. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 21(7), 516–525.

Foertsch, J., & Alexander, B. B. (n.d.). *Guidelines for self-evaluation of EOT-PACI Projects*. Retrieved September 7, 2004, from www.cac.wisc.edu/-lead/pages/products/self-eval.pdf.

Foster, N. (2003). Conference report. *Nursing competency: Self-evaluation process*.
August (pp.27-29). Windhoek.

Fouche, C. B. (2002). Problem formulation. In A. S. De Vos (Ed.), *Research at grass roots: For the social sciences and human service professions* (2nd ed.) (pp.104-113). Pretoria: Van Schaik.

Fouche, C.B., & Delpont, C. S. L. (2002). Introduction to the research process. In A. S. De Vos (Ed.), *Research at grass roots: For the social sciences and human service professions* (2nd ed.) (pp.77-91). Pretoria: Van Schaik.

Fouche, C. B., & De Vos, A. S. (2002). Quantitative research designs. In A. S. De Vos (Ed.), *Research at grass roots: For the social sciences and human service professions* (2nd ed.) (pp.137-149). Pretoria: Van Schaik.

Franklin, D. (2002). The 5 guiding principles of daily surgical schedule. *Outpatients Surgery Magazine*. December, 1-2. Retrieved September 14, 2007, from <http://www.outpatientsurgery.nt/2002/os12/f5.shtml>.

Friedl, J. J., De Vos, A. S., & Fouche, D. B. (2002). Conceptual research. In A. S. De Vos (Ed.), *Research at grass roots: For the social sciences and human service professions* (2nd ed.) (pp.435-442). Pretoria: Van Schaik.

Gabel, R. A., Kulli, J. C., Stephen Lee, B., Spratt, D. G., & Ward, D. S. (1999). *Operating room management*. Johannesburg: Butterworth Heinemann.

Gannon, F. T., Draper, P. R., Watson, R., Proctor, S., & Norman I. J. (2001). Putting portfolios in their place. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 21(7), 534–540.

Geoghegan, D. (2000). Peri-operative nursing in the 21st Century. *South Africa Theatre Sister (SATS)*, 25(1), March.

Gerdes, L. C. (1988). *The developing adult*. (2nd ed.).
Durban: Butterworth.

Gillham, B. (2000). *The research interview*. London:
Continuum.

Gobo, G. (2004). Sampling, representativeness and generalizability. In C. Searle, G. Gobo, J. F. Gubrium, & D. Silverman, (Eds.), *Qualitative research practice* (pp.435-454). London: Sage.

Gopee, N. (2001). Lifelong learning in nursing:
Perceptions and realities. *Nurse Education Today. The
Journal for Health Care Education. An International
Journal*, 21(8), 607-615.

Government Notice No.10 of 1999. No.2040. (1999). *Government Gazette of the Republic of Namibia*.:Rules relating to the acts or omissions by registered or enrolled persons constituting improper conduct or misconduct, pp.1-14.

Government Notices No.13 of 1999. No.2040. (1999). *Government Gazette of the Republic of Namibia*.: Regulations relating to the scope of practice of persons who are registered or enrolled under the Nursing Professions Act, No 30 of 1993, pp.64-71.

Greeff, M. (2002). Information collection: Interviewing. In A. S. De Vos (Ed.), *Research at grass roots: For the social sciences and human service professions* (pp.291-320). (2nd ed.). Pretoria: Van Schaik.

Gubrium, J. F., & Holstein, J. A. (1997). *The new language of qualitative method*. New York: Oxford University Press.

Grundy, L. (2001). Pathway to fitness for practice: National Vocational Qualifications as a foundation of competence in nurse education. *Nurse Education Today*.

The Journal for Health Care Education. An International Journal, 21(4), 260-265.

Gunter, L. M. (1997). Notes on a theoretical framework for nursing research. In L. H. Nicoll (Ed). *Perspectives on nursing theory* (3rd ed.) (pp.5-12). New York: Lippincott.

Habgood, C. (2000). New nurse-to-patient ratio legislation and its effect on perioperative nursing: Statistical data included. *AORN Journal*, June, 1-4. Retrieved September 14, 2007, from <http://findarticles.com/p/articles/mi-mOFSL/is-6-71/ai-64424155>

Hansen, D. T., Mior, S., & Mootz, R. D. (2000). Why outcomes? Why now? In S.G. Yeomans (Ed). *The clinical application of outcomes assessment* (pp.3-13).

Connecticut: Appleton & Lange.

Happell, B. (2000). Student interest in perioperative nursing practice as a career. *AORN Journal*, March, 1-2.

Hardyman, R., & Hickey, G. (2001). What do newly-qualified nurses expect from preceptorship? Exploring the perspective of the preceptor. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 21(1), 5864.

Hart, C. (2000). *Doing the literature review*. London: Sage.

Henning, E., Van Rensburg, W., & Smit, B. (2004). *Finding your way in qualitative research: Releasing the social science research imagination*. Pretoria: Van Schaik.

Hidalgo, C. Z. (2002). *Definition of integrity: Interactive playground*. Retrieved February 29, 2008, from <http://webweevers.com/integrity.htm>.

Hiemstra, R. (2006). *Translating personal values and philosophy into practical action*. Retrieved February 21, 2006, from <http://home.twecnryrcom/hiemstra/philchap.html>.

Hilgart, C. M., & Hytry Karl, M. (1995). Developing clinical protocols and guidelines for advanced practice nursing (APN). In M. Snyders, & M. P. Mirr (Eds.), *Advanced practice nursing: A guide to professional development* (pp.93-102). NewYork: Springer.

Hill, S. S. & Howlett, H. A. (1997). *Success in practical nursing: Personal and vocational issues* (3rd ed.). London: W.B. Saunders.

Hodson-Carlton, K. E. (1998). The learning resource center. In D. M. Billings, & J. A. Halstead (Eds.), *Teaching in nursing: A guide for faculty* (pp.301-314). London: W.B. Saunders.

Holmström, I., & Larsson, J. (2005). A tension between genuine care and other duties: Swedish nursing students' views of their future. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 25(2), 148-155.

Hornby, A. S. (2005). *Oxford advanced learner's dictionary: International student's edition* (7th ed.). New York: Oxford University Press.

IHETS: Indiana Higher Education Telecommunication System. (n.d.). *Indiana partnership for statewide education course development grant proposal teaching surgical practice in online learning communities*. Retrieved September 14, 2007, from <http://www.ihets.org/archive/progserv-arc/education-arc/IPSEgrants-arc/99-00/proposals/...>

Infonet. (n.d.). *What do we need to consider?* Retrieved September 8, 2004, from <http://www.jiscinfonet.ac.uk/Infokits/effective-use-of-VLEs/e-assessment/assess-ads-disads>.

Interim Health Professionals Councils in Namibia. (n.d).

Windhoek: Information on continuous professional development (CPD). Windhoek.

Jacelon, C. S. (2004). Managing personal integrity: The process of hospitalization for elders. *Journal of Advanced Nursing*, 46(5), 549-556.

Jooste, K. (2003). *Leadership in health services management*. Lansdowne: Juta Academic.

Kagan, C., & Evans, J. (1995). *Professional interpersonal skills for nurses*. Cheltenham: Stanley Thornes.

Karaöz, S. (2005). Turkish nursing students' perception of caring. *Nursing Education Today. The Journal for Health Care Education. An International Journal*, 25(1), 31-40.

Katz, J. M., & Green, E. (1997). *Managing quality: A guide to system-wide performance management in health care*. London: Mosby.

Kaye-Petersen, E. (2001). Workshop report. *Defining nursing competency in a Namibian context*. 4-6 September 2001. Windhoek: University of Namibia.

Kenny, A. (1998). Self-direction: An appropriate model for teaching skills. *Nurse Education Today. The Australian Electronic Journal of Nursing Education*, 4(1). Retrieved March 13, 2000, from <http://www.scu.edu.au/school/nhcp/aejne/archive/vol4-1/akennyvol4-1.htm>.

Kenny, A. J., & Kendall, S. (2001). Serving two masters: Quality teaching and learning versus economic rationalism. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 21(8), 648-655.

King, C. A., & Broom, C. (2002). Ethics in perioperative practice: Values, integrity, and social policy. *AORN Journal*, Dec. Retrieved September 14, 2007, from <http://findarticles.com/p/articles/mi-mOFSL/is-6-76/ai-95681593>.

Kirby-Harris, R. (2001). *Defining nursing competency in a Namibian context*. Workshop report. 4-6 September 2001.

Windhoek: University of Namibia

Kisting Sparks, R. (1995). Client education. In M. Snyders, & M. P. Mirr (Eds.), *Advanced practice nursing: A guide to professional development* (pp.117-133). New York: Springer.

Kitson, A. L. (2001). Does nursing education have a future? *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 21(2), 86-96.

Knowles, M. S. (1990). *The adult learner: A neglected species* (4th ed.). Houston: Gulf.

Knowles, M. S., Holton, E. F., & Swanson R. A. (2005). *The adult learner: The definitive classic in adult education and human development* (6th ed.). Boston: Elsevier

Kloppers, A. R. E. (2002). *Quality of nursing care rendered by professional nurses during the intra-operative phase of a surgical intervention*. Unpublished.

Kress, R. N. (n.d.). The RNNA programme enhances the OP team. *Operating Room Nurses Association of Canada*.

Retrieved April 07, 2003, from

<http://www.ornac.ca/articles/may94-2.htm>.

Kyrkjebø J. M., & Hage, I. (2005). What we know and what they do: Nursing students' experiences of improvement knowledge in clinical practice. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 25(3), 167-175.

Learning Point Associate. (n.d.). *Outcomes-based education: An overview*. Retrieved July 20, 2006, from <http://www.ncrel.org/sdrs/areas/issues.envrnmnt/go.go4outcm.htm>.

Legal Eagle Eye Newsletter for the Nursing Profession, (1998). *Sponge counts not documented*, (6)3Mar 98.

Retrieved January 21, 2003, from

<http://www.nursinglaw.com/spongecount.htm>.

Leininger, M. M. (1981). The phenomenon of caring: Importance, research questions and theoretical considerations. In M. M. Leininger (Ed.), *Caring: An essential human need. Proceedings of the three National Caring Conferences* (pp.3-16). Detroit: Wayne State University Press.

Lenburg, C. B. (n.d.). Promoting competence through critical self-reflection and portfolio development: The inside evaluator and the outside context. *Tennessee Nurses Association*. Retrieved May 8, 2004, from

<http://www.tnaonline.org/portfolilcl.html>.

Lenburg, C. B. (1999). The framework, concepts and methods of the competency outcomes and performance

assessment (COPA) model. *Online Journal of Issues in Nursing*. Retrieved September 24, 2004, from <http://www.nursingworld./ojin/topic10tpc10-2.htm>.

Levett-Jones, T. L. (2005). Self-directed learning: Implications and limitations for undergraduate nursing education. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 25(5), 363-368.

Liaschenko, L., & Peter, E. (2004). Nursing ethics and conceptualization of nursing: profession, practice and work. *Journal of Advanced Nursing*, 46(5), 488-494).

Lilly, J. (n.d.). *Robotics in the operating room*. Progressive engineer feature. Retrieved September 18, 2007, from

<http://www.progressiveengineer.com/PEWebDackissues2005/PEWeb%2064%20Jul52005-2/Intuitive.htm>.

Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic inquiry*. London: Sage.

LoBiondo-Wood, G., & Haber, J. (1998). *Nursing research: Methods, critical appraisal and utilization* (4th ed.). Missouri: Mosby.

Link: Self-evaluation. (n.d.). *Holistic education as education for adaptability or "self-empowerment": The function of error and self-evaluation*. Retrieved August 07, 2004, from <http://www.holisticeducator.com/selfevaluation.htm>.

Living values education. (n.d.). *Honesty (a)*. Retrieved September 14, 2007, from <http://www.livingvalues.net/values/honesty.htm>.

Lucas, J. R. (1995). *Responsibility*. New York: Clarendon Press.

Luckett, K., & Sutherland, L. (2000). Assessment practices that improve teaching and learning. In S. Makoni (Ed.). *Improving teaching and learning in higher education: A handbook for Southern Africa*. (pp.98-130). Johannesburg: HERDSA (The Higher Education Research and Development Society of Australasia).

MacLeod, M. L. (1996). *Practicing nursing: Becoming experienced*. New York: Churchill Living.

Macnaghten, P., & Myers, G. (2004). Focus groups. In C. Searle, G. Gobo, J. F. Gubrium, & D. Silverman (Eds.), *Qualitative research practice* (pp.65-77). London: Sage.

Major, D. A. (2005). OSCEs – seven years on the bandwagon: The progress of an objective structured clinical evaluation programme. *Nurse Education Today*. *The Journal for Health Care Education. An International Journal*, 25(6), 442-454.

Makoni, S. (2000). Great expectations: The professional and institutional demands of higher education in Southern Africa. In S. Makoni. (Ed.), *Improving teaching and learning in higher education. A handbook for Southern Africa* (pp. 1-9). Johannesburg: HERDSA (The Higher Education Research and Development Society of Australasia).

Martin, J., Oksanen, R., & Takala, T. (2000). *Preparation of the education sector development programme in Ethiopia*. Paris: Association for the Development of Education in Africa (ADEA).

Martin, V., & Henderson, E. (2001). *Management in health and social care*. London: Routledge.

MBEC - Ministry of Basic Education and Culture (1998). *Towards improving continuous assessment in schools: A policy and information guide*. Examination Board. Revised. Draft. Rep. of Namibia.

McAllister, M. (2001). Principles for curriculum development in Australian nursing: An examination of the

literature. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 21(4), 304–314.

Mc Clelland, D. C. (2000). *Human motivation*. Cambridge: Press Syndicate of the University of Cambridge.

Menon, S. T. (2002). Toward a model of psychological health empowerment: Implications for health care in multicultural communities. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 22(1), 28-39.

Miles, M. B., & Huberman, A. M. (1994). *Quality data analysis: An expanded sourcebook*. London: Sage.

Miller, P.L. (2003). The effect of scoring criteria specificity on peer and self-assessment. *Assessment & Evaluation in Higher Education*, 28(4), 813-820.

Miller, M., & Kearney, N. (2004). Guidelines for clinical practice: Development, dissemination and implementation. *International Journal of Nursing Studies*, 41(7), 813–820.

Mills, P. (2003). Group project work with undergraduate veterinary science students. *Assessment & Evaluation in Higher Education*, 28(5), 528–538.

MOHSS - Ministry of Health and Social Services. (1998). *The patient charter*. Republic of Namibia. Windhoek.

Mondungwa, N., Poggenpoel, M., & Gmeiner, A. (2000).

The experience of the mothers caring for their teenage daughters' young child. *Curationis*, 23(3). September, 63-65.

More-selfesteem.com (n.d). *Self-motivation*. Retrieved

January 27, 2007, from

<file:///C:/Documents%20and%20Settings/karstens/My%20document>.

Morse, J. M., & Field, P. A. (1996). *Nursing research: The application of qualitative approaches* (2nd ed.).

Cheltenham: Stanley Thornes.

Mouton, J. (1996). *Understanding social research*.

Pretoria: Van Schaik.

Mulder, M. (1992). A model for clinical evaluation.

Curationis, 15(4), 17-18.

Muller (1993). Quality improvement in a health care service. In S. W. Booyens (Ed.), *Dimensions of nursing management* (pp.575-609).Cape Kenwyn: Juta.

Muller, M., Bezuidenhout, M., & Jooste, K. (2006).

Healthcare service management. Cape Town: Juta.

National Board for Professional Teaching Standards. (n.d.). *Assessment*. Retrieved January 17, 2007, from

<file:///C:/Documents%20and%20Settings/karstens/My%20document>.

Naude, M., Meyer, S., & van Niekerk, S. (1999). *The nursing unit manager: A comprehensive guide*. Sandown: Heinemann.

Neary, M. (2001). Responsive assessment: assessing student nurses' clinical competence. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 21(1), 3-17.

Nelson, S. (1999). Using adult learning principles for perioperative orientation programmes – surgical nursing. *AORN Journal*. December, 1999. Retrieved February 29, 2008, from <http://findarticles.com/p/articles/mi-mOFSL/is-6-70/ai-58359076/pg-2>.

Neuman, W. L. (2000). *Social research methods: Qualitative and quantitative approaches* (4th ed.). London: Allyn and Bacon.

Newman, M. A., Sime, A. M., & Corcoran-Perry, S. A. (1999). The focus of the discipline of nursing. In E. C. Polifroni & M. Welch (Eds.), *Perspectives on philosophy*

of science in nursing: A historical and contemporary anthology (pp.20-23). New York: Lippencott.

North American Spine Society. (n.d.). *Prevention of wrong-site surgery sign, mark & X-ray (SMaX)*. Retrieved April 7, 2007, from <http://www.spine.org/smax.cfm>.

North Central Educational Laboratory. (n.d.). *Adult learning theory*. Retrieved March 3, 2000, from <http://www.ncrel.org/sdrs/areas/issues/methods/techlgy/te101k12.htm>.

Nursing Council of Namibia. (2004). *Memorandum and explanatory notes on: Nursing Bill*. Windhoek

Nursing Research Worldwide. Current dimensions and future directions. (1990). *Report of the Taskforce on*

International Nursing Research. April 30-May 2, 1990.

Geneva, Switzerland.

O'Connor, S. E., Pearce, J., Smith, R. L., Voegeli, D., &

Walton, P. (2001). An evaluation of the clinical

performance of newly qualified nurses: A competency

based assessment. *Nurse Education Today. The Journal*

for Health Care Education. An International Journal,

21(7), 559-568.

Oermann, M. H., & Gaberson, K. B. (1998). *Evaluation and testing in nursing education*. New York: Springer.

Ogunniyi, M. B. (1986). *Educational measurement and evaluation*. Nigeria: Longman.

Online Merriam-Webster. (n.d). *Honesty*. Retrieved September 14, 2007, from <http://www.m-w.com/dictionary/honesty>.

Operating Room Nurses Association of Canada. (1998). *Perioperative registered nurses are essential to quality patient care in the operating room*. Retrieved April 7, 2003, from <http://www.ornac.ca/essent.htm>.

Osborn, R. E. (1996). *Self: An eclectic approach*. London: Allyn and Bacon.

Otaala, B., & Mahlalela, P. (2004). Proceedings of the workshop on enhancement of leadership in higher education. British Council. September 27-29. Windhoek. Namibia

Parahoo, K. (1997). *Nursing research: Principles, process and issues*. New York: Palgrave MacMillan.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). London: Sage.

PECA. (n.d.). *Perioperative management services*.

Retrieved September 14, 2007, from

<http://www.peca.org/Periser.htm>.

Perioperative Learning Center. (n.d.). *Inservice training, AS 201170-100.22*. Retrieved September 14, 2007, from

<http://vumcpolicies.mc.vanderbilt.edu/Emanual/Hpolicy.nsf/AllDocs/BAD9293AC01713...>

Pervin, L. A (1996). *The science of personality*. New York: John Wiley.

Pervin, L. A., & John, O. P. (1997). *Personality theory and research* (7th ed.). New York: John Wiley.

Peter, E., Lunardi, V. L., & Macfarlane, A. (2004).
Nursing resistance as ethical action: Literature review.
Journal of Advanced Nursing, 46(4), 403-415.

Petersen, C. (2001). Count processes; counting towels;
intraoperative sneezes; sponge disposal; contact
precautions. *AORN Journal*. September Clinical Issues.

Retrieved January 22, 2003, from

<http://www.aorn.org/journal/2001/sepci.htm>.

Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods* (7th ed.) London: Lippencott Williams & Wilkins.

Polit, D. F., & Beck, C. T. (2006). *Essentials of nursing research: Methods, appraisal and utilization* (6th ed.). London: Lippencott Williams & Wilkins.

Polit, D. F., & Hungler, B. P. (1999). *Nursing research: Principles and methods* (6th ed.). New York: Lippincott.

Pollard, A. (2002). *Reflective teaching: Effective and evidence-informed professional practice*. London: Continuum.

Powers, K. (1993). Role over? *Nursing Times*, 13(41), 72-75.

Praeger, S .G. (1995). Josephine E. Paterson and Loretta T. Zderad. In J. B. George (Ed.). *Nursing theories: The base for professional nursing practice* (4th ed.) (pp.301-314). Connecticut: Appleton & Lange.

Preddy, S. (1997). Multi-cultural nursing in South Africa. *SATS*, 22(4), 50-57.

Puterbaugh, S., & Anderson, B. (1991). *Current nursing management of an entry-level perioperative nursing course*. Retrieved September 14, 2007, from <http://www.ncbi.nlm.nih.gov/sites/entrez?cmd=Retrieve&db=PubMed&listuids=1930646...>

Quinn, F. M. (1997). *The principles and practice of nurse education* (3rd ed.). London: Stanley Thornes.

Quinn, F. M. (2000). *The principles and practice of nurse education* (4th ed.). London: Stanley Thornes.

Quinn, F.M., & Hughes, S. J. (2007). *Quinn's principles and practice of nurse education* (5th ed.). Cheltenham: Nelson Thornes.

Rapley, T. (2004). Interviews. In C. Searle., G. Gobo. J.F. Gubrium & D. Silverman (Eds.). *Qualitative research practice* (pp.15-31). London: Sage.

Ray, M. A. (1981). A philosophical analysis of caring within nursing. In M.M. Leininger, (Ed.), *Caring: An essential human need. Proceedings of the three national caring conferences* (pp.25-36). Detroit: Wayne State University Press.

Reilly, R., & Perrin, C. (1999). Preparing the nursing profession: Educating to lead or training to manageable?

The Australian Electronic of Nursing Education, 4(2),

Retrieved April 4, 2007, from:

<http://www.scu.edu.au/schools/nhcp/aejne/archive/vol4-2/reillyrvol4-2.htm>.

Reinertsen, D. (2000). *Building mutual trust is critical in interdependent relationships*.

Retrieved September 14, 2007, from

<http://www.elecdesign.com/Articles/Index.cfm?AD=&ArticleID=4730>.

Rothrock, J. C. (1996a). Introduction to the nursing process. In J. C. Rothrock (Ed.),

Perioperative nursing care planning (pp.3–13) (2nd ed.). New York: Mosby.

Rothrock, J. C. (1996b). The relationship of outcomes management and performance assessment to improvement. In J. C. Rothrock (Ed.), *Perioperative nursing care*

planning (pp. 15–29) (2nd ed.). New York: Mosby.

Rothrock, J. C. 2003. *Alexander's care of the patient in surgery* (12th ed.). New York: Mosby.

Ryan, J. (2003). Continuous professional development along the continuum of lifelong learning. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 23(7), 498-508.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.

Sample self-evaluation prompts. (n.d.). Retrieved August 7, 2004, from

<http://www=evergreen.edu/washcenter/resources/ad/e3.html>.

SATS - South Africa Theatre Sister. (1992). *Facts and principles of evaluation*. Cape Town

SATS - South African Theatre Sister (1994). *Standards peri-operative procedures*. Cape Town.

Schneider, Z., Elliot, D., LoBiondo-Wood, G., & Haber, J. (2003). *Nursing research: Methods, critical appraisal and utilization* (2nd ed.). London. Mosby.

Schwandt, T. A. (1997). *Qualitative inquiry: A dictionary of terms*. London: Sage.

Scribd. (n.d.). *Unit 4 self-assessment*. Retrieved September 8, 2004, from <http://www.scribd.com/doc/3006507/Unit-4-selfassessment>.

Searle, C. (2004). *Professional practice: A South African nursing perspective* (4th ed.). Pietermaritzburg: Heinemann.

Seifert, P. C. (1996). Cardiac surgery. In J. C. Rothrock (Ed.), *Perioperative nursing care planning* (pp. 318–327) (2nd ed.). London: Mosby.

Self evaluation/self assessment & rubrics (n.d.). Retrieved

January 27, 2007, from

<file:///C:/Documents%20and%20Settings/karstens/My%20document>.

Shaw, L. J. (n.d. a). *Five educational philosophies: Essentialism. Teacher education 954. Humanistic and social aspects of teaching*. Retrieved September 23, 2006, from <http://edweb.sdsu.edu/LShaw/f95syll/philos/phessent.html>.

Shaw, L. J. (n.d. b). *Five educational philosophies: Progressivism. Teacher education 954. Humanistic and social aspects of teaching*. Retrieved September 23, 2006, from <http://edweb.sdsu.edu/LShaw/f95syll/philos/phprogr.html>.

Shaw, L. J. (n.d. c). *Five educational philosophies. Teacher education 954. Humanistic and social aspects of teaching*. Retrieved September 23, 2006, from <http://edweb.sdsu.edu/LShaw/f95syll/philos/phexist.html>.

Shivute, S. N. (2003). *Nursing competency: Self-evaluation process*. Conference report. August 27–29.

Windhoek.

Sigsby, L. M. (2003). Avoiding problems when establishing a student learning experience in perioperative nursing. *Nurse Educator*, 28(1), 1-2.

Snyders, M. (1995). Advanced practice within a nursing paradigm. In M. Snyders & M. P. Mirr (Eds.). *Advanced practice nursing: A guide to professional development* (pp.25-34). NewYork: Springer.

Sorcinelli, M. D. (n.d.). *Self-evaluation of teaching*. Center for Teaching and Learning. Retrieved July 23, 2004, from <http://www.wmich.edu/teachlearn/new/self-eval-tch.htm>.

Spangler, B. (2003). *Facilitation: Beyond intractability*. Retrieved October 02, 2007. from <http://www.beyondintractability.org/essay/facilitation>.

Spry, C. (1997). *Essentials of perioperative nursing* (2nd ed.). Maryland: Aspen.

Stanfield, P., & Hui, P. S. (2002). *Introduction to the health professions* (4th ed). Stugbury: Mass: Jones & Barlett.

Standford Encyclopedia of Philosophy (2002). *Personal autonomy*. Retrieved September 14, 2007, from:
<http://plato.stanford.edu/entries/personal-autonomy/>.

Stanford Encyclopedia of Philosophy. (2003). *Autonomy in moral and political philosophy*. August 27. Retrieved September 14, 2007, from:
<http://plato.stanford.edu/entries/autonomy-moral/>.

Stein, D. (n.d.). Situated learning in adult education. *ERIC Digest. Cable bill too high?* Retrieved March 23, 2000,

from <http://www.ericdigests.org/1998-3/adult-education.html>.

Stein-Parbury, J. (2000). *Patient and person: Developing interpersonal skills in nursing* (2nd ed.). London: Harcourt.

Streubert, H. J., & Carpenter, D. R. (1995). *Qualitative research in nursing: Advancing the humanistic imperative*. Philadelphia: J.B. Lippincott.

Stufflebeam, D. L. (n.d.). *Guidelines for developing evaluation checklists: The checklists development checklist (CDC)*. Retrieved August 10, 2002, from <file://E:\ChecklistGuidelines.htm>.

Taras, M. (2003). To feedback or not to feedback in student self-assessment. *Assessment & Evaluation in Higher Education*, 28(5), 549-562.

Tenzer, I. E. (2000). Clinical staffing personnel scheduling. In M. L. Phippen & M. P. Wells (Eds.), *Patient care during operative and invasive procedures* (pp.754-768). London: W.B. Saunders.

Tesch, R. (1995). *Qualitative research: Analysis types and software tools*. New York: Falmer.

The American Physiological Society. (2002). *Planning an effective programme evaluation: Resources for project directors*. Retrieved January 9, 2008, from:

<http://www.the-aps.org/education/promote/promote.html>.

The Free Dictionary. (n.d.). *Integrity*. Retrieved February 29, 2008, from <http://www.thefreedictionary.com/integrity>.

The Nurse Friendly. (n.d.). Nurse directories on: Sponge count off, patient develops sepsis, surgeon blames nurse.

Retrieved January 22, 2003, from

wysiwyg://5/<http://www.nursefriendly.com/nursing/clinical.cases/052399.htm>

The Riley Guide: before you search. (n.d.). *Self-assessment resources*. Retrieved January 27, 2007, from <file:///C:/Documents%20and%20Settings/karstens/My%20documents>

The World Bank Group (b). (n.d.). *Monitoring & evaluation tools, methods and approaches*. Retrieved

September 5, 2007, from

<http://www.worldbank.org/ieg/ecd/me-tools-and-approaches.htm?SearchType=byField&P...>

Thompson, J. R., & Koranacki, J. (1993). *Statistical process control for quality improvement*. London: Chapman & Hall.

Thorne, S. (2000). Data analysis in qualitative research. *Evidence-Based Nursing*, 3(3), 68–70. Retrieved September 2, 2006 from

<http://ebn.bmjournals.com/cgi/content/full/3/3/68?maxtoshow=&HITS=10&hits=10&RES...>

Thurston, N. E., & King, K. M. (2004). Implementing evidence-based practice: Walking the talk. *Applied Nursing Research*, 17(4), 239–247.

Timmins, F., & McCabe, C. (2005). Nurses' and midwives' assertive behaviour in the workplace. *Journal of Advanced Nursing*, 51(1), 38–45.

TIP: Concepts. (n.d.). *Attitudes*. Retrieved September 14, 2007, from: <http://tip.psychology.org/attitude.html>

Tiwari, A., & Tang, C. (2003). From process to outcome: The effect of portfolio assessment on student learning. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 23(4), 269-277.

Tiwari, A., Lam, D., Yuen, K. H., Chan, R., & Fung, T. (2005). Student learning in clinical education: Perceptions of the relationship between assessment and learning. *Nurse*

Education Today. The Journal for Health Care Education.

An International Journal, 25(4), 299-308.

Torres, S., & Dominguez, L. M. (1998). Collaborative practice: How we get from coordination to the integration of skills and knowledge. In C. M. Sheehy & M. C. McCarthy (Eds.), *Advanced practice nursing: Emphasizing common roles* (pp.217-240). Philadelphia: F.A. Davis.

Troskie, R. (1993). Critical evaluation of newly qualified nurse's competency to practice. *Curationis, 16(3), 50-59.*

UCE Birmingham Faculty of Health. (n.d.). *Self evaluation document – Executive summary* Retrieved

January 22, 2007, from

<http://www.health.uce.ac.uk/majorreview/docs/sed-exce-summary-2.pdf>.

UCLA Medical Center, Westwood. *Administrative nurse IV*. (n.d.). Retrieved February 8, 2005, from <file:///A/assess3.htm>.

UICOMP – Vision – Commitment. (n.d.). *Our core values – commitment*. Retrieved August, 29, 2007. from <http://www.uicomp.uic.edu/Vision/Commitment.html>.

UIUC Counseling (n.d.). *Center Assertiveness*. Retrieved September 14, 2007, from <http://www.couns.uiuc.edu/brochures/assertiv.htm>.

UK Centre for legal education. (n.d.). *Group, peer and self assessment*. Retrieved September 8, 2004, from <http://www.ukcle.ac.uk/resources/assessment/group/html>.

UNCKLE Guide to subject review. (n.d.). *Preparing the self-evaluation document*. Retrieved August 07, 2004, from <http://www.unkle.ac.uk/quality/selfevaluatio.html>.

University of Kentucky. (n.d.). *Perioperative services*.

Retrieved April 7, 2003, from

<http://www.mc.uky.edu/uknursing.Nursing%20Units.operativesvcs.shtml>.

Uys, L. R., & Gwele, N. S. (2005). *Curriculum development in nursing: Process and innovations*. London: Routledge.

Van Beuzekom, M., & Boer, F. (2006). A comparison of US, UK, and Dutch perioperative staffing practices. *AORN Journal*, 84(4), October, 632-641.

Van der Merwe, I. F. J. (2000). *Continuous assessment: The Namibian experience*. Conference of the Association of Commonwealth and Accreditation Bodies in Mauritius. Abstract. 4-8 September.

Van der Schaaf, M. F., Stokking, K. M., & Verloop, N. (2003). Development performance standards for teacher

assessment by policy capturing. *Assessment & Evaluation in Higher Education*, 28(4), 396-409.

Venter, E. (2006). *Philosophy of education as a means to educate humanity in a diverse South Africa: Philosophy of education*. Retrieved September 23, 2006, from <http://www.bu.edu/wcp/Paper/educ/EducVent.htm>.

Vittanen, P., Niemi, H., Nevgi, A., Raehailme, O., & Launonen, A. (2003). Towards strategic learning skills through self-assessment and tutoring in web-based environment. *Education-line*. Retrieved November 28, 2006 from <http://www.leeds.ac.uk/educol/documents/00003227.htm>.

Voss, S. J. (1996). Joint commission recommendations and requirements. In J. C. Rothrock (Ed.), *Perioperative nursing care planning* (pp. 65–72) (2nd ed.). New York: Mosby.

Wakefield, A., Attree, M., Braidman, I., Carlisle, C.,
Johnson, M., & Cooke, H. (2005). Patient safety: Do
nursing and medical curricula address this theme? *Nurse
Education Today. The Journal for Health Care Education.
An International Journal*, 25(4), 333-340.

Walker, L. O., & Avant, K. C. (2005). *Strategies for theory construction in nursing*. (3rd
ed.). New Jersey: Pearson-Prentice Hall.

Watson, R. (2002). Clinical competence: Starship
Enterprise or straitjacket? *Nurse Education Today. The
Journal for Health Care Education. An International
Journal*, 22(46), 476-480.

Weinstein, E. (2001). *What is internal motivation?* LASSI instructional modules. Retrieved September 14, 2007, from <file:///www.hhpublishing.com/-onlinecourses/study-strategies/BSL/motivation/H5.html>.

Weller, M. (2005). General principles of motivation. *Los Angeles Business Journal*, March 14,. 1-4. Retrieved September 14, 2007, from <file:///honolulu.hawaii.edu/internet/committees/FacDevCom/guidebk/teachtip/motivate.htm>.

Welman, C., Kruger, F., & Mitchell, B. (2005). *Research methodology* (3rd ed.). Cape Town: Oxford University Press.

Weston, M .J., Buchda, V. L., & Bergstrom, D. (1998).
Creating excellence in practice. In C. M. Sheehy, & M. C.
McCarthy (Eds.), *Advanced practice nursing:
Emphasizing common roles* (pp.304-317). Philadelphia:
F.A. Davis.

Whitehead, D., & Russel, G. (2004). How effective are
health education programmemes: resistance, reactance,
rationality and risk? Recommendations for effective
practice. *International Journal of Nursing Studies*, 41(2),
163-170.

Whittaker, S., Smolenski, M. & Carson, W. (2000). Assuring continued competence –
policy questions and approaches: how should the profession respond? *Online Journal of
Issues in Nursing*. Retrieved September 24, 2004, from
<http://www.nursingworld.org/ojin.topic10tpc10-4.htm>.

Wikipedia, the free encyclopedia. (n.d. a). *Honesty*.

Retrieved September 14, 2007, from

<http://en.wikipedia.org/wiki/Honesty>.

Wikipedia, the free encyclopedia (n.d. b). *Courage*. Retrieved August, 29, 2007, from

<http://en.wikipedia.org/wiki/Courage>.

Wikipedia, the free encyclopedia. (n.d. c). *Attitude*

(*psychology*). Retrieved September 14, 2007, from:

[http://en.wikipedia.org/wiki/attitude-\(psychology\)](http://en.wikipedia.org/wiki/attitude-(psychology)).

Wikipedia, the free encyclopedia. (n.d. d). *Internalization*. Retrieved September 14,

2007, from <http://en.wikipedia.org/wiki/Internalization>.

Wikipedia, the free encyclopedia. (n.d. e). *Operationalization*. Retrieved September 14, 2007, from <http://en.wikipedia.org/wiki/operationalization>

Wikipedia, the free encyclopedia. (n.d. f). *Autonomy*. Retrieved September 14, 2007, from <http://en.wikipedia.org/wiki/Autonomy>.

Wikipedia, the free encyclopedia. (n.d. g). *Programme evaluation*. Retrieved January 9, 2008, from <http://en.wikipedia.org/wiki/programme-evaluation>.

Williams, B., & Walker, L. (2003). Facilitating perception and imagination in generating change through reflective practice groups. *Nurse Education Today. The Journal for Health Care Education. An International Journal*, 23(1), 131-137.

Wilson, M., Shepherd, I., Kelly, C., & Pitzner, J. (2005).
Assessment of a low-fidelity human patient simulator for
the acquisition of nursing skills. *Nursing Education Today*.
The Journal for Health Care Education. An International
Journal, 25(1), 56-67.

Zeelie, S. C. D. (2002). *A self-evaluation system for quality assessment in nursing research*. Unpublished.

ADDENDUM A

Approval from the Ministry of Health and Social Services to conduct a
study in the State hospitals in Namibia

ADDENDUM B

An invitation to operating room nursing practice field experts to participate
in phase 1 of the study.

INVITATION TO PARTICIPANTS IN RESEACH STUDY (Field experts for phase 1)

P O Box 30689

Pioneers Park

July 2006

Dear

I am performing a study as a doctoral student under the auspices of the Faculty of Medical and Health Sciences at the University of Namibia. Professor A S van Dyk is the supervisor and Professor L Small the co-supervisor. The title of the study is: **“Self-assessment programme for operating room professional nursing practice in Namibia”**. The self-assessment programme consists of self-assessment checklists and a self-assessment instructional guide. Concepts elicited from a focus group discussion with professional nurses working in the State hospitals in Windhoek (Windhoek Central and Katutura) and Oshakati was used to develop the self-assessment programme.

The request is that you participate in phase 1 of the study. The purpose is to verify the content of the self-assessment programme. A draft of the self-assessment programme is provided. After you worked through the draft self-assessment programme a meeting will be held where it is expected of you to discuss the content and verify whether the content addresses quality operating room professional nursing practice in a Namibian context. The verification of the self-assessment programme will determine whether the content illustrates the expected activities of professional nurses working in the operating room for quality care executed through competent professional performance. The self-assessment instructional guide addresses only standards of operating room nursing practice. This document provides information to enhance knowledge regarding expected

professional performance to ensure operating room professional nursing practice quality improvement.

Please find a **draft of the self-assessment programme** attached. Your anonymity will be assured. The meeting will be held on 2006 at Windhoek Central Hospital Chapel at hours.

Thank you for participating in the study. If you are interested in further information or would like to make other suggestions regarding the date, time or venue please contact me at the following contact numbers: 178019(h); 206-3473 (w); cell: 0813001034

Yours sincerely.

.....

A R E Kloppers (Ms).

ADDENDUM C

An invitation to professional nurses working in the operating room to participate in phases 3 and 4 of the study.

INVITATION TO PARTICIPANTS IN RESEACH STUDY (professional nurses working in the operating room for phases 3 and 4)

P O Box 30689

Pioneers Park

April 2007

Dear

I am performing a study as a doctoral student under the auspices of the Faculty of Medical and Health Sciences at the University of Namibia. Professor A S van Dyk is the supervisor and Professor L Small the co-supervisor. The title of the study is: **“Self-assessment programme for operating room professional nursing practice in Namibia”**. The self-assessment programme consists of self-assessment checklists and a self-assessment instructional guide. Concepts elicited from a focus group discussions with professional nurses working in the State hospitals in Windhoek (Windhoek Central and Katutura) and Oshakati was used to develop the self-assessment programme.

The request is that you participate in phase 3 and phase 4 of the study. The purpose is to implement the self-assessment programme and evaluate the implemented self-assessment programme. The self-assessment programme is provided. An information session will be held to introduce the self-assessment programme and how you should implement the self-assessment programme.

Participation in the study is voluntary. If you volunteer to participate in phase 3, the implementation of the self-assessment programme, you will have to participate in phase 4 as well. Therefore it will be expected of you to sign on the paper at the bottom of the page to indicate your willingness to participate.

Thank you for participating in the study. If you are interested in further information or would like to make other suggestions regarding the date, time or venue please contact me at the following contact numbers: 178019(h); 206-3473 (w); cell: 0813001034

Yours sincerely.

.....

A R E Kloppers (Ms).

.....

I.....am willing to participate in phases 3 and 4 of the study titled: Self-assessment programme for operating room professional nursing practice in Namibia. I will adhere to the requirements.

Signature.....

Name in print.....

ADDENDUM D

Results of the focus group discussion of phase 1 of the study.

RESULTS ON THE FOCUS GROUP DISCUSSIONS OF PHASE 1 OF THE STUDY

Professional working in the operating rooms in the State hospitals in Windhoek (Windhoek Central and Katutura) and Oshakati were participants in the study for phase 1.

A central question was asked where after the researcher asked probing questions.

Central question: Can self-assessment be utilized effectively in the operating room as part of the educational process to improve the quality of operating room professional nursing practice in Namibia.

RESPONSES

“I think...self-assessment can identify strengths and weaknesses”

“Uuuh.....self-assessment is very important and needed. If you do it honestly, I mean, it can be used for improvement and a refreshment course can be attended. That’s all.”

“Self-assessment is a good idea. People are evaluated but it is not always the truth because it is my friend or because they fear to evaluate them negative they think you are the alien. If you lie you lie to yourself. If you think I am giving to myself all the marks that you do it and you know you did not do it you are cheating yourself and you will not upgrade your knowledge and you do not know where to improve. Me..I think self-evaluation is evaluating your-self and is good and we must just start doing it. I think it is applicable there in our department”.

“Self-evaluation is good nut it is not done honestly, because some do not know the correct way things should be done”.

“Self-evaluation can be negative. If you want it to be positive you have to have a tool or instrument to measure the performance against”.

“It is very important to evaluate yourself positively’.

“I agree.....that self-evaluation is needed because you can upgrade your knowledge”.

“Self-evaluation must not be seen as judgement, but to upgrade your-self for improvement. If you are not sure about the correct method of doing things you can ask someone to demonstrate the correct procedure”.

“Self-evaluation is essential because sometimes we do not know the procedure to know what we are doing is up to date”.

“I am in. Self-evaluation is needed”.

“Self-evaluation is good. You can evaluate your shortcomings even if no one is near”.

“Self-evaluation is a good idea. It is something good. Mmmm after evaluation you know where to improve. Some things you do you know are wrong. Self- evaluation can help you to cut out the wrong things”.

“I want to say that someone else must take the responsibility to evaluate you”.

“I agree and want to say that evaluation must be enforced on you because you will not do it yourself because people are lazy”.

Question by the researcher: Why do you do wrong if you know it is wrong?

“You do wrong because you are late”.

“There is no one to check you”.

“Surgeons force you to scrub fast. You then just wash your hands and do not scrub according to the prescribed method”.

“Ignorance.....”.

“Sometimes you are tired and hungry”.

“We do wrong because there is shortage of staff”.

“We have no in-service training...its true”.

“Because we have a lack of knowledge”.

“We must remember that we are responsible and accountable uhm...for what we are doing”.

“We do wrong because of work overload”.

“Some people are forced to work in the theatre. So they just do the job. Me ...I was forced to work here”.

“We don’t know because of lack of interest”.

“We do wrong because of absence of motivation”.

“I want to say. There is a wrong approach and attitude towards the work”.

“I think you will not harm the patient because the things you do wrong is simple and you think you can leave it like that”.

“Kan miskien werk. Ek sê...self-evaluer sal nie werk be skrop nie. Ander moet jou evalueer. Jy sal nie wees twat jy goed gedoen het nie. Better as julle twee is. Wat ek graag wil hê is opleiding op ‘n ander plek”

Maybe it can work. I say...it will not work if you scrub. Someone else must evaluate you. You will not know if you do the correct thing. It is better if we are two. What I want is training somewhere else.

“ As mens eerlik is wanneer jy jouself evalueer kan jy verbeter. Aan die ander kant sal dit goed wees want dank an jy niemand beskuldig nie. Dit sal ook dien as ‘n motivering wanneer ek ‘n kort pad wil vat. Dis goeie ding as dit net eerlik gedoen word”.

If you are honest when you evaluate yourself, you can improve. On the other hand it will be good because you cannot blame someone else. It will also serve as a motivation when you want to take short cuts. It is a good thing if it can be done honestly.

“Nee wat...wanneer moet ons ons-self evalueer as ons in die oggend so besig is. Dit sal beter wees as iemand ander dit doen.

When will we have time to evaluate ourselves if we are busy in the mornings. It will be better if someone else do it.

“Ek dink self-evaluering is wel goed, maar dan moet daar ‘n ‘guide’ wees”.

I think self-evaluation is good, but there must be a guide.

“I have an opinion. Self-evaluation can be done at the end of the list. It is something that you build in yourself. Part of integrity”.

Question by the researcher: What about medical legal risks when you do wrong things?

“Medical legal risks happen, but there is no feedback on any investigations done and no research”.

“Sometime the medical risks are minor with no danger”.

“Ignorance. We ignore the danger”.

“Ek wil net sê...’medical legal hazards’ is baie hoog hier as ge volg van te kort aan “staff” en goed”.

I just want to say...medical legal hazards are very high here because of staff shortage.

“Medical legal hazards are high, we don’t have gowns and drapes and sutures and a lot of things to work with. This is not good”.

Question by the researcher: If you evaluate yourself, how will you know that what you are doing is right or wrong?

“Oh yes...we need a checklist”.

“We also need standards and criteria”.

“It’s true...we need standards for procedures”.

“Standaards moet aan international verwagtinge voldoen”

Standards must comply with international standards.

Question by the researcher: Will self-assessment help you to be competent?

“I think it will help you to come to a normal standard”.

“Evaluation must be enforced. It must be incorporated in the system”.

“Mmmm...a person must have a will to be competent and committed to what she is doing”.

“To me...I think....through in-service training personnel will know what to do”.

“Uh..uh..every quarter of the year the chief registered nurse must visit each theatre, evaluate the personnel and give feedback after the procedure”.

“I say...supervisor must see that self-evaluation is done”.

“I agree....,but...uhm...before self-evaluation is done, I mean....personnel must first observe on-another...I mean...until they think they are ready...I mean... and then do the self-evaluation”.

“Die goed sit ‘stress’ op ‘n mens en benadeel ons ‘competence’”.

These things put stress on a person and derogate our competence.

“Mense moet vermoeiens en kennis hê”.

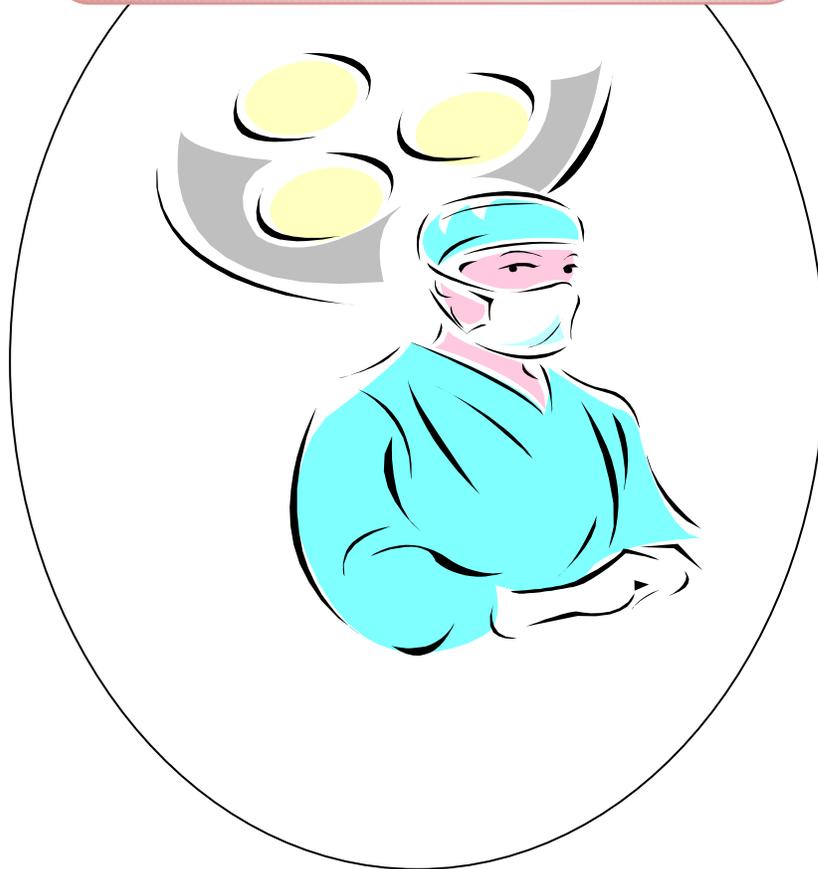
Peole must have skills and knowledge.

ADDENDUM E

Self-assessment checklists as part of the self-assessment program for the
study

**SELF-ASSESSMENT PROGRAMME FOR
OPERATING ROOM PROFESSIONAL NURSING
PRACTICE IN NAMIBIA**

**SELF-ASSESSMENT
CHECKLISTS**



SUMMARY

The objective of the development of self-assessment checklists on operating room nursing practice standards is to provide professional nurses with a document readily available for them to determine their strengths and weaknesses regarding their professional competence in operating room professional nursing practice on their own time.

The content of this document include the concepts derived from phase 1 of the study. The rational was to make the document user friendly and appropriate for regional and national utilization. The checklists will give professional nurses insight in their perspective of operating room professional nursing practice in all dimensions.

The standards for this section are the same as for the self-assessment instructional guide starting with the admission of the patient to the operating room and end with the report of the patients' intervention given by the professional nurse (scrub nurse) to the recovery room personnel.

All professional nurses working in the operating room, irrespective of whether they obtain a qualification in operating room nursing science can use this document to assess their level of professional practice competence.

For this document, the term professional nurses used in the text refer to all professional nurses working in the operating room.

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1 INTRODUCTION TO THE SELF-ASSESSMENT CHECKLISTS

1.1 INTRODUCTION

Operating room professional nursing practice is constituted to protect the patient's personal, moral, and legal rights. In the context for this study, this process begins with the admission of the patient to the operating room and ends in the recovery room. The desired outcome identified were the safety of the patient. Safety of the patient requires a safe physical and mental environment that refers to safe equipment and supplies, functional instruments and educated and skilled professional nursing personnel.

Managerial and educational structures form the basis for quality operating room professional practice. Thus, requires a well organized managerial and educational system to enhance practice for excellence. Continuous and in-service education based on the principles of adult learning, provides opportunities for professional nurses working in the operating room irrespective of their level of academic qualification and/or experience, to gain in-depth knowledge and enhance their professional performance competence. For the remainder of this text the term professional nurses will refer to all professional nurses working in the operating room irrespective of their level of academic qualification and/or experience.

An adult learner usually brings her/his life experience to the learning situation. Therefore one can assume that they are problem orientated and are capable of self-directed learning. In this respect adults need to be involved in "evaluating their own progress towards self-chosen goals" (Knowles, 1990, p.22).

Schwandt (1997, p.xix) argues that “theories, concepts, beliefs, understanding, values” are the language that constitutes practice. The latter author further states that theory and practice, acting and thinking are linked in a “continuous process of self-examination and self-transformation”.

Bloom’s taxonomy of learning is relevant for this program. It is expected of professional nurses to enhance their knowledge (cognitive domain) to understand why it is important to do certain activities in a certain manner; to identify their value and feelings (affective domain) regarding the patient as a human being with specific needs; and develop their skills (psychomotor) for competent performance (Aucoin, 1998, p.213-216). Surgical patients are regarded as being unconscious. They cannot experience the affective and cognitive developmental level of professional nurses. However, these skills are portrayed in the execution of their psychomotor activities that are dictated by operating room professional nursing practice performance standards.

1.2 PURPOSE OF THE SELF-ASSESSMENT CHECKLISTS

The purpose of the self-assessment checklists is to assist professional nurses in their quest to evaluate their own clinical performance for quality improvement.

1.3 GENERAL STATEMENT

Professional nurses have a professional obligation to incorporate the standards of clinical practice and professional performance in their daily activities to meet the expectations of consumers during the intra-operative phase of a surgical intervention (Fairchild, 1996, p.38). Therefore, the individual has to be committed to quality patient care that can only be established by means of measuring their professional performance. Pre-set standards

and criteria serve as guidelines for the professional quality performance expected by the external and internal consumers. During the process of self-assessment professional nurses need these pre-set standards and criteria to guide the monitoring of her/his performance.

According to Fairchild (1996, p.36) Standards of Professional Performance addresses:

- ❖ The **quality of care** by evaluating the “quality and appropriateness” of nursing care systematically;
- ❖ **Performance appraisal** when the practice of the professional nurse is evaluated in context of “professional standards and relevant statutes and regulations”;
- ❖ Acquiring and maintaining of knowledge in their practice can be made possible through **education**;
- ❖ **Resource** use will be reflected in the planning and delivering of patient care considering “factors related to safety, effectiveness, efficiency, environment concerns and costs”.

The self-assessment checklists consist of the concepts derived from the perceptions of professional nurses inferred during Phase 1 of the study. The concepts are self-assessment, managerial support, personal values, and standards.

Standards guide all facets of operating professional nursing practice activities including the managerial and educational aspects. Professional nurses will be able to identify their knowledge basis and experience their sense of caring through the process of self-assessment (refer to page 1). The standards and criteria used, derived from pre-

determined Standards of Professional Performance, Standards of Operating Room Clinical Practice and Competency Statements by the Association of Operating Room Nursing (AORN), American Nurses Association (ANA), Joint Commission for Accreditation of Health Care Organization (JCAHO) (Fairchild, 1996, p.38), South African Theatre Sister (SATS) (SATS, 1994, n.p.) and (Rothrock, 2003, pp.4-11,147). From these standards and criteria that guide and prescribe the knowledge and practice expected of operating room professional nursing practice the checklists for the concept standard was developed and presented in the form of checklists.

1.4 PHILOSOPHICAL FRAMEWORK

The humanistic-existentialism as a philosophy of nursing is applicable to nurses and patients as individuals in the health care situations with their own experiences, values, and expectations. Both have freedom of choice, are self-determined, and have to realize that they are responsible for themselves in any given situation (Praeger, 1995, p.302-303). This philosophy supports the essential of a self-assessment process to improve and assure the quality of operating room professional nursing practice.

The existentialism as a philosophy of education argues the fact that individuals have the freedom to develop as they wish. At the same time this philosophy demands the development of the person as a whole and not just the development of the mind (Shaw, 2006, p.2).

1.5 INSTRUCTIONS ON HOW TO USE THE SELF-ASSESSMENT CHECKLISTS

The likert scale was used as indicators for the concepts self-assessment, managerial support, and personal values. The instructions to evaluate your self are on page 5.

For the standards and criteria of operating room professional nursing practice a checklist was developed with indicators Yes, No an N/a. After you have assisted for a surgical procedure, you need to sit down and complete the checklist. Deduction of critical points is only for the use of the standards and criteria. All critical points are indicated below. Critical points are those activities that will be harmful to the patient if not executed. These activities are indicated in the checklist in the same manner as below.

Critical points:

- A* fail the procedure
- #### minus 50% from the total
- ## minus 20% from the total
- # minus 10% from the total

FOR THE CONCEPTS “SELF-ASSESSMENT, MANAGERIAL SUPPORT AND PERSONAL VALUES”.

⇒ Read through the content of this section. Complete the questions, calculate your score vertically and then horizontally. Work out a percentage e.g. $7 \div 25 = 28 \div 100 = 28\%$.

FOR THE CONCEPT “STANDARDS”

⇒ After you have assisted with a surgical intervention, evaluate your performance by completing the checklist that is provided at the end of each standard.

⇒ Check your score by subtracting all the **n/a** marks from the total, count all the **yes** marks, and divide the yes marks with the total marks indicated to get a percentage e.g. $10 \div 20 = 50\%$. Deduct the percentage indicated from the total if you omitted to perform a critical point e.g. $50\% - 20\% = 30\%$.

⇒ Compare your score to the indicated **level of care** below, to estimate if you need to improve your knowledge, skills, and competence for quality operating room professional nursing practice.

Level of care prescribed as assumed by the researcher according to the Scope of Practice (“Government notice No. 13”, 1999, p.66).

0-49%	Poor level of care. The patient is at risk. You need to revisit the self-assessment instructional guide to enhance knowledge and improve your practical competence.
50-59%	In-adequate care. You need to improve your practical competence.
60-74%	Good quality care
75-80%	High quality care
80-100%	Excellent care

After each self-assessment session consult with your mentor, clinical instructor or the person in charge of the operating room for guidance. A self-assessment instructional guide, the program for the Advanced University Diploma in Nursing Sciences (Operating room) (UNAM) and the prescribed books are also available for your convenience.

2. THEMES

2.1 INTRODUCTION

This section present the concepts elicited from professional nurses during phase 1 of the study. These concepts describe comprehensively the expectations of professional nurses regarding their professional performance competence, the method of measuring the latter and managerial support to enable them to meet these expectations.

Four **key themes** and **sub-themes** identified are:

- ❖ **Self-assessment** describes the concepts of assessment, self-assessment, and evaluation.
- ❖ **Managerial support** refers to staff allocation, in-service education, supervision, feedback, and support (resources).
- ❖ **Personal values** address the concepts of caring, responsibility, accountability, honesty, integrity, attitudes, behaviour, interest, commitment, motivation (internal and external) and the development of the self.
- ❖ **Standards** include criteria, procedures, guidelines, and checklists.

Professional nurses have to acknowledge the fact that they are responsible and accountable, first and foremost to their clients/patients, their employers, nursing profession, community at large and themselves (Kisting Sparks, 1995, p.119). Therefore, it is their duty to care according to clients/patients needs, keep themselves abreast with developing technology through continuous education and in-service training, and measure their competence against pre-established professional performance standards with the aid of a recognized method of assessment. Evaluation and assessment are the appraisal measurement methods that can successfully be used for operating room professional nursing practice. Previous research results, however reflects that these activities are seldom done in the operating rooms (Kloppers, 2002, p.79). Therefore, a self-assessment programme for competent professional performance may awaken the awareness by individuals of the level of their professional competence. Hopefully resulting in the improvement of the quality of operating room professional nursing practice.

It is a known fact that people who developed as a whole are more competent performers. Therefore it is recommended that you read through and complete all the questions of all the concepts at the same time.

2.2 CHECKLISTS FOR THMES

2.2.1 SELF-ASSESSMENT

Osborn (1996, pp.1,2) defines self as “the sum total of beliefs you have of yourself. It includes attributes, abilities, attitudes and values that an individual believes define who he or she is”. Therefore it can be assumed that attitudes towards day-to-day responsibilities influence behaviour and actions (Bohner & Wänke, 2004, p.4). Osborn (1996, p.2) is of the opinion that one has to explore the affective, behavioural and cognitive facets of the self if you want to know yourself.

According to Osborn (1996, p.2) the cognitive facet of the self requires to understand the processes individuals use to know themselves.

Affective facet of the self highlights the “manner in which individuals evaluate themselves” (Osborn, 1996, p.2).

Behaviour facet of the self addresses the behavioural manner in which individuals present themselves to others (Osborn, 1996, p.2). These behavioural manners are experienced by others and themselves through their senses and evaluated accordingly.

The assessment process forms an essential part of the educational system that is a necessity in operating room professional nursing practice. It focuses on learning outcomes, describing desired knowledge, skills, abilities, capacities, attitudes, or dispositions of the learner (Engelbrecht, 2005, p.9). In this context, assessment will determine the degree of the competency the individual professional performance (Troskie, 1993, p.51).

Self-assessment provide the opportunities for professional nurses to take responsibility for their own learning at their own time; encourage a sense of independence and responsibility for critical judgment about their performance; enhance self-discipline to assure quality operating room professional nursing practice. It forms the basis for the development of one’s character and self-empowerment. Searle (2004, p.204) argues that it is the responsibility of professional nurses to identify their strengths and weaknesses, correct their disabilities and report their own errors. The statement of the latter author

supports the fact that the process of self-assessment can enhance the quality of operating room nursing practice professional performance.

The following questions will enable you to assess whether you are mentally in touch with yourself and the concept self-assessment.

Self-assessment checklist for the concept “self-assessment” that form part of the self-assessment process for operating room professional nursing practice quality improvement.

Directions: Respond to each of the statements below by ticking off the number best expressing your believe	1 = fully disagree 2 = disagree 3 = don't know 4 = agree 5 = fully agree				
	1	2	3	4	5
1. The self-assessment process should be part of a monthly evaluation system					
2. Self-assessment can help professional nurses to identify strengths and weaknesses in their day- to-day practice					
3. The self-assessment process enable professional nurses to become clinically competent					
4. Self- assessment will enable professional nurses to reflect on her/his knowledge of her-/himself					
5. Self-assessment can be used to enhance quality operating room professional nursing practice					
TOTAL					

Calculate vertically and then horizontally. Calculate your score as indicated on page 5. Assess your belief with regard to what you think of the value of the process of self-assessment as an activity in the operating room for operating room professional nursing practice quality improvement.

2.2.2 MANAGERIAL SUPPORT

Positive, active, effective, and participatory management enhances professional performance and personal growth in any working environment. Management is responsible for the provision of all resources, therefore are accountable for the performance of their personnel (Martin & Henderson, 2001, p.276). The importance of managerial support by means of written standards, policies and procedures that are clear, realistic, attainable, measurable and known to all, cannot be over emphasized. All personnel should be involved with the compilation of these written standards and criteria used to evaluate the quality of professional performances (Naude, Meyer, & van Niekerk, 1999, p.242).

Career advancement, job-satisfaction, prevent burnout syndrome, appropriate in-service education with a structured feedback system should be the core of managerial support for professional nurses (Searle, 2004, p.77). These expectations could be met by means of a systematically planned process of assessment with resulting developing the performance of professional nurses (Naude, Meyer, & van Niekerk, 1997, p. 239). Self-assessment checklists may encourage professional nurses to adhere to the prescribed standards and eliminate subjective appraisals done by supervisors (Dienemann, 1998, p. 471).

The following questions will enable you to assess whether you are aware of the responsibilities of management regarding personnel support and your responsibility to assist management to reach that goal.

Self-assessment checklist for the concept “managerial support” as part of self-assessment for operating room professional nursing practice quality improvement

<p>Directions: Respond to each of the statements below by ticking off the number best expressing your believe and expectations</p>	<p>1 = fully disagree 2 = disagree 3 = don't know 4 = agree 5 = fully agree</p>				
	1	2	3	4	5
1. Resources should be readily available at all times for different activities in the operating room					
2. Written policies and procedures will enhance operating room professional nursing practice competence					
3. Effective staff allocation will make it possible for professional nurses to assess themselves with resulting improvement in the quality of operating room professional nursing practice					
4. In-service training will improve the quality of operating room professional nursing practice					
5. All professional nurses should be involved with the compilation of all relevant policies and procedures					
TOTAL					

Calculate vertically and then horizontally. Calculate your score as indicated on page 5. Assess your opinion with regard to what you think of the value of managerial support to improvement the quality of operating room professional nursing practice.

2.2.3 PERSONAL VALUES

All the concepts that describe personal values are interlinked with one another. An excellent performer is committed to the standards prescribed for quality performance. Committed people usually are driven by interest in the subject or are internally motivated. Motivated people are responsible and accountable for their actions. When one accounts for one's actions they are honest and trustworthy, therefore acts with care with an un-questionable integrity. Personal individual attitudes and behaviour in a working environment usually determine the working climate that in turn affects individuals and at the end the whole community (Bohner & Wänke, 2004, pp.81-82; Pervin, 1996, p.94; Searle, 2004, pp. 174,212).

Nursing is defined as an art and science. The art reflect the caring aspect of nursing. **Caring** is defined “as that relationship that expresses the feeling of concern, regard or respect one human being has for another” (Boyle, 1981, pp.40-41). Although care is considered to be the “heart of all health services” little attention was given to this concept by humanistically-oriented scientists and caregivers (Leininger, 1981, pp.4-5). According to Snyders (1995, p.29) caring still requires the nurse to be attentive to the patient/client even though it is evident in operating room nursing that with the enhancement of science and technology nurses are inclined to shift from caring for the patient/client to skilled management of machines. When admitting a patient to the operating room professional nurses need to give their full attention to the patient enabling them to observe the emotional status of the patient. This interaction can be monitored and appreciated by the patient. On the other hand, when positioning the patient on the operating table the patient will be under anaesthesia and not be able to respond to the competence of the practitioner. It is, however, the duty of professional nurses to care enough about the patient's well-being by understanding the principles of positioning of the patient and the complications that may occur if they do not adhere to

these principles (Ray, 1981, p.31). These actions will portray their commitment and trustworthiness towards their professional responsibility.

According to Gerdes (1988, p.96) **commitment** is the “ability to believe in the truth, importance and interest value of who one is and what one is doing”. The latter author also indicates the importance of involvement in all situations of life. The degree of commitment may change because life situations change. However, it is essential to believe that commitment to yourself and others is essential to a sense of continuity of self, professionally and personally.

Interest is defined as “a relatively constant, positive or negative directedness towards a specific activity” (Gerdes, 1988, p.251). Interest mostly influence your choice of work and determine job satisfaction.

Internal motivation derives from an inner desire to improve and give direction to life and have a positive connotation to everything an individual wants to do. It has the “most global impact on self” (Osborn, 1996, p.34; More-selfesteem.com, n.d., p.1). Therefore individuals may be motivated to acquire and maintain positive self-assessment.

Responsibility and **accountability** are attributes/behaviour described as a quality of character and mind (Lucas, 1995, p.11). These are people that can be left with responsible work, that will cope and not leave the work undone because it is their tea-time.

Trust and **honesty** can be described as the cornerstones for relationships amongst professional colleagues and between the patient/client and the health care provider. Dishonesty leads to the loss of self-respect, loss of integrity, loss of respect by others and loss with peace with one-self. The reasons why professional nurses are dishonest may be to protect themselves, the patient, and/or other professional practitioners (Weston, Buchda & Bergström, 1998, p.307).

Improvement is “an ongoing process of change” influenced by “internal and external factors and learning” (Gerdes, 1988, p.9). Improvement follows actions and repetition of the same actions (Smith 2006, p.3).

The patient/client relies on the **integrity** of professional nurses to acknowledge their needs and meet them. Personal integrity is inseparable from the quality of health care service and can be identified by the honest and committed care given without being evaluated by others (Weston, Buchda & Bergström, 1998, p.307).

The following questions will enable you to assess whether your personal values are developed to enable you to render high quality operating room professional nursing care.

Self-assessment checklist for the concept “personal values” as part of self-assessment for operating room professional nursing practice quality improvement

<p>Directions: Respond to each of the statements below by ticking off the number best expressing your believe</p>	<p>1 = fully disagree 2 = disagree 3 = don't know 4 = agree 5 = fully agree</p>				
	1	2	3	4	5
1. A professional nurse cannot work competently in the operating room if s/he is not interested in operating room professional nursing practice					
2. Professional nurses may not keep quiet if they have done something wrong even if the patient was not harmed					
3. Professional nurses can leave work undone if it is time for them to go off duty					
4. Internal motivation is essential to enhance professional competence through a self-assessment process					
5. The well-being of the patient comes before personal needs					
TOTAL					

Calculate vertically and then horizontally. Calculate your score as indicated on page 5. Assess your belief regarding your personal values as an important aspect for operating room professional nursing practice quality improvement.

2.2.4 STANDARDS

Standards are necessary as a guide for professional nurses to measure their aptitude in operating room professional nursing practice and improve their skills for excellence (Weston, Buchda & Bergström, 1998, p.306). The checklists for the standards enclose all intra-operative activities from admission of the patient to the operating room to the report of the professional nurse (scrub nurse) to the recovery personnel. As mentioned in the introduction (pages 1, 2), the cognitive and affective skills of professional nurses cannot be experienced by patients, but can be executed by nurses through their psychomotor skills and observed by others and experienced by them-selves. Therefore, the questions in this section are more detailed and extensive. Each standard is represented by criteria in a checklist.

The standards and criteria used, derived from pre-determined Standards of Professional Performance, Standards of Operating Room Clinical Practice and Competency Statements by the Association of Operating Room Nursing (AORN), American Nurses Association (ANA), Joint Commission for Accreditation of Health Care Organization (JCAHO) (Fairchild 1996, p.38), South African Theatre Sister (SATS) (SATS, 1994, n.p.) and (Rothrock, 2003, pp. 4, 147). These standards should be viewed as a basis for planning continuing and in-service education, performance appraisal and competent performance of professional obligations (Standards of practice for electrologists, n.d., p.15). A **checklist** is provided for each standard to reflect the current competence status of professional nurses.

**INSTRUCTIONS FOR THE USE OF THE CHECKLISTS
FOR SELF-ASSESSMENT OF THE STANDARDS FOR**

COMPETENT OPERATING ROOM PROFESSIONAL NURSING PRACTICE.

Prepare yourself mentally for the self-assessment session because you have to remember what you have done and what you have omitted. Be honest with yourself, for this is the only way to identify your strengths and weaknesses. Try to do the self-assessment as soon as possible after you assisted for a surgical procedure.

2.2.4.1 STANDARD 1. ADMISSION OF THE PATIENT TO THE OPERATING ROOM**Standard statement**

Nursing care to a patient on admission to the operating room is provided to ensure client safety from medical legal hazards, comfort, alleviate anxiety, and to provide continuous nursing care during the surgical intervention (Spry, 1997, p.18).

Admission refers to the “act of accepting somebody into an institution”. It can also be defined as “the right to enter a place or to join an institution or organization” (Hornby, 2005, p.19).

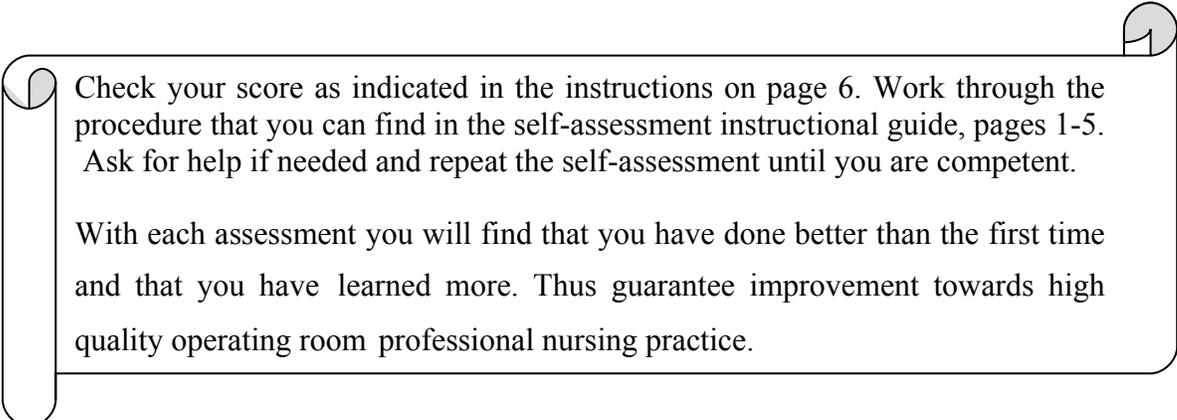
Institutional policy and procedure should include steps whereby professional nurses can be guided to perform the admission procedure successful. It is essential that professional nurses are empathetic communicators, that they develop good listening skills, being alert to nonverbal communication, offer gentle reassurance, provide explanation, and utilize comforting behaviour. A pre-operative checklist is used to prevent oversight, omission and sentinel events. Nursing actions should reflect all the principles pertaining safe patient care. The patient should experience no anxiety and fear. Professional nurses must be able to guarantee nursing care free from injury related to the wrong operative procedure, incomplete informed consent to the operation, incomplete documentation that can result in wrong and/or delayed treatment.

Self-assessment checklist for the standard “admission of a patient to the operating room” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
1.1 Greet the patient and introduced yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2. Ask the patient her/his name	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3. Ask the patient her/his age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4. Ask if the patient know what operation s/he is going to undergo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5. Ask whether the operation was explained to him/her by the medical practitioner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6. Ask if the patient understand the operation and is satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.7. Ask when last the patient had anything to eat or drink	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.8. Ask if the patient was shaved and what area of the body	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
1.9. Ask if the patient had a bath before s/he was dressed for the operating room			
1.10. Ask if the patient passed urine before the patient was transferred to the operating room			
1.11. Ask the patient if someone catheterised her/him			
1.12. Ask if the patient have dentures			
1.13. Ask if the patient removed all jewels			
1.14. Ask the patient if s/she know of any allergies that s/he suffers from			
1.15. Ask the patient if s/he had any injections or medication in the morning			
1.16. Ask the patient to give his/her arm to read the arm band			
1.17. Verify the name and registration number of the patient with the armband			
1.18. Verify the name and registration number of the patient with the file			
1.19. Verify the name of the patient with the operation list			
1.20. Verify the name and registration number of the patient with the consent for operation form			
1.21. Verify the operative procedure with the consent for operation form ###			
1.22. Verify the operative procedure with the operating list			
1.23. Verify with the prescription and medication record if the patient had an injection or medication prior to transporting the patient to the operating room #			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
1.24. Check the consent for operation form for the operative procedure ###			
1.25. Verify with the ward checklist when last the patient had anything to eat and drink			
1.26. Verify with the ward checklist if the patient's bladder is empty			
1.27. Verify with the ward checklist if all jewels are removed			
1.28. Verify with the ward checklist if dentures are removed if necessary			
1.29. Verify with the ward checklist if the patient was shaved and the area			
1.30. Verify with the ward checklist if the patient was catheterised			
1.31. Check the reading of the temperature taken in the ward			
1.32. Check the reading of the blood pressure taken in the ward			
1.33. Check the reading of the pulse taken in the ward			
1.34. Check the reading of the respiration taken in the ward			
1.35. Check the reading of the haemoglobine taken in the ward			
1.36. Check the reading of the urine analysis results done in the ward			
1.37. Check the intravenous infusion site and if it is functioning			
1.38. Check the infusion solution according to the prescription card and fluid balance card and the expiry date.			
TOTAL			



Check your score as indicated in the instructions on page 6. Work through the procedure that you can find in the self-assessment instructional guide, pages 1-5. Ask for help if needed and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

2.2.4.2 STANDARD 2. INFORMED CONSENT FOR AN OPERATIVE PROCEDURE

Standard statement

Ethical principles/moral rules i.e. respect for persons, autonomy, beneficence and non-maleficence, as well as legal conventions of informed consent to an operation, required that the patient be allowed to control what happens to his/her body. Ethical principles/moral rules of autonomy, beneficence/non-maleficence, justice, veracity, and fidelity serve to shape the boundaries of informed consent. The legal obligation to provide the information and obtain the consent lies with the person performing the procedure, namely the medical practitioner. The institution and professional nurses that allow operative and invasive procedures to be performed on their premises have a legal obligation to ensure that informed consent has been obtained (Fairchild, 1996, p.386).

Informed consent for an operative procedure refers to the permission obtained from a patient for a specific test or an operative intervention after disclosure of the risks and hazards involved in the operative procedure. The medical officer must provide full

details to the patient of all activities pertaining to the specific surgical intervention (Fairchild, 1996, p.385).

The institution should provide policies and procedure regarding informed consent to operative or invasive procedure and the medico-legal risks pertaining informed consent to an operative procedure.

Professional nurses must check the informed consent for completeness, legality, and correctness. Professional nurses must however remain responsive to the patient’s needs, demonstrating a caring attitude. Professional nurses must identify the possibility that the patient may not understand the nature, risks, and/or hazards with regard to the surgical intervention as explained by the medical practitioner (Rothrock, 1996, p.97). This knowledge deficit may lead to fear and anxiety of the unknown.

Self-assessment checklist for the standard “informed consent for an operative procedure” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
2.1. Ensure that the consent for operation form was not used before <i>###</i>			
2.2. Check the name of the patient on the consent for operation form and verify with the file, armband and operation list <i>###</i>			
2.3. Check the registration number of the patient on the consent for operation form and verify with file, armband and operation list <i>###</i>			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
2.4. Check the date on the consent for operation form			
2.5. Check the age of the patient on the consent for operation form			
2.6. Verify the age of the patient with the file and verbal information of the patient or the parents or ward personnel in the case of a minor			
2.7. Check the sex of the patient as indicated on the consent for operation form			
2.8. Check the surgeons' name on the consent form			
2.9. Verify the name of the surgeon with the operation list			
2.10. Check whether the patient had a pre-medication if prescribed and if it is recorded on the consent for operation form			
2.11. Verify the pre-medication with the prescription form and ward medication record			
2.12. Check the time and date of administration of the pre-medication			
2.13. Check the operative procedure e.g. total abdominal hysterectomy ###			
2.14. Verify the operative procedure with the operation list and the verbal information of the patient or parents/guardian or ward personnel in the case of a minor ###			
2.15. Check the type of anaesthesia as indicated on the consent for operation form			
2.16. Verify the type of anaesthesia with the verbal information of the patient or parents/guardian or ward personnel in the case of a minor			
2.17. Check the signature of the patient or guardian in the case of a minor ###			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
2.18. Check the date when the document was signed #			
2.19. Check the signatures of the witnesses			
TOTAL			

Check your score as indicated in the instructions on page 5. Work through the procedure that you can find in the self-assessment instructional guide pages 5-11. Ask help if needed and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

2.4.3 STANDARD 3. PREPARATION FOR AND EXECUTION OF THE OPERATIVE POSITIONING OF THE PATIENT ON THE OPERATING TABLE

Standard statement

Nursing care of the patient regarding positioning of the patient on the operating table for surgery is to safeguard the patient from any physical injury. The position of the patient should meet the proved accessibility to the body part to be treated for the surgeon's benefit (Rothrock, 2003, p.178).

Position is the "way in which something is arranged". Position can also be defined as the "way in which somebody is sitting or standing" (Hornby, 2005, p.1129).

Institutions should provide policies, procedures and maintenance schedules to ensure effective functioning of all operating tables for all surgical disciplines and specific operative positions for specific operative procedures and the risks involved.

The activities of professional nurses should reflect knowledge of the different operative positions, different operating tables and their specific fittings and should be able to change positions of the table without any risk to the patient and personnel. The patient, under anaesthesia, will not be able to verbalize any discomfort. Therefore, it is the responsibility of operating room personnel to ensure that the patient is comfortable, free from intra-operative related injury and regain normal physical mobility postoperatively (Rothrock, 2003, p.170-171). The activities of professional nurses regarding operating positioning of a patient on the operating table involves the preparation of the table to accommodate the needs of the surgeon, anaesthetist and the comfort of the patient and the execution of the procedure. Usually the procedure is performed by other team members, but it remains the responsibility of the professional nurses (scrub nurse) to ensure that the operative position is correct and safe through instructions and if possible demonstrations beforehand.

The dorsal and lateral operative positions are the only ones included in the checklists because these operative positions are used together with surgical counts, which are recommended for self-assessment.

Self-assessment checklist for the standard “preparation for and execution of the operative positioning of the patient on the

operating table” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
3.1. Check if the operating table is locked ###			
3.2. Check the operating table for cleanliness and function			
3.3. Prepare table accessories for specific operative procedures			
3.4. Ensure safe transfer of the patient to the table ##			
3.5. Ensure that the patient is never left unattended ###			
3.6. Reassure the patient by talking to the patient before s/he is induced			
3.7. Instruct the personnel to keep the patient covered at all times			
3.8. Instruct the personnel to keep the patient safe by using safety straps ###			
3.9. Check if the position of the arm board for the intra-venous infusion is correct – less than 90% in abduction			
3.10. Check if the other arm is correctly positioned and secure- not under the patients' body			
3.11. Check if the head, neck, spin and lower extremities are in one line			
3.12. Check that the feet of the patient is on a foot cushion			
3.13. Check that the knees and ankles of the patient does not press against each other			
3.14. Check that the eyes of the patient are closed with plaster, jelonet or ointment #			
3.15. Ensure that the right size diathermy plate is used for the right patient – small plate for children and big plate for adults ##			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
3.16. Ensure that the surgical diathermy plate is in the correct position – under the parts of the body with enough muscle for good contact ##			
3.17. Lateral position: ensure that there is a pillow between the legs			
3.18. Ensure that the upper leg is stretched			
3.19. Ensure that the lower leg is bend			
3.20. Ensure that the patient is secured to the bed with elastoplast and a safety band			
3.21. Ensure that the time of onset and discontinuation of the use of the tourniquet is recorded ###			
3.22. Make sure that the tourniquet is removed after use ###			
TOTAL			

Check your score as indicated in the instructions on p 5. Work through the procedure that you can find in the self-assessment instructional guide pages 11-26. Ask help if needed and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

2.2.4.4 STANDARD 4. PREPARATION FOR AND EXECUTION OF SURGICAL SCRUB, STERILE GOWNING AND GLOVING

Standard statement

The patient can expect to receive care in an aseptic environment according to institutional policies and procedure. Infection control practices involve both personal and administrative measures. Personal measures include the application of aseptic principles. Administrative measures include provision of adequate physical facilities, appropriate surgical supplies and operational present-day infection-control (Rothrock, 2003, p.131). Professional nurses are responsible for creating and maintaining a sterile field and for monitoring aseptic practice by all members of the surgical team. Appropriate implementation of this responsibility requires an understanding of infection sources, transmission modes and the methods to reduce or eliminate micro-organisms in the surgical setting.

Asepsis refers to the “absence of infectious organisms” and is directed at “cleanliness and the elimination of all infectious agents” (Rothrock, 2003, p.97).

Aseptic technique can be defined as “aseptic practices” by which contamination with micro-organisms is prevented (Spry, 1997, p.83).

Institutional policies and procedures must be in line with the current “aseptic practices and techniques” (Rothrock, 2003, p.131) regarding scrubbing, gowning and gloving. Each department must develop, implement, and evaluate structured principles regarding mentioned practices. Professional nurses must have in-depth knowledge of principles and practices associated with attire, aseptic technique, surgical scrubbing, gowning, and gloving. Nursing actions must reflect knowledge of the surgical scrub method and execution of the scrubbing method competent, donning of a sterile gown without

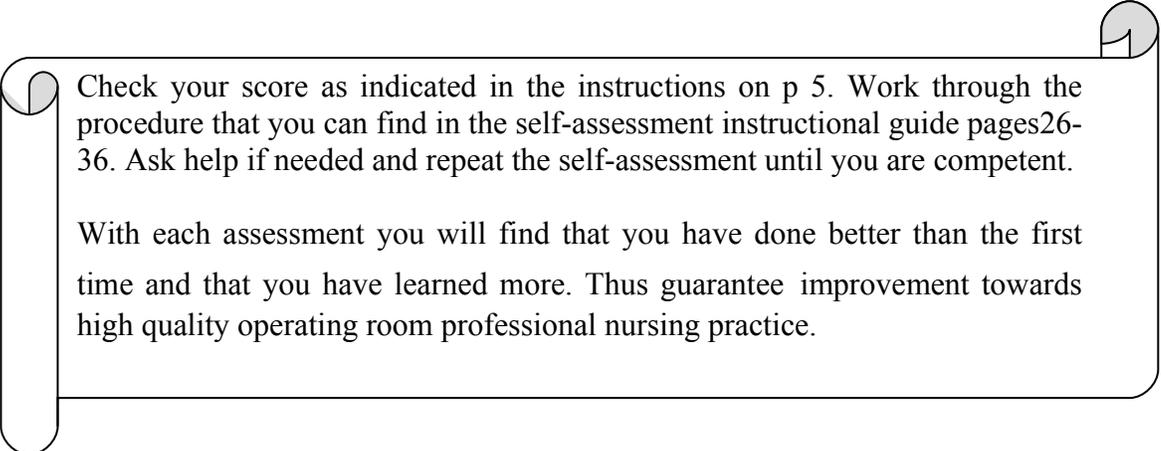
contaminating the outside of the gown and complete the procedure of sterile gloving without contamination of the gown and/or outside of the sterile gloves.

Self-assessment checklist for the standard “preparation for and execution of surgical scrubbing, sterile gowning and gloving” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
4.1. Check the wash basins for cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2. Check if the antiseptic soap is enough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3. Check if the antiseptic soap containers are clean and functional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4. Check if the sterile brushes are connected correctly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5. Check if the sterile brushes are enough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.6. Check if the water is running sufficiently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.7. Cover your hair completely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.8. Wear the face mask correctly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.9. Don an apron	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.10. Check that your nails are short and clean and without nail polish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.11. Ensure that the water is running freely before you started scrubbing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.12. Check the watch to check the scrubbing time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.13. Wet the hands and arms to elbow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
4.14. For one minute - take soap and wash the hands to pulse			
4.15. In up and down movements,			
4.16. Circular movements			
4.17. Between the fingers, thumbs and back of hands			
4.18. Rinse			
4.19. For one minute – take soap, wash hands in similar way as above			
4.20. Arms in circular movements to two fingers above elbow			
4.21. Rinse finger tips only			
4.22. For one minute - brush finger tips of one hand			
4.23. Rinse brush and fingers tips			
4.24. Brush finger tips of the other hand			
4.25. Rinse the brush and finger tips			
4.26. Discard the brush without contaminating your hands and arms			
4.27. For two minutes – wash hands in similar way as for 4.15; 4.16 and 4.17			
4.28. Rinse from finger tips, hands and arms thoroughly			
4.29. Close tap with any body part except the hands and forearms according to the design of the taps and wash basin			
4.30. Keep hands above elbow level throughout the procedure			
4.31. Ensure that the water did not drip on the gown trolley			
4.32. Stand away from the trolley			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
4.33. Take one hand towel and let it fall open without shaking it			
4.34. Keep the towel away from the body – straight arms			
4.35. Dry from fingers to elbow			
4.36. Press the towel to the hands and arms and did not rub			
4.37. Drop towel into bin			
4.38. Keep hands at face level			
4.39. Handle the gown at the collar			
4.40. Stand away from the trolley			
4.41. Allow the gown to fall open away from the body and trolley			
4.42. Put both arms simultaneously in the gown sleeves			
4.43. Inform the nurse to pull the sleeves from under the arms to the back			
4.44. Prevent touching the outside of the gown with un-gloved hands			
4.45. The glove envelope is folded open on the sterile gown trolley			
4.46. The first glove is picked up on the folded back part.			
4.47 The hand with fingers against one another is placed in the glove, first four (4) fingers then the thumb.			
4.48. The four (4) fingers and the thumb of the un-gloved hand are held out and the folded over part is pulled over the hand.			
4.49. Put folded part of gloves over thumb pull over gown sleeve at pulse – both sides alternatively.			
TOTAL			



Check your score as indicated in the instructions on p 5. Work through the procedure that you can find in the self-assessment instructional guide pages 26-36. Ask help if needed and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

2.2.4.5 STANDARD 5. PREPARATION FOR AND SETTING OF STERILE TROLLEYS, (INSTRUMENTS, DRAPES AND STERILE SUPPLIES)

Standard statement

Professional nurses should adhere to the principles regarding the sterile field by executing the correct preparations methods of the sterile field to prevent secondary infection to the patient.

Setting of sterile trolleys, instruments, drapes and sterile supplies refer to the method in which professional nurses prepare, evaluate and handle the sterile drapes, set instruments in the instrument tray and on the mayo-table and setting of the work trolley for a surgical procedure.

Institutions and departments should provide policies and procedures to guide professional nurses to maintain a sterile environment during the process of preparing the sterile field for a surgical intervention.

The activities of professional nurses must reflect the principles of prevention of infection regarding the setting of sterile trolleys.

The desired outcomes identified is that professional nurses prepare and set the sterile trolleys, drapes and instruments in such a manner that sterility of the sterile environment and staff is maintained.

Self-assessment checklist for the standard “preparation for and setting of sterile trolleys, (instruments, drapes and sterile supplies”) to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
5.1. Ensure that all trolleys are clean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2. Ensure that all packs and instruments needed are ready for use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3. Ensure that all sterile supplies needed are ready for use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.4. Ensure that the outer covering of the sterile packs are dry A*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.5. Ensure that the outer covering of the sterile packs are intact A*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.6. Ensure that the packs are sterile by checking the colour of the autoclave tape on the packs A*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.7. Open the first fold of the inner packs towards you #	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.8. Fold the drapes over your hands so that your hands does not become contaminated #	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.9. Ensure that all surfaces of all trolleys are covered #	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.10. Shift trolleys towards each other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
5.11. Ensure that the mayo cover is not contaminated when covering the mayo table #			
5.12. Ensure that the mayo table leg is covered correctly #			
TOTAL			

Check your score as indicated in the instructions on p 5. Work through the procedure again that you can find in the self-assessment instructional guide pages 36-39. Ask help if you need and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

2.2.4.6 STANDARD 6. PREPARATION FOR AND EXECUTION OF SWAB MANAGEMENT DURING AN OPERATIVE PROCEDURE

Standard statement

Swab count should be done during all surgical procedures where there is a possibility that a swab can unintentionally be retained as a foreign object in a body cavity and/or large muscle structures of a patient after surgery.

Swab count refers to the process of physically examine and count each swab separately, each type of swab separately before skin incision, during surgery and before closure of the wound.

Operating rooms should have written policies and procedures regarding the principles of swab management (Meeker & Rothrock, 1999, p.43). The support system of the institution should provide all the needed swabs in acquired amounts for specified surgical interventions done in that institution.

The activities by professional nurses should reflect the planning for needed swabs, implementation of the process of swab counting throughout the surgical procedure and the evaluation of the process.

The outcome identified is that the patient be free of injuries related to the use of swabs during a surgical intervention.

Self-assessment checklist for the standard “preparation of and execution of operative swab management during an operative procedure” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
6.1. Confirm the type of swabs to be used for the procedure you assisted for			
6.2. Ensure that there are enough swabs sterile of all types			
6.3. Ensure that the co-counter knows the procedure for swab count			
6.4. Ensure that the swab rack is clean			
6.5. Ensure that there is a kidney dish and forceps			
6.6. Ensure that the patient's particulars are written completely on the swab board #			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
6.7. Ensure that there are no used swabs of the previous cases in the operating room ##			
6.8. Ensure that the circulating nurse keep his/her hands lower than the sterile field when receiving the paper seal of the swabs			
6.9. Count with the circulating nurse count together and aloud			
6.10. Count different type of swabs separately #			
6.11. Count two bundles of the same swabs separately #			
6.12. Taped swabs – open the swab to check for cleanliness, the condition of the swab and the presence of loose threads			
6.13. Pull on the bands of the swabs			
6.14. Put the different swabs in separate containers			
6.15. Large dissecting swabs – fold open, count one by one and put in a container			
6.16. Small dissecting swabs – loosen them and remove the treads, count them one by one and put in a container			
6.17. Count tampons			
6.18. Count throat packs			
6.19. Ensure the correct recording of the swabs on the swab board #			
6.20. Ensure the correct recording of swabs that are pushed into the abdominal cavity####			
6.21. Ensure that there is an acceptable amount of swabs on the operating table around the wound			
6.22. The correct manner of handing swabs to the circulating nurse – open the swab before discarding			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
6.23. Supervise the manner in which the circulating nurse handles and hangs the swabs on the swab rack			
6.24. Ask the anaesthetist to evaluate the blood loss on the used swabs before they are removed from the swab rack			
6.25. Method of counting swabs intra-operative- first the amount on the board			
6.26. Then on the swab rack			
6.27. Then on the sterile field			
6.28. Then on the operating table			
6.29. For a hysterectomy complete an extra swab count before closure of the pelvic peritoneum A*			
6.30. Report the findings to the surgeon who acknowledge			
6.31. For caesarean section complete an extra swab count before closure of the uterus A*			
6.32. Report findings to the surgeon who acknowledge			
6.33. Complete the first routine intra-operative swab count before closure of the abdominal peritoneum or first layer of a wound A*			
6.34. Report findings to the surgeon who acknowledge			
6.35. Complete the second routine intra-operative swab count before closure of the sheath or second layer of a wound A*			
6.36. Report findings to the surgeon who acknowledge			
6.37. Complete the final swab count before closure of the skin A*			
6.38. Report findings of the final swab count to the surgeon who acknowledge			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
6.39. Ensure that the co-counter record the findings on the swab board according to protocol			
6.40. Order that the swabs may be removed from the swab rack			
6.41. Ensure that the used soiled swabs are correctly disposed of after the final swab count			
6.42. Ensure that the used clean swabs are correctly disposed of after the final swab count			
6.43. Ensure that all swabs stay in the operating room until after the patient has left the operating room #			
TOTAL			

Check your score as indicated in the instructions on p 5. Work through the procedure again that you can find in the self-assessment instructional guide pages 39-47. Ask help if you need and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

EXECUTION OF SURGICAL INSTRUMENT

MANAGEMENT DURING AN OPERATIVE PROCEDURE

Standard statement

Surgical instrument management requires professional knowledge and commitment to adhere to the instrument management policy and procedure.

Surgical instruments can be defined as any item used for a surgical intervention.

Institutions should have policies guiding the professional nurses regarding surgical instrument management. This information should include recommendation on when and how formal instrument count should be done and who the responsible parties are.

The activities of professional nurses during planning, implementing and evaluation of surgical instrument management should reflect knowledge regarding the importance of surgical instrument management during a surgical intervention.

The outcome identified is that professional nurses should have knowledge of formal instrument management as prescribed to ensure that the patient is “free from injury related to extraneous objects” after surgery (Spry, 1997, p.151). In this standard the extraneous object refers to surgical instruments.

Self-assessment checklist for the standard “preparation for and execution of instruments management during an operative procedure” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
7.1. Confirm the instruments needed for the surgical procedure you assisted for			
7.2. Confirm that the co-counter knows the procedure of instrument count			
7.3. Check that all used instruments of the previous surgical procedure are removed from the operating room			
7.4. Open the instruments to check for cleanliness and function #			
7.5. Count instruments aloud with the co-counter #			
7.6. Check if the co-counter tick off on the instrument form every instrument counted			
7.7. Check the screws on the self-retaining retractor ##			
7.8. Check and count all extra instruments ####			
7.9. Ensure that the co-counter record extra instruments according to protocol #			
7.10. Keep the instruments neat on the mayo-table			
7.11. Avoid handling instruments on tips			
7.12. Hand instruments to the surgeon according to protocol			
7.13. Hand knife to the surgeon according to protocol ####			
7.14. Hand and give off contaminated instruments correctly			
7.15. Not leave used instruments on the patients' body during the surgical procedure ##			
7.16. Check instruments before closure of the peritoneum or first layer of the wound A*			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
7.17. Report the finding to the surgeon who acknowledge			
7.18. Ensure that the co-counter ticked off the instruments as they are counted before closure			
7.19. Ensure that the instrument form is filled in completely and correctly after completion of the surgical procedure			
7.20. Sign the instrument form after completion of the surgical procedure			
TOTAL			

Check your score as indicated in the instructions on p 5. Work through the procedure again that you can find in the self-assessment instructional guide pages 48-54. Ask help if you need and repeat the self-evaluation until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

2.2.4.8 STANDARD 8. PREPARATION FOR AND EXECUTION OF SURGICAL SUTURE MATERIAL AND SURGICAL NEEDLE MANAGEMENT DURING AN OPERATIVE PROCEDURE

Standard statement

The choice of suture material and needles, the management thereof should promote primary wound healing, prevent infection and/or tissue damage and medical legal risks.

A suture is a “thread, wire or other material used in the operation stitching parts of the body together” (Fairchild, 1996, p.201). A suture also refers to “a strand of material used to ligate a blood vessel so as to occlude the lumen or sew tissue together” (Spry, 1997, p.214).

Atraumatic suture material can be defined as the surgical needle with the suture material attached to it. The needle and suture material forms a “continuous unit in which needle diameter and suture diameter are matched as closely as possible” (Spry, 1997, p.221).

Institutional policy and procedure on management of surgical suture material and surgical needles must be up to date with the changing sciences and technology and available to all professional nurses. The supporting system of an institution should make provision for the supply of any surgical suture material needed at any given time.

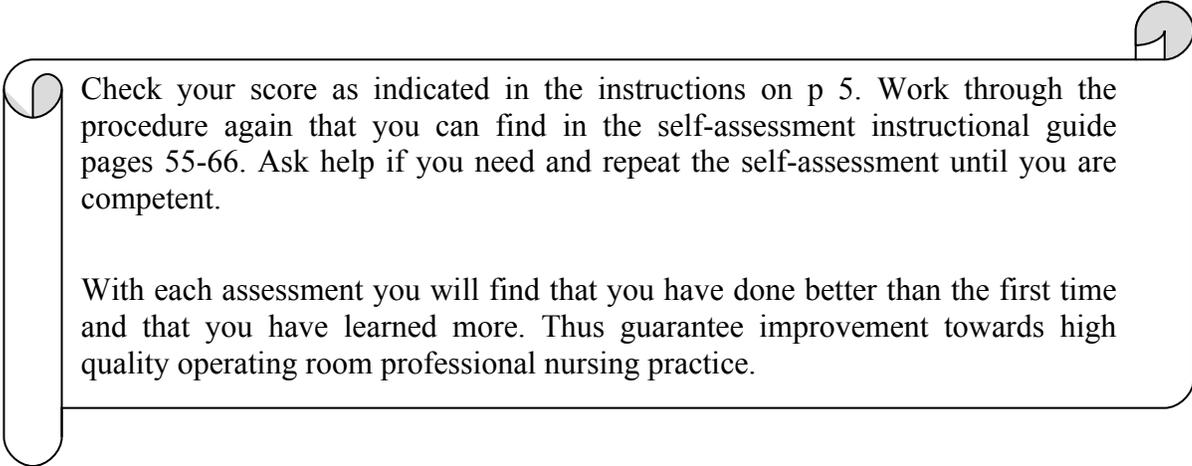
The activities of professional nurses should reflect knowledge of the process of manufacturing and characteristics of surgical suture material and surgical needles. Professional nurses should manage and care for suture material and surgical needles competently and efficiently.

The outcome identified is that there will be no patient injury related to the use of surgical suture material and surgical needles. Some tissue reaction is inevitable because surgical suture material is a foreign body.

Self-assessment checklist for the standard “preparation for and execution of needle management during an operative procedure” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
8.1. Confirm the suture material and needles needed for the surgical procedure you assisted for			
8.2. Ensure that there are enough suture material and needles needed			
8.3. Confirm that the co-counter knows the procedure of suture material and needle count			
8.4. Handle and count loose (traumatic) needles according to protocol ###			
8.5. Ensure that the co-counter record the loose (traumatic) needles on the swab board according to protocol #			
8.6. Handle and count atraumatic suture material according to protocol ###			
8.7. Ensure that the co-counter record atraumatic suture material on the swab board according to protocol #			
8.8. Keep suture material packages for control of amount of suture material used			
8.9. Keep needles on a safe place for safety and counting #			
8.10. Ensure that there are no used needles with needle holder on the patient's body #			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
8.11. For a hysterectomy complete an extra needle count before closure of the pelvic peritoneum A*			
8.12. Report findings to the surgeon who acknowledge			
8.13. For a caesarean section complete an extra needle count before closure of the uterus A*			
8.14. Report findings to the surgeon who acknowledge			
8.15. Complete the first routine intra-operative needle count before closure of the abdominal peritoneum or first layer of a wound A*			
8.16. Report findings to the surgeon who acknowledge			
8.17. Complete the second routine intra-operative needle count before the closure of the sheath or second layer of a wound A*			
8.18. Report findings to the surgeon who acknowledge			
8.19. Complete the final needle count before closure of the skin A*			
8.20. Report findings of the final needle count to the surgeon who acknowledge			
8.21. Ensure that the co-counter record the findings of the needle count on the swab board and patient's records according to protocol			
8.22. Discard the used needles into a sharp container according to protocol ###			
TOTAL			



Check your score as indicated in the instructions on p 5. Work through the procedure again that you can find in the self-assessment instructional guide pages 55-66. Ask help if you need and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

2.2.4.9 STANDARD 9. PREPARATION FOR AND EXECUTION OF SURGICAL SKIN PREPARATION

Standard statement

The skin incision line and surrounding areas should be surgically cleaned with an aseptic solution that will not harm the patient.

Surgical skin preparation can be defined as the mechanical cleaning of the surface of the skin on the incision line and a wide surrounding area using bacteriocidal cleaning solution.

Institutions should have written policies and procedures to guide professional nurses to understand the importance of surgical skin preparation and the skills to be acquired to perform the procedure competently.

The actions of professional nurses should reflect knowledge of the process of surgical skin preparation with the aim to prevent bacteria to enter the wound through the skin incision.

The outcome identified is that surgical skin preparation is done effectively and competently without any harm to the patient due to the aseptic solution and to “prevent bacteria on the skin surface” to enter the skin incision (Rothrock, 2003, p.147).

Self-assessment checklist for the standard “preparation for and execution of surgical skin preparation” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
9.1. Use the correct antiseptic solution according to any allergies known to the patient #			
9.2. Use the correct antiseptic solution according to surgeons preference and/or hospital policy			
9.3. Ordered the operating lights to be switched on.			
9.4. Confirmed the nature and site of the skin incision line			
9.5. Ensure that an adequate area surrounding the operation site is prepared – shaved, no linen or clothing			
9.6. Evaluate the position of the body - alignment			
9.7. Evaluate the condition of the skin			
9.8. Evaluate the position of the surgical diathermy plate ##			
9.9. Ask consent from the anaesthetist to start with the surgical skin preparation			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
9.10. Begin at the site of incision and work to the periphery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.11. Begin at the side where you are standing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.12. Use swabs once only and discard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.13. refrain from going back to clean area with dirty swab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.14. Prevent too wet swabs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.15. Ask someone to ensure that the patients neck and diathermy plate are dry ##	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.16. Discard dirty swabs into bucket after each one is used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.17. Order the co-counter to remove the dirty swabs from the bucket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOTAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check your score as indicated in the instructions on p 5. Work through the procedure again that you can find in the self-assessment instructional guide pages 66-70. Ask help if you need and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

2.2.4.10 STANDARD 10. PREPARATION FOR AND EXECUTION OF STERILE DRAPING

Standard statement

Professional nurses must have “in-depth knowledge of principles and practices” and acquire skills regarding the process of surgical draping (Spry, 1997, p.79). The barrier quality and fluid impermeability of surgical drapes must be estimated before use in the operating room to prevent cross infection during surgery.

Surgical draping can be defined as the covering of the patient and the adjacent surroundings of a patient’s body for surgery to provide a sterile field.

The institution should have written policies and procedures regarding the characteristics of surgical drapes and the method of the draping procedure to provide high quality micro-organism’s barrier. Supporting structure of an institution should allow for different types and sizes of high quality surgical drapes.

The activities of professional nurses should reflect careful planning to acquire desired types and sizes of surgical drapes required for surgery (Meeker & Rothrock, 1999, p.146). The implementation of the draping method should reflect high quality professional performance according to prescribed principles.

The outcome identified is that the surgical drape must form a barrier between the patient’s skin and everything on top of the surgical drape e.g. water, to prevent cross infection that may with result in post-operative wound infection.

Self-assessment checklist for the standard “preparation for and execution of sterile draping” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
10.1. Prepare the correct drapes for the surgical procedure you assisted for	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2. Covers the operating table on your side first	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3. Check towels for holes and cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.4. Refrain from shifting towels and clips once they were placed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5. Cover your hands by folding towels back over your hands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6. Keep the towels high enough at face level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7. Keep the towels not below waist level #	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.8. Ensure that your gown and gloves are not contaminated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.9. Ensure that the operative site is exposed adequately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.10. Cover the operating table and surrounding areas sufficiently to provide a sterile field #	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOTAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check your score as indicated in the instructions on p 5. Work through the procedure again that you can find in the self-assessment instructional guide pages 71-75. Ask help if you need and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

2.2.4.11 STANDARD 11. SAFE HANDLING AND TRANSFER OF THE PATIENT FROM THE OPERATING TABLE TO THE PATIENT TRANSPORT TROLLEY IN THE OPERATING ROOM IMMEDIATELY AFTER THE SURGICAL PROCEDURE

Standard statement

Transferring the patient describes the activities of professional nurses and/or other members of the operative and invasive procedure surgical team, in moving the patient from the operating table to the patient transport trolley without tissue injury, altered body temperature, ineffective breathing patterns, altered tissue perfusion, discomfort, pain and falling (Rothrock, 1996, pp.588, 590).

The definition for the **transfer of the patient from the operating table to the patient transport trolley** in this context can be the placing of the patient from one bed to another without disturbing the normal functioning of the vital systems of the patient.

Institutional policy and procedure should include steps whereby professional nurses can be guided to perform the activity of the transfer of the patient successfully. Equipment provided by the institution must be functional to safeguard the patient and personnel from medical legal hazards.

Assessing, planning, implementation and evaluation of all nursing actions reflects principles of safety including human factors, equipment, and continuous high quality professional nursing practice during the transfer of the patient from the operating table to the patient transport trolley.

The outcomes identified is that the patient will be transferred from the operating table to the patient transport trolley without loss of dignity, maintenance of baseline neuromuscular functions, intact skin, patent airway and free from any injury related to transfer of a patient (Rothrock ,2003, p.253-254).

Self-assessment checklist for the standard “for the safe handling and transfer of the patient from the operating table to the patient transport trolley in the operating room immediately after the surgical procedure” to assess operating room professional nursing practice competence

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
11.1. Refrain from turning your back to the patient ###			
11.2. Order someone to stay with the patient if you were not next to the patient			

<i>Did you</i>	<i>Yes</i>	<i>No</i>	<i>N/a</i>
11.3. Ensure that there is an oxygen cylinder on the recovery trolley #	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.4. Ensure that enough people transfer the patient from the operating table to the patient trolley ##	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.5. Keep the patient warmly covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.6. Ensure that the urine bag is not on the trolley	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.7. Ensure that there are nothing on the patient's legs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOTAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check your score as indicated in the instructions on p 5. Work through the procedure again that you can find in the self-assessment instructional guide pages 76-79. Ask help if you need and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

PROFESSIONAL NURSE (scrub nurse) TO THE RECOVERY ROOM PERSONNEL

Standard statement

The report given by professional nurses (scrub nurses) regarding any intervention done to the patient during a surgical procedure to the recovery room personnel should be detailed, correct and complete to enable them to assist the patient to gain her/his pre-operative health status.

Report to the recovery room personnel can be defined as the information given by one person to another regarding every intervention done, health status of the patient at that time and prescriptions for further interventions.

Institutional and departmental policies and procedures should be complete to guide professional nurses (scrub nurse) to provide information to the recovery nurse to ensure continuous nursing care.

The activities of professional nurses should reflect their knowledge of the content of the report to be given to the recovery room nurse regarding the care that the patient received in the operating room and the nursing care that the patient should receive in the recovery room and the ward.

The outcome identified is that professional nurses (scrub nurse) report all interventions done in the operating room completely and competently to ensure high quality continuous nursing care for the patient in the recovery room and the ward.

Self-assessment checklist for the standard “report on patient’s interventions by the professional nurse (scrub nurse) to the recovery room personnel” to assess operating room professional nursing practice competence

<i>Did you</i>	Yes	No	N/a
12.1. Assist the recovery room personnel regarding the comfort and safety of the patient			

12.2. Stand next to the patient's trolley to see the face of the patient			
12.3. Report the following: patient's full name			
12.4. Patient's registration number			
12.5. Names of the medical personnel attended to the patient			
12.6. Surgical intervention done			
12.7. Anaesthesia given			
12.8. Muscle relaxant given			
12.9. Analgesics given during the surgical procedure			
12.10. Suture material used			
12.11. Drains inserted, the type			
12.12. The position of the drain eg. through a stab wound or in the incision line			
12.13. Swab, needle, and instrument count correct.			
12.14. Post-operative prescription			
12.15. Show the integrity of the skin			
12.16. Show the wound site			
12.17. Show the drainage tube – function and amount of drainage			
12.18. Give special orders and observations that the recovery personnel should do eg. Check for vaginal bleeding after a hysterectomy			
12.19. Show the tissue specimen to the recovery room personnel			
12.20. Show all information of the patient on the tissue specimen form			
12.21. Show the intravenous infusion fluid and the amount infused and expiry date			
12.22. Show the amount of urine drainage and the colour of the urine			

TOTAL			
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Check your score as indicated in the instructions on p 5. Work through the procedure again that you can find in the self-assessment instructional guide pages 79-84. Ask help if you need and repeat the self-assessment until you are competent.

With each assessment you will find that you have done better than the first time and that you have learned more. Thus guarantee improvement towards high quality operating room professional nursing practice.

3. ANNUAL RECORD FOR SELF-ASSESSMENT FOR PROFESSIONAL NURSES WORKING IN THE OPERATING ROOM

NAME:.....200....

MONTH	%	COMMENTS –Professional nurse	COMMENTS - Supervisor
January			
February			
March			
April			
May			

June			
July			
August			
September			
October			
November			
December			

4. BIBLIOGRAPHY

Aucoin, J.W. (1998). Program planning: Solving the problem. In J. K. Kelly-Thomas (Ed.), *Clinical and nursing staff development. Current competence, future focus* (pp.213-238). (2nded.). New York: Lippincott.

Bohner, G., & Wänke, M. (2004). *Attitudes and attitude change*. East Sussex: Psychology Press Ltd.

Boyle, J.S. (1981). An application of the structural-functional method to the phenomenon of caring. In M.M. Leininger (Ed.), *Caring. An essential human need. Proceedings of the three national caring conferences* (pp.37-48). Detroit: Wayne State University Press.

Dienemann, J.A. (1998). *Nursing administration. Managing patient care*. Connecticut: Appleton & Lange.

Engelbrecht, F.D.J. (2005). *Assessment and evaluation of instruction*. CAA 7309. Centre for External Studies. Windhoek: University of Namibia.

Fairchild, S.S. (1996). *Perioperative nursing. Principles and practice*. (2nded.). London: Little, Brown and Company.

Gerdes, L. C. (1988). *The developing adult*. (2nded.). Durban: Butterworth.

Government notice No. 13. No. 2040. (1999). Regulations relating to the scope of practice of persons who are registered or enrolled under the Nursing Professions Act, Act No. 30 of 1993, pp.64-71

Hornby, A. S. (2005). *Oxford advanced learner's dictionary. International student's edition*. (7thed.). New York: Oxford University Press.

Kisting Sparks, R. (1995). Client Education. In Snyders, M., Mirr, M.P. (Eds.). *Advanced practice nursing. A guide to professional development* (pp.117-133). New York: Springer Publishing Company.

Kloppers, A.R.E. (2002). *Quality of nursing care rendered by professional nurses during the intra-operative phase of a surgical intervention*. Unpublished.

Knowles, M. (1990). *The adult learner, a neglected species*. (4thed.). Houston: Gulf Publisher Co.

Link: Self-evaluation. (n.d.). *Holistic education as education for adaptability or 'Self-empowerment': The function of error and self-evaluation*. Retrieved August 07, 2004, from <http://www.holisticeducator.com/selfevaluation.htm>.

Leininger, M.M. (1981). The phenomenon of caring: Importance, research questions and theoretical considerations. In M.M. Leininger (Ed.). *Caring. An essential human need. Proceedings of the three national caring conferences* (pp.3-16). Detroit:Wayne State University Press.

Lucas, J. R. (1995). *Responsibility*. New York: Clarendon Press.

Martin, V., & Henderson, E. (2001). *Management in health and social care*. London: Routledge.

Meeker, M.H., & Rothrock, J.C. (1999). *Alexander's care of the patient in surgery*. (11thed.). New York: Mosby.

Naude, M., Meyer, S., & van Niekerk, S. (1999). *The nursing unit manager. A comprehensive guide*. Sandown: Heineman.

Osborn, R.E. (1996). *Self. An eclectic approach*. London: Allyn and Bacon.

Pervin, L.A (1996). *The science of personality*. New York: John Wiley & Sons.

Praeger, S.G. (1995). Josephine E. Paterson and Loretta T. Zderad. In J.B. George (Ed.). *Nursing theories. The base for professional nursing practice* (pp. 301-314). (4thed.). Connecticut: Appleton & Lange.

Ray, M.A. (1981). A philosophical analysis of caring within nursing. In M.M. Leininger (Ed.). *Caring. An essential human need. Proceedings of the three national caring conferences* (pp. 25-36) Detroit: Wayne State University Press.

Rothrock, J.C. (1996). *Perioperative nursing care planning*. (2nd ed.). New York: Mosby.

Rothrock, J.C. (2003). *Alexander's care of the patient in surgery*. (12thed.). London: Mosby.

SATS: South Africa Theatre Sister. (1994). *Standards peri-operative procedures*. Cape Town.

Schwandt, T A. (1997). *Qualitative inquiry. A dictionary of terms*. London: Sage Publications.

Searle, C. (2004). *Professional practice. A South African nursing perspective*. (4th ed.). Pietermaritzburg: Heinemann.

More-selfesteem.com (n.d). *Self-motivation*. Retrieved January 27, 2007, from <file:///C:/Documents%20and%20Settings/karstens/My%20document>.

Shaw, L J. (2006). Teacher education 954. Humanistic and social aspects of teaching. *Five educational philosophies*. Retrieved September 23, 2006, from <http://edweb.sdsu.edu/LShaw/f95syll/philos/phexist.html>.

Smith, M K. (2006). Johan Hienrich Pestalozzi. *Infed*. Retrieved September 23, 2006, from <http://www.infed.org/thinkers/et-pest.htm>.

Snyders, M. (1995). Advanced practice within a nursing paradigm. In M. Snyders., & M.P. Mirr (Eds.). *Advanced practice nursing. A guide to professional development* (pp. 25-34). NewYork: Springer Publishing Company.

Spry, C. (1997). *Essentials of perioperative nursing*. (2nded.). Maryland: An Aspen Publication.

Standards of practice for electrologists. (n.d). Retrieved January 27, 2007, from <http://www.electrology.com/standards practice 06.pdf>.

Troskie, R. (1993). Performance, appraisal and productivity. In S.W. Booyens (Ed.). *Dimensions of nursing management* (pp.534-557) Kenwyn: Juta & Co Ltd.

Weston, M.J., Buchda, V.L., & Bergstrom, D. (1998). Creating excellence in practice. In C.M. Sheehy, & M.C. Mc Carthy, *Advanced practice nursing. Emphasizing common roles* (pp. 304-317). Philadelphia: F.A. Davis Company.

ADDENDUM F

Self-assessment instructional guide as part of the self-assessment programme for the study.

**SELF-ASSESSMENT PROGRAMME FOR
OPERATING ROOM PROFESSIONAL NURSING
PRACTICE IN NAMIBIA**

**SELF-ASSESSMENT INSTRUCTIONAL
GUIDE FOR OPERATING ROOM
PROFESSIONAL NURSING PRACTICE
(STANDARDS)**



SUMMARY

The objective of the compilation of a self-assessment instructional guide on operating room nursing practice standards is to provide professional nurses with a document readily available that they can consult immediately when needed.

The content of this document only include standards of operating room professional nursing practice as arranged by the researcher. The rationale was to make the document user friendly and appropriate for all regional and national utilization. The information on procedural principles will guide professional nurses through the procedures step-by-step in sequence on actions expected from them during a surgical intervention.

The self-assessment instructional guide was compiled using different sources on operating room professional nursing practices. The content present standards, criteria, principles and procedural activities prescribed for operating room professional nursing practices during the intra-operative phase of the peri-operative period of a surgical intervention. The activities of each standard include actions and rationale.

The standards for this section are the same as for the self-assessment checklist starting with the admission of the patient to the operating room and end with the report of the patients' intervention given by the professional nurse (scrub nurse) to the recovery room personnel. The description of each standard includes the introduction, purpose of the standard, definition, standard statement, structure standard, process standard, outcomes standard, objective of the standard and the procedure. The standards are based on Donabedian's standard model represents structure, process and output standards (Katz & Green, 1997, p.25).

All professional nurses working in the operating room, irrespective of whether they obtain a qualification in operating room nursing science can use this document to enhance their knowledge after they assessed their level of professional practice competence or as initial information prior to the assessment.

For this document, the term professional nurses used in the text refer to all professional nurses working in the operating room.

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SELF-ASSESSMENT INSTRUCTIONAL GUIDE
FOR
OPERATING ROOM PROFESSIONAL NURSING
PRACTICE (STANDARDS)

1. ADMISSION OF THE PATIENT TO THE OPERATING ROOM

1.1 INTRODUCTION

During admission of the patient to the operating room the patient will already have had a pre-medication. The status quo is that the patient must be regarded as semi-conscious after the administration of any tranquilliser. Therefore it is of the utmost importance that professional nurses working in the operating room knows the medical legal risks and prevention pertaining admission of the patient to the operating room.

Other than the pre-operative visit of the patient in the ward is the admission of the patient to the operating room a critical time for professional nurses to gather data to help plan for the patient's care and safety. It is the opportunity to collaborate with the patient by identifying the patient and build a trust relationship. It also provides the opportunity to verify the surgical intervention

planned and identify the needs of the patient to be able to plan nursing care to meet those needs (Rothrock, 2003, p.25).

1.2 PURPOSE

The purpose of this standard is to guide operating room personnel to describe the activities of professional nurses or other members of the operative and invasive procedure nursing team in the activities of the admission of the patient to the operating room without medical legal risks to the patient.

1.3 DEFINITIONS

Admission refers to the "...act of accepting somebody into and institution". It can also be defined as the "... right to enter a place or to join an institution or organization" (Hornby, 2005, p.19).

1.4 STANDARD

1.4.1 Standard statement

The nursing care to a patient on admission to the operating room is provided to ensure client safety from medical legal hazards, comfort, alleviate anxiety, and to provide continuous nursing care during the surgical intervention.

1.4.2 Structure standard

Institutional policy and procedure should include steps whereby professional nurses can be guided to perform the admission of the patient to the operating room procedure successful. It is essential that professional nurses are empathetic communicator, that they develop good listening skills, being alert to nonverbal communication, offers gentle reassurance, provides explanation and utilizes comforting behaviour. A checklist is used to prevent oversight, omission and sentinel events.

1.4.3 Process standard

Nursing actions reflects:

- Identification and gathering of data concerning the health status of the patient on admission to the operating room.
- Nursing care plan to address the patient's needs during surgical intervention.
- Environmental factors that influence the patient's health, i.e. anaesthetics and equipment
- Execute all the principles pertaining safe patient care.

1.4.4 Outcome standard

The outcome identified is that the patient is:

- Free from anxiety and fear
- Free from injury related to wrong operative procedure, incomplete informed consent to the operation, incomplete documentation that can result in wrong and /or delayed treatment.

1.5 OBJECTIVE

Professional nurses should be able to:

- Demonstrate the process of admission of the patient to the operating room competently

1.6 PROCEDURE**Admission of the patient to the operating room.**

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Greet the patient in a friendly manner and introduce yourself ➤ Ask the patient the following: <ul style="list-style-type: none"> ○ Full name ○ Age ○ If s/he knows the operation s/he is undergoing and on which side of the body, if applicable ○ When last did s/he had anything to eat or drink ○ Did s/he had a bath in the 	<p>To let the patient feel welcome and alleviate stress</p> <p>To verify the verbal answer with the armband, patient file, consent to an operation form, special preparation form, vital signs form and operation list. In case of an infant or child the parent or ward personnel can answer these questions</p> <p>To ensure that the patient did not eat or drink</p>

<p>morning</p> <ul style="list-style-type: none"> ○ Was s/he shaved if applicable ○ Was a urinary catheter inserted ○ Did s/he passed urine in the ward ○ Did s/he has had an injection ○ If s/he suffers from any allergies; ○ Ask the patient if his/her dentures are removed ○ Ask the patient if the jewels are removed 	<p>something without the knowledge of the nursing personnel</p> <p>It is required that the patient bath to prevent post-operative sepsis</p> <p>Hair in a wound is regarded as a foreign body that may cause wound infection</p> <p>Give an indication if the bladder is full or if a catheter must be prepared</p> <p>Give an indication if the bladder is full</p> <p>To verify any medication that was given</p> <p>Anaesthetist must be notified</p> <p>Denture may remain on orders of the anaesthetist</p> <p>Jewels may cause</p>
--	--

<ul style="list-style-type: none"> ➤ Correlate the following information on the armband, patients file, informed consent to an operation form and with the ward staff that accompanied the patient: ➤ <ul style="list-style-type: none"> ○ Patient's name and age ○ Patients registration number ○ Body temperature, blood pressure, pulse respiration, haemoglobin, ward urine analysis results, stool activities; ➤ Check the intravenous infusion site and the infusion solution; ➤ Check the consent to an operation (will be discussed in a separate chapter). 	<p>diathermy burns</p> <p>Verify with the documents all verbal information of the patient.</p> <p>Sometimes the patient verbalize the name used at home that differs from the name on the records</p> <p>Names can be the same but every patient have a different registration number</p> <p>Identify the correct patient by the registration number</p> <p>To be able to either rectify the abnormality before surgery or cancel the case</p> <p>For continuous care</p> <p>To verify the operative procedure</p>
---	--

<ul style="list-style-type: none"> ➤ Check if the dentures are removed, if applicable or if the anaesthetist prescribed that dentures must not be removed; ➤ Check that all jewels are removed. 	<p>Dentures can be pushed into the oro-pharyngeal cavity during intubation</p> <p>Can cause pressure and/or diathermy burns.</p>
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2. INFORMED CONSENT FOR AN OPERATIVE PROCEDURE

2.1 INTRODUCTION

The operating room is full of dangers for the patient, with possible judicial involvement for professional nurses. They must thus continually be watchful to protect patients as well as themselves, the surgeons and the hospital. The decision of a patient to undergo an operative or invasive procedure must be only after the medical practitioner explained the operative procedure and all risks involved to the patient. It is imperative that patients understood the explanation. Patients being ignorant to medical science language depend upon and trust in the medical practitioner for the information upon which they rely in the decisional process (Fairchild, 1996, p.385).

If an operative or invasive procedure is performed without the patient's informed consent it is regarded as assault. Professional nurses are responsible to ensure that patients understand the impact of the operative/invasive procedure before they sign the consent to an operation form.

2.2 PURPOSE

The purpose of this standard is to provide guidelines to professional nurses to understand the implications of informed consent to an operation given by patients who are prepared for an operative or invasive procedure.

2.3 DEFINITIONS

Informed consent to an operation refers to the permission obtained from a patient for a specific test or an operative procedure after “disclosure of the risks and hazards” involved in the specific procedure. The medical practitioner must provide full details to each patient of all activities pertaining to the specific operative procedure (Fairchild, 1996, p.385).

A minor is a person under the age of 18 years (in Namibia). “An emancipated minor is one who is legally under the age of majority but is recognized as having a legal capacity to consent”. A person can become an emancipated minor by “...pregnancy, marriage, high school graduation, living independently and military service” (Rothrock, 2003, p.1212).

2.4 STANDARD

2.4.1 Standard statement

Ethical principles/moral rules i.e. respect for persons, autonomy, beneficence and non-maleficence, as well as legal conventions of informed consent to an operation, requires that patients be allowed to control what happens to their body. Ethical principles/moral rules of autonomy, beneficence/non-maleficence, justice, veracity, and fidelity serve to shape the boundaries of informed consent to an operation. The legal obligation to provide the information and obtain the consent to an operation lies with the person performing the procedure, namely the medical practitioner. The institution and professional nurses that allow operative and invasive procedures to be performed on

their premises have a legal obligation to ensure that informed consent to an operation has been obtained (Fairchild, 1996, p.386).

2.4.2 Structure standard

The institution should provide:

- Policies and procedure regarding informed consent to an operation or invasive procedure
- Standards and policies on medico-legal risks pertaining informed consent to an operation

2.4.3 Process standard

Professional nurses must evaluate the informed consent to an operation for completeness, legality, and correctness. Professional nurses must however remain responsive to the patient's needs and demonstrating a caring attitude. Professional nurses must identification the possibility that the patient may not understand the nature of the procedure. This knowledge deficit may lead to fear and anxiety of the unknown.

2.4.4 Outcome standard

The outcomes identified are that patients demonstrate knowledge of their understanding of the risks and hazards with regard to the operative/invasive procedure as explained by the medical practitioner (Rothrock, 1996, p.97). The procedure must be described correctly in the patient's own terms. Consent form to an operative procedure is signed and witnessed by authorized people. The patient is free of fear and anxiety.

2.5 OBJECTIVE

Professional nurses should be able to:

- Demonstrate knowledge of the legal regulations regarding informed consent to an operative procedure by evaluating the consent form correctly.

2.6 PROCEDURE

Critical points to remember regarding informed consent to an operation

- Each nurse must realize that examinations, treatments, operative procedures with or without anaesthesia constitute assault
- Informed written permission (informed consent) for an operation is not required anywhere by the Law
- In the instance of an adult fully conscious that does not need any type of anaesthesia, permission is acceptable if the patient gives himself/herself for treatment out of his/her own free will and with verbal consent that the procedure or treatment can be done. This is not applicable for procedures in the operating room.
- A permission (informed consent to an operation) form for both the operative procedure and type of anaesthesia must be signed for all surgical interventions and for certain medical cases and special procedure and examination
- Permission must be given out of own free will and with full insight
- The medical practitioner must give a full and understandable explanation of what is going to be done during the surgical procedure and what the consequences, risks and hazards are involved
- Ignorance of the patient regarding the surgical intervention, makes permission (informed consent to an operation) invalid
- The patient must be fully conscious and not under the influence of any preparation/substance.
- One person must complete the permission (informed consent to an operation).
- The patient must sign the permission in the presence of the two witnesses and the two witnesses sign in the presence of the patient.

- If the person can't write, his right thumb imprint must be taken.
- Permission (informed consent to an operation) may be repealed – it is the patient's right.
- Permission (informed consent to an operation) can elapse, depending on concerning conditions.
- Permission (informed consent) for euthanasia may not be granted.

Permission by adults

- An adult person signs his/her own permission (informed consent) form – i.e. over the age of 18 years. (According to Legislation – March 1976).
- In case of a married woman, although she may lawfully give her own permission, it is advisable to obtain the husband's permission (informed consent) when the operation will cause sterility.
- In the case of an unconscious adult, medical practitioners will decide whether the operation is necessary to save the patients' life, or to prevent permanent incompetence or overwhelming life. The medical superintendent is known in this matter. A member of the family is asked to sign this permission (informed consent).

Permission for the minor is give by:

- Any biological parent of the child born in wedlock, even though the parents are divorced.
 - Mother of an illegitimate child
 - The lawfully adopted parents of the lawfully adopted child
- The guardian if s/he is appointed as a guardian by the court (the foster-parents of a sheltered child is not the lawful guardian and may not grand permission).

Refusal by parents to grant inform consent to an operation for a minor

- In the case where the parents refuse to grant permission (informed consent to an

operation) for a surgical intervention or treatment, which the medical practitioner regard as essential, permission may be granted by the Medical Superintendent of the hospital and/or Minister of Health and Social Services of the concerned area. If there is not such an official, then the magistrate of that area may give permission (informed consent to an operation). In terms of the Children's Act the Minister of Health and Services delegated his authorization to above-mentioned persons.

Emergency concerning a child

- In an emergency concerning the case of a minor, permission is granted in terms of Section 20, subsection 7 of the Children's Act which reads as follows: If the Medical Superintendent of a hospital is of the opinion that an operative procedure or medical treatment is essential to save the life of a person under the age of 18 years or to save him from serious and irrecoverable physical injuries or disability and that the necessity of an operative procedure or medical treatment is so urgent, that it cannot be delayed for the purpose of consulting the legal person about obtaining permission for the operative procedure or treatment, then the Medical Superintendent, after he has obtained the opinion of another doctor, may give the necessary permission.
- In such a case it is not necessary to obtain permission from the Ministry of Health and Social Services or Magistrate.

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Permission (informed consent to an operation) form clearly mentions: <ul style="list-style-type: none"> ○ Patient's name ○ Patient's age ○ Registration number ○ Nature of surgical intervention ○ The date 	<p>All these information is to verify that the correct patient is undergoing the correct operative procedure.</p>

<ul style="list-style-type: none"> ○ Pre-medication given ○ Type of anaesthesia ○ Surgeon's name ○ Signature of the patient/legal guardian ○ Signatures of the witnesses 	
---	--

3. PREPARATION FOR AND EXECUTION OF THE OPERATIVE POSITIONING OF THE PATIENT ON THE OPERATING TABLE

3.1 INTRODUCTION

Patients undergoing general or regional anaesthesia are unable to respond to injury, pain, and/or discomfort. Improper positioning of patients can lead to post-operative “musculoskeletal pain, joint dislocation, peripheral nerve damage and cardiovascular and respiratory compromise” and can also make it difficult for the surgeon to perform surgery (Spry, 1997, p.119). The whole surgical team is responsible for the positioning of patients on the operating table. The task of positioning, the use of positioning and the use of equipment, demands the application of in-depth knowledge of anatomy and physiology, a high sense of responsibility and efficiency to prevent medical legal hazards. It is therefore the responsibility of professional nurses that serve as the advocate for patients to be knowledgeable, skilled and show an empathetic attitude towards the process of positioning patients. Risks regarding operative positioning can start when patients are transferred from the patients' trolley to the operating table.

3.2 PURPOSE

The purpose of this standard is to guide professional nurses to understand the importance of the preparation of the operating

table, proper surgical positioning and the complications of improper positioning of patients on the operating table.

3.3 DEFINITIONS

Position is the “...way in which something is arranged”. Position can also be defined as the “...way in which somebody is sitting or standing” (Hornby, 2005, p.1129).

3.4 STANDARD

3.4.1 Standard statement

The nursing care of patients regarding positioning of patients for surgery is to safeguard patients from severe and permanent injury. The position of patients should meet the surgeon’s need for accessibility to the body part to be treated.

3.4.2 Structure standard

Institutions should provide policies, procedures, and maintenance schedules to ensure effective functioning of all operating tables for all surgical disciplines and specific operative positions for specific operative procedures and the risks involved.

3.4.3 Process standard

The activities of professional nurses should reflect knowledge of the different operative positions, different operating tables, and their specific fittings and should be able to change positions of the table without any risk to patients and personnel.

3.4.4 Outcome standard

The outcome identified is that patients be comfortable, free from operative positioning related injury and regain normal physical mobility postoperatively (Rothrock, 2003, pp.170-171).

3.5 OBJECTIVES

Professional nurses should be able to:

- Prepare the operating table completely, correctly and safely for specific operative procedures
- Demonstrate the procedure of transfer of patients from patients trolley to the operating table
- Demonstrate the correct position of patients for specific surgical procedures without any operative positioning related injuries to patients.

3.6 PROCEDURE

Critical points to remember

- There are numerous specific designed operating tables with highly specialized additional equipment for obtaining an effective surgical position
- The operative position is determined by the operative procedure, incision line and operative field and the preference of the surgeon with accompanying changes as

needed for the anaesthetist

- The supervising professional nursing personnel must be helpful with the positioning
- The scrub nurse is responsible for checking the patients' position visually before surgical skin preparation and sterile draping.
- Loss of muscular tension, consciousness, and total a-tonic status due to anaesthesia, increases the danger of injury during manipulation to obtain the position.

NB. The anaesthetist must grant permission before patients is placed in the required position.

Factors to take into consideration

- Position of operative field.
- Type of anaesthesia to be administered.
- Accompanying injuries e.g. fractures.
- Physical abnormality e.g. kyphosis, stiff joints.
- Sex, age, length, and mass of patients.

Requirements for a good position

- Ensure maximum safety of patients
- Make provision for efficient breathing
- Ensure undisturbed blood circulation
- Prevent pressure on arteries – ischaemia and necrosis of tissue develops as a result of disturbed arterial blood supply.
- Prevent disturbed venous draining and thus thrombosis, embolism as a result of venous stasis.
- Prevent stretching, pressure or damage of nerves which can lead to paralysis or injuries
- Bronchial plexus- abduction of arm not more than 80%
- Over extension of the neck causes stretching of nerves in this plexus

- Nervus radialis (before lateral epicondyle of the Humerus)
- Nervus Vulnaris (in groove behind medial epicondyle)
- Above-mentioned can be squeezed when elbow hangs at the side of the table or when the whole arm falls from the table and stays hanging
- Nervus Ischiadicus (runs over posterior aspect of ilium) - Lithotomy position and in very thin patient
- Nervus Saphena (runs through popliteal fossa and then along medial aspect of the lower leg)
- Nervus Peroneal (runs from the apex of the popliteal fossa over the lateral head of musculus gastrocnemius to the posterior aspect of the fibula which is situated laterally)
- Lithotomy position – poles for legs can cause pressure
- Nervus facialis (runs on the side of the face) – cranial position and turn of head from one side to another
- Prevent pressure on eyeball and damage of cornea. Eyes must be covered with tulle grass or just be plainly covered. **NB. Cranial position and especially prone positions**
- Prevent stretching of ligaments, especially feet - support the feet to prevent dropped feet
- Take care that position, when obtained, stays stable - use belts, supports and sandbags
- Support the fat patients' arm and thighs, the long patients' feet
- Never force a stiff joint. Joint must be carefully bent and supported. **NB.** Elderly patients
- Any part of patients' body must never touch metal. Patients may obtain diathermy burns when a surgical diathermy is used

Precautionary measures

- A patient may never be left alone on the operating table

- The table/pedestal/transporter must be locked when patients is transferred from and to the operating table
- If patients has a fracture that has not been splinted, a doctor must be consulted before patients is shifted or move
- When patients is transported to and from the operating table, make sure that his/her arm does not knock against the frame of the operating table, trolley or any other equipment that can harm patients
- While patients are placed in position, the anaesthetist is responsible for the anaesthetic tubes and the position of the head
- The anaesthetic screen must not press against patients' arm
- When a patient lies on his/her back, the legs must not be crossed
- When a patients lies on his/her back, a foot cushion must be placed under his/her heels to prevent pressure
- Take care that any part of the patients' body does not touch metal anywhere on the table
- Ensure that the inactive electrode (patient plate) of the diathermy machine is in the correct position
- Two people should never lift a heavy patient alone – patients may fall or the personnel may sustain back injuries
- When position is changed, patients must never be exposed unnecessarily

Requirements for the operating table

- Must be of stainless steel with a non-static rubber mattress
- The mattress is made in such a manner that patients cannot slip off, it must also be thick enough to prevent pressure sores
- The table is composed of different parts:
 - Headrest
 - Top part
 - Kidney rest

- Bottom part
- Leg rest

Accessories for positioning

- Special headrest (neurology)
- Shoulder supports
- Arm supports and arm tables (for hand and arm surgery)
- Arm support (for anaesthesia)
- Foot support
- Lithotomy poles
- Anaesthetic screen
- Back supports
- Tube supports
- Hip supports
- Leather belts/girdles
- Staples in which parts are fastened

Linen accessories

- Warm blankets
- Pillows
- Sponge pieces of different sizes
- Sandbags
- Thick sponge mattresses for prolonged procedures

Preparations for operative positioning

- Check the effectiveness and the working condition of the table
- Ensure that you know how to obtain the specific position.
- Prepare all the requirements to get patients into position
- Identify and check operative site
- Obtain the anaesthetist's permission

OPERATIVE POSITIONS

Dorsal or supine

It is used for all operations on the anterior level of the body, e.g. laparotomy, appendectomy.

Actions	Rationale/Explanation
➤ Patient lies on his/her back.	
➤ Arm for anaesthesia on arm board not more than 80° in abduction	To prevent brachial plexus nerve injury
➤ The arm must be strapped to the arms board	To prevent the arm from falling off the arm board.
➤ Other arm next to the side of the body with hand in slight flexion supported by arm support	To prevent the arm from falling off the operating table
➤ Patients' hand must never be under any body part	To prevent injury to the peripheral blood vessels and nerves
➤	
➤ Head on a small pillow	To prevent the head from turning and causing airway obstruction
➤ Legs next to one another, the inside of the knees must not press against one another and the feet must not be crossed	To prevent pressure
➤ Ensure that the eyes are closed – tulle grass, plaster, or chloromycetin applicaps.	To prevent dryness of the cornea
➤ Foot support (foot cushion)	
	To elevate the legs and prevent pressure on

<ul style="list-style-type: none"> ➤ The head, neck, spine and lower extremities must be in one line 	<p>the calves (deep venous thromboses)</p> <p>To prevent post-operative muscular pain</p>
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Modification of dorsal positions

Surgery on neck, thyroidectomy, block dissection

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Supine with a sandbag under the shoulders to ensure extension of the neck 	<p>To provide access to the operative area</p>
<ul style="list-style-type: none"> ➤ Horseshoe rubber ring under head 	<p>To protect ears and nerves of the head and face</p>

Modification of dorsal positions

Mastectomy

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Supine with one arm on a arm board and the other on the side of patients' body as for the dorsal position 	<p>To prevent brachial plexus nerve injury</p>
<ul style="list-style-type: none"> ➤ Or with both arm out on arm supports 	<p>To provide better access to the operative area</p>
<ul style="list-style-type: none"> ➤ Or the arm on the affected side is covered with cotton wool and tied to the anaesthetic screen. 	<p>To keep the arm out of the way if the surgeon needs to excise the nodes in the axilla</p>

Modification of dorsal positions

Cholecystectomy and cholangiogram

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Patient lies supine with modification 	
<ul style="list-style-type: none"> ➤ Special cholangiogram table-tap is preferable 	<p>To load the x-ray film into the x-ray tray under the table</p>

➤ Supine with sandbag under liver area – or table is turned left	To expose the liver area for better access to the galbladder
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Modification of dorsal positions

Surgery on ear

Actions	Rationale/Explanation
➤ Patient lies supine	
➤ Head turned to the side	For access to the affected ear

Trendelenburg position

NB. Quick change to this position in detrimental to patients.

Used for operations on the pelvis, so that the abdominal organs move in the direction of the diaphragm and stay out of the field of surgery

Actions	Rationale/Explanation
➤ Patient lies supine	
➤ Pay attention that patients does not develop breathing problems	Because the abdominal organs are pressing against the diaphragm the lungs cannot expand for proper breathing
➤ Patients must be placed on a non-slip mattress e.g. A Hewer Mattress	To prevent patients from slipping off and fall on his/her head
➤ Patients is in the supine position and the head of the table is turned lower than the feet, plus minus 45%	To empty the abdominal cavity for better access to the pelvic organs
➤ If necessary the table can be lowered at the knee, shoulder rests placed in position (It is dangerous)	To prevent patients from slipping off the operating table
➤ Leather belts placed around the legs	To prevent patients from slipping from the operating table

Reversed Trendelenburg position

Sometimes used for a thyroidectomy to decrease the blood supply to the operative area

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Patient is lying supine. ➤ Feet support is placed in position. ➤ The table is turned so that patient's head is higher than his feet. 	To prevent patients from slipping down the table

Lithotomy position

Use for bladder examinations, perineum region, genitalia and rectal operations

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Ensure that the pubis is in line with the center of the operating table ➤ Patients is placed under anaesthesia in the supine position ➤ The lithotomy poles or leg supports are securely attached to the table both poles at equal height and the length to according to patient's legs ➤ Patient's legs are lifted simultaneously, carefully flexed at the knees, hold the foot in one hand and the lower leg in the other and placed the foot in the supports ➤ The stirrup must not be too small ➤ Patient's legs must not press against the metal of the poles. 	<p>So that there is no need to pull patients down after anaesthesia</p> <p>For comfort for patients</p> <p>To prevent hip joint dislocation, pressure at the knees and lumbar region of the spine</p> <p>To prevent hip dislocation and/or muscle strain</p> <p>To ensure that the foot does not slip out of the stirrup</p> <p>To prevent injury from pressure on the peroneal nerve (lower leg) and injury to the femoral and obturator nerve (inner</p>

➤ The legs must not be opened to wide	thigh)
➤ One arm of patients is put on an arm board not more than 80% in abduction	To prevent the possibility of back injuries To prevent brachial plexus injury
➤ The other arm is folded over patient's chest, preferably tied with elastic sticking plaster or leather strap.	To prevent the arm from falling. If the hand is next to patient's body there is a possibility that the fingers may be crashed with the lower end of the table is elevated at the end of the operation
➤ It is important that both legs are supported at the knee joint and lowered simultaneously at the end of the procedure.	To prevent hip dislocation and muscle strain

Lateral position

Use for thoracic, renal and some orthopedic operations on the hip.

Actions	Rationale/Explanation
➤ In the lateral position patients lies on one side	
➤ Patient is placed under anaesthetic in the supine position.	
➤ When permission is obtained from the anaesthetist, patient is placed in the required position.	
➤ Three to four (3 – 4) people are necessary to turn patients of his/her side	To prevent patients from falling off the table, injury to the arms, legs and body
➤ The anaesthetist must guard the head, neck and airway	To prevent airway obstruction when the neck is turned or the endotracheal tube can be pulled out be accident

<ul style="list-style-type: none"> ➤ The back of patients must be against the edge of the operating table. ➤ The bottom knee is bent ➤ The top leg is straight ➤ A sandbag is placed at the foot-side ➤ The pillow is placed between the legs ➤ A back support is screwed to the operating table behind patients back ➤ A round abdomen support or sandbag is placed anterior ➤ The top arm is strapped in the arm rest ➤ The bottom arm can lie straight next to patients or be bent so that the hand rests on the pillow next to patient's head ➤ Place a leather band and broad white plaster over patient's hips to stabilize the position. 	<p>To provided better access to the operating area</p> <p>It helps to stabilize patients</p> <p>To increase the operating area in the lumbar region</p> <p>To keep the leg in position</p> <p>To prevent pressure</p> <p>To keep patient's body in one position and prevent patients from falling off the table</p> <p>To keep patient's body in one position</p> <p>To keep the alignment of the thorax and provide access to the thoracic area near the axilla</p> <p>Have a normal as possible position without injury</p> <p>To prevent patients from falling off the table and to keep the position</p>
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Prone position

Use for laminectomy, pilonidal sinus, operations to the cerebellum, or any operation to the posterior level of the body.

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Patient is placed under anaesthetic in the supine position ➤ 3 to 4 people first turn patients onto his side, keep arm straight next to the sides, support head and legs then over onto stomach ➤ When patients lies on his stomach, a support is placed under the pelvis and pillow or support under the chest ➤ A pillow is paced under the ankles ➤ The arms are comfortably placed above the head or on arm supports or next to patient ➤ Sandbag is placed below shoulders to lift chest from table. ➤ The head is placed in a special horse shoe-shaped headrest 	<p>To prevent injuries to the legs, arms and body and airway obstruction</p> <p>To ensures breathing space (i.e. diaphragm moves)</p> <p>To prevent the toes from pressing against the operating table</p> <p>To provide access for the anaesthetist to the intravenous site and comfort for patient's arms to prevent post-operative muscle pain</p> <p>To promote breathing</p> <p>To prevent pressure on the eyes and ears and make sure that the anaesthetic tubes are free.</p>

Cranial position

Operation on the medulla – seated position.

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ When patient is placed on the table, make sure that he lies over the center of the table ➤ Is placed under anaesthesia in a supine position. 	<p>To make it easy to put patients in a sitting position</p>

➤ The top part of the operating table is turned upwards	
➤ A special head support, which comes anterior against the head, is placed in position	To support patient's neck and ensure stability of the position
➤ The arms are placed on a pillow over the abdomen or one arm is on the arm support	To ensure comfort, prevent injury and accessibility for the anaesthetist to the intravenous site
➤ The table is bent under the knees	To ensure a comfortable sitting position and to prevent muscle strain
➤ A pedestal is placed in position under the feet	To reduce pressure on the popliteal areas of the legs

Orthopedic operations

For some hip operations traction is necessary and then the Kifa (spica) table is used

Actions	Rationale/Explanation
➤ Patient is supine on a spica table and the feet are tied to special pedestals	So that traction on the leg can be carried out
➤ The leg on the affected side in traction and rotated medial	For access to the operating site for easy access for the surgeon
➤ The rod between the legs must be well padded	To prevent pressure on the genitalia
➤ One arm on the arm board and the other arm secured on the chest	To prevent injury to the arms and accessibility for the anaesthetist to the intravenous site

Kraske position (Jack Knife)

Is sometimes used for removing pilonidal sinus (this position is rarely used)

Actions	Rationale/Explanation
➤ Patient is placed under anaesthesia in	

a supine position.	
➤ Patients is placed on his/her stomach with the knees on his/her chest	To expose the anal cleft
➤ The head can be straight on a head ring or turned side ways	For stability of the head, to secure the endo-tracheal tube and protect the eyes and ears
➤ Arms are folded above the head	Comfortable position and prevent muscle strain

4. PREPARATION FOR AND EXECUTION OF SURGICAL SCRUB, STERILE GOWNING AND GLOVING

4.1 INTRODUCTION

Skin of the hands and forearms of the surgical team is a major source of microbial contamination in surgery (Rothrock, 2003, p.137). Therefore the skin of the hands and forearms must be washed before a sterile gown and gloves are donned. However, the skin can never be scrubbed sterile, but can only be surgically clean.

Micro-biological research proofed that scrubbing of the hand and forearms with a brush causes more damage to the skin than it cleans the skin. The friction of the brush damages the epidermis and opens the pores that again bring deep flora to the surface.

4.2 PURPOSE

The purpose of this standard is to guide the operating room professional nurse to understand the importance of surgical scrub, sterile gowning and sterile gloving and why they should adhere to the aseptic technique principle.

4.3 DEFINITIONS

Asepsis

Asepsis refers to the “absence of infectious organisms” and is directed at “cleanliness and the elimination of all infectious agents” (Rothrock, 2003, p.97).

Aseptic technique

Aseptic technique can be defined as “aseptic practices” by which contamination with microorganisms is prevented (Spry, 1997, p.83).

4.4 STANDARD

4.4.1 Standard statement

Patients can expect to receive care in an aseptic environment according to institutional policies and procedure. Infection control practices involve both personal and administrative measures. Personal measures include the application of aseptic principles. Administrative measures include provision of adequate physical facilities, appropriate surgical supplies and operational present-day infection-control (Rothrock, 2003, p.131).

Professional nurses are responsible for creating and maintaining a sterile field and for monitoring aseptic practice of all members of the surgical team. Appropriate implementation of this responsibility requires an understanding of infection sources, transmission modes and the methods to reduce or eliminate micro-organisms in the surgical setting.

4.4.2 Structure standard

Institutional policies and procedures must be in line with the current aseptic practices and techniques regarding scrubbing, gowning and gloving (Rothrock, 2003, p.131). Professional nurses must have in-depth knowledge of principles and practices associated with attire, aseptic technique, surgical scrubbing, gowning, and gloving. Each department must develop, implement, and evaluate structured principles regarding the practices of scrubbing, gowning, and gloving. The institution must also provide the

physical structure for these practices for the operating room personnel to be able to adhere to these principles.

4.4.3 Process standard

Nursing actions must reflect knowledge of the surgical scrub method and the competent execution of the scrubbing method. Don a sterile gown without contaminating the outside of the gown and complete the procedure of sterile gloving without contamination of the gown and/or outside of the sterile gloves.

4.4.4 Outcome standard

The desired outcome identified for a patient who undergoes surgery is freedom from wound infection following the operative procedure. Prevention of wound infection due to correct surgical scrub, sterile gowning, and sterile gloving.

4.5 OBJECTIVES

Professional nurses should be able to:

- Demonstrate the correct method of surgical scrubbing of the hands and arms
- Demonstrate the correct method of sterile gowning and gloving

4.6 PROCEDURE

Critical points to remember

Classification for micro-organisms (skin flora)

Superficial skin flora (transient)

- The amount and type of this organism depends on the surrounds, the type of work and the person's habits concerning his personal hygiene
- It is a contamination of a passing nature

Deep skin flora (resident)

- There are normal commercial micro-organisms present in the hair follicles and sweat-glands e.g. staphylococci
- It is impossible to remove these organisms with a surgical scrub procedure
- The skin surface is virtually free of the organisms after the usual scrub, but as soon as the person sweats, the organisms come to the surface again

Scrubbing soap

- **Pure soap** removes all the organisms that are present on the skin surface and does not cause any allergies that can lead to a skin infection. Soap is not recommended because it is not very effective concerning constricting the growth of deep skin flora
- **Hibitane 0,5% in alcohol 70%** destroys deep flora to a degree. It penetrates the sweat-pores and hair follicles and thus works longer
- **PhisoHex** is a phenol – derivative together with phisoderm that is a soapy preparation. It is an antiseptic preparation that leaves the minimum organisms behind after a scrub procedure. The substance is absorbed by the skin and forms a layer that decreases the micro-organisms that come to the surface. The effectiveness is dependent on regular use; if other cleaning agents are used in the meantime, the layer (above mentioned) is destroyed. It is non-toxic, has the same **pH as the skin and dissolves oil**

- **Hibiscrub** is highly effective because of its bacteriostatic status. The substance is generally used in operating room units
- **Povidine** is also bacteriostatic and therefore highly effective for use in the operating room units

Preparation for surgical scrub

Actions	Rationale/Explanation
➤ Check that all requirements are ready	If you discontinue the process of scrubbing to find something, you have to start the scrubbing process from the beginning – time wasting
➤ Ensure that the cap and mask fit comfortably, and worn correctly	The cap will prevent the hair from falling into the wound that is a source of infection. The mask forms a barrier for micro-organisms to enter the wound when talking, coughing or sneezing
➤ Nails must be short and clean – free from oil and nail polish	Dirt can be found under long nails. Long nails increase the risk of glove tear. Nail polish chip off and can fall into the wound and cause infection
➤ No rings must be worn	Micro-organisms and dirt can be found in the grooves of the rings that can be a source of wound infection
➤ A plastic apron is donned	To keep clothes dry

<ul style="list-style-type: none"> ➤ Set water to a desired temperature ➤ Check the time. The length of the time for the surgical scrub procedure is 5 minutes 	
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Surgical scrub method

Actions	Rationale/Explanation
➤ The hands must at all times be held higher than the elbows	To prevent contamination of the arms and hands by water running back from elbows
➤ The whole scrub procedures take place under running water	So that the dirty water can run away
➤ Wet hands and forearms well	It is easy for the soap to lather
➤ Take soap or lotion and wash hands for one (1) minute - rinse	Rinsing is to wash away the dirt
➤ Take soap – wash hands and arms to two (2) fingers above elbow for one (1) minute – rinse or leave soap on arms and rinse nails only	If the water runs down from the elbow it is at least clean
➤ Remove the nail-brush from the sterile brush holder, wet, spray lotion on and brush the nails, alternatively and rinse brush and nails in between each hand for one (1) minute	
➤ Let the brush fall into a holder without contaminating the hands	
➤ Take soap and wash hands to pulse for two (2) minutes	
➤ Rinse thoroughly – hands always first and	To prevent water to run down to

<p>then forearms up to the elbows. The hands must be the highest point</p> <ul style="list-style-type: none"> ➤ Some surgeons/hospitals prefer that the hands and arms be rinsed with Hibitane 0,5% in 70% alcohol after scrubbing 	the hands
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Drying of hands

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Circulating nurse removes the plastic apron or wipe the water off the apron 	If the sterile gown is don over the wet apron then the gown will become wet and be regarded as un-sterile
<ul style="list-style-type: none"> ➤ Scrub nurse take the sterile paper towels from the gown pocket, one in each hand or one by one – be careful that water does not drip on the pack 	Water dripping on the pack makes the pack un-sterile
<ul style="list-style-type: none"> ➤ Keep the hands higher than the elbows and away from the body 	To prevent contamination of the hands on cloths
<ul style="list-style-type: none"> ➤ Dry one hand: fingers, hands, arm by means of a pressing and rotary movement 	Rubbing of the skin will stimulate micro-organisms to grow and be active
<ul style="list-style-type: none"> ➤ Drop towel in bucket 	
<ul style="list-style-type: none"> ➤ Repeat for other hand 	

Gowning of sterile gown

Actions	Rationale/Explanation
	The sterile gown must be worn to enable the person to work in the sterile operative area.

<ul style="list-style-type: none"> ➤ Lift the folded gown in both hands, stand away from the trolley ➤ Stand far enough from all sterile articles ➤ Never touch the outside of the gown with the bare hand ➤ When in doubt to whether the hands or gown are contaminated, assume that they are and wash the hands again and take another sterile gown ➤ Hold the gown at the neckband with both hands, allow the rest of the gown to drop – never shake ➤ Slip the hands into the armholes simultaneously and hold the hands and arms straight in front of your face above head ➤ The circulating nurse places her hands on the inside of the sleeves – not deeper than the upper arm – and pull the cuffs of the gown over the scrubbed person's hands ➤ The sterile packed gloves are now opened and given to the scrubbed person ➤ While the gloves are put on (procedure described later) the circulating nurse ties all the ties behind the back <p>NB s/he may only touch the ties</p>	<p>So that the gown is not contaminated when touching the unsterile areas of the trolley</p> <p>To prevent the possibility of contamination the gown</p> <p>The hands are just surgically clean and not sterile</p> <p>When you shake air is stirred and micro-organism can fall on sterile field</p> <p>When arms are sideways there is a possibility that sleeves can be contaminated by touching unsterile surfaces</p> <p>If the circulating nurse put her/his hands in too deep s/he may touch the arms of the scrub nurse</p> <p>Prevent contamination of the gown</p>
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Donning of sterile gloves

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ By no means may the gloves be handled with ungloved hands on the outside of the sterile gloves ➤ The glove envelope is folded open on the sterile gown trolley ➤ The first glove is picked up on the folded back part ➤ The hand with fingers against one another is placed in the glove – first 4 fingers then the thumb ➤ The folded back part must stay folded back ➤ From the top place the gloves hands 4 fingers in the folded back part of the remaining glove and pick it up ➤ The 4 fingers and the thumb of the bare hand are held out and the folded part is pulled over the hand ➤ Put folded part of gloves over thumb pull over gown sleeve at pulse – both sides ➤ A new pair of gloves must be put on if the gloves are perforated or contaminated before or during the operation 	<p>To prevent contamination of the gloves because the hands are only surgically clean and the gloves are sterile</p> <p>So that the part that will be flipped over the gown cuff stay sterile</p> <p>Sterile gloved hand on the outside sterile part of the glove</p>

When dressed completely in sterile gown and gloves

- Take care that no un-sterile surfaces is touched
- Move with as little as possible disturbance of air
- Immediately move to the aseptic area, e.g. operating room, setting room or sterile trolleys
- Don't fold your arms. The areas under your arms are considered as not sterile
- Gloved hands must be at chest level
- Never touch the gown with your gloved hands

After conclusion of surgical procedure

- Circulating nurse loosens the strings of the gown
- Scrub nurse pull the gown from the shoulder seam over the arm
- Fold outside of gown to inside and place in linen container

Gloves

- Take off carefully and place in container for disposable of articles; gloves may not lie around; must be placed directly in container. Spray Hibitane 0,5% alcohol 70% on hands. Dry your hands.

5. PREPARATION FOR AND SETTING OF STERILE TROLLEYS, (INSTRUMENTS, DRAPES AND STERILE SUPPLIES)**5.1 INTRODUCTION**

Setting of sterile trolleys, instruments, drapes and sterile supplies form part of a group of procedures to prevent wound contamination with micro-organisms. Professional nurses should contain and control the principle of infection control through execution of knowledge and competent professional performance of principles (Fairchild, 1996, p.145).

5.2 PURPOSE

The purpose of this standard is to guide professional nurses to protect the patient from secondary infection by setting up and maintaining the sterile field during a surgical intervention.

5.3 DEFINITIONS

Setting of sterile trolleys, instruments, drapes and sterile supplies refer to the method in which the professional nurse prepare, evaluate and handle the sterile drapes, set instruments in the instrument tray and mayo-table and setting the work trolley while preparing the sterile trolleys for the surgical procedure.

5.4 STANDARD

5.4.1 Standard statement

Professional nurses should adhere to the principles regarding the sterile field by executing the correct preparation methods of the sterile field to prevent secondary infection to the patient.

5.4.2 Structure standard

Institutions and departments should provide policies and procedures to guide the operating room personnel to maintain a sterile environment during the process of preparing the sterile field for a surgical intervention.

5.4.3 Process standard

The activities of professional nurses must reflect the principles of prevention of infection regarding the setting of sterile trolleys.

5.4.4 Outcome standard

The desired outcomes identified is that professional nurses prepare and set the sterile trolleys, drapes and instruments in such a manner that sterility of the sterile environment and staff is maintained.

5.5 OBJECTIVES

Professional nurses should be able to:

- **Evaluate the outer cover of the packs to ensure sterility of the packs**
- **Demonstrate the correct and competent handling of drapes while covering the mayo-table and setting of instruments**
- **Demonstrate surgical consciousness by covering the sterile surfaces completely**

- **Demonstrate surgical consciousness by covering her/his hands to prevent contaminations of the hands**

5.6 PROCEDURE

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ All packs, instruments and sterile supplies needed prepared and ready for use 	<p>To prevent time wasting during surgery</p>
<ul style="list-style-type: none"> ➤ Clean all surfaces of the trolleys with an aseptic solution 	<p>To remove dirt and destroy micro-organisms</p>
<ul style="list-style-type: none"> ➤ The outer cover of the pack must be dry and intact 	<p>If the outer cover of the pack is wet or broken then the pack is deemed un-sterile</p>
<ul style="list-style-type: none"> ➤ The autoclave tape colour on the outer pack will give an indication if the pack is sterile 	<p>If the colour did not change as indicated, then the pack is un-sterile</p>
<ul style="list-style-type: none"> ➤ The scrub nurse must open the first inner fold towards her/him 	<p>To protect the front of the sterile gown</p>
<ul style="list-style-type: none"> ➤ The scrub nurse must fold the drapes of the pack over her/his hands 	<p>To prevent the hands from contamination</p>
<ul style="list-style-type: none"> ➤ All surfaces of the trolleys must be covered 	<p>To prevent contamination of sterile instruments and supplies</p>
<ul style="list-style-type: none"> ➤ Shift trolleys towards each other 	<p>To prevent excessive movement</p>
<ul style="list-style-type: none"> ➤ The mayo-table top and leg must be covered completely without contaminating the cover 	<p>To ensure a sterile surface where the instruments must be placed. The mayo-table leg is placed against the operating table and that area is also part of the sterile field</p>

6. PREPARATION FOR AND EXECUTION OF SWAB MANAGEMENT DURING AN OPERATIVE PROCEDURE

6.1 INTRODUCTION

In Namibia, professional nurses are legally responsible for checking swabs, instruments, and needles during a surgical procedure. In the instance of a swab being retained unintentionally in a body cavity of a patient, professional nurses can be legally prosecuted. If the court decided that s/he was negligent, s/he will be found guilty. The Namibia Nursing Council disciplinary committee will prosecute her/him, and act in accordance to the Act on Nursing. Depending on the finding, she can be struck off the Namibia Nursing Council register, be suspended, pay a penalty, or receive a warning (“Government notices No. 10”, 1999, p.11).

In the case of professional nurses practicing under the authorization of the Ministry of Health and social Services (MOHSS) the disciplinary community will act against them where there is evidence that the professional nurse omit to execute the swab, instrument, and needle count with a second person.

In a superficial cavity or in the instance of surgery where a swab cannot easily be forgotten, the professional nurse (scrub nurse) is still held responsible for checking, even though a formal swab count has not taken place.

Two persons who are both not professional nurses may not undertake a swab count, and the name of the professional nurse must appear on the role of the Namibia Nursing Council.

6.2 PURPOSE

The purpose of this standard is to guide professional nurses to understand the process of intra-operative swab management and the medical legal risks thereof.

6.3 DEFINITIONS

Swab count refers to the process of physically examine and count each swab separately, each type of swab separately before skin incision, during surgery and before closure of the wound.

6.4 STANDARD

6.4.1 Standard statement

Swab count should be done during all surgical procedures where there is a possibility that a swab can unintentionally be retained as a foreign object in a body cavity of a patient after surgery.

6.4.2 Structure standard

Operating rooms should have written policies and procedures regarding the principles of pre- and intra-operative swab management (Meeker & Rothrock, 1999, p.43). The support system of the institution should provide all the needed swabs in acquired amounts for specified surgical interventions done in that institution.

6.4.3 Process standard

The activities by professional nurses should reflect the planning for swabs needed the implementation of the process of swab counting throughout the surgical procedure and the evaluation of the process.

6.4.4 Outcome standard

The outcome identified is that the patient be free of injuries related to the use of swabs during a surgical intervention.

6.5 OBJECTIVES

Professional nurses should be able to:

- Demonstrate knowledge regarding the type of swabs needed for specific surgical procedures
- Demonstrate the process of intra-operative swab counting correctly and competently

6.6 PROCEDURE

Significant information

Classification of swabs

- All swabs are five (5) in a pack and guarded with a röntgen shade bands, threads or dots for easy identification on x-ray if a swab is unintended retained in the human body
- Large taped swabs
- Large dissecting swabs are raytec swabs folded on a swab holder if used.
- Tonsil swabs
- Small dissecting swabs on a kocher clamp for blunt dissection
- Patties are packed in bundles of ten (10) for use in neuro- and orthopaedic surgery

(laminectomy)

- Eye swabs are sponges on plastic sticks
- Anaesthesia swabs are green and are usually used unsterile
- Skin preparation swabs are blue, sterile packed (not counted) except for cleaning of the vagina

When must formal swab count take place?

- During any surgical procedure where a high risk with regard to retained swabs, instruments and needles exists, e.g. surgery in any of the body cavities and major muscles:
 - Stomach/abdominal cavity
 - Mouth/throat cavity
 - Pelvic cavity
 - Ear-farinks
 - Nose-farinks
 - Laringo-farinks
 - Vaginal canal
 - Hip surgery
 - E.g. Mclaughlin pin and plate
 - Moore's prosthesis
 - Muller or Charnley – hip arthroplastic (hip replacement)
 - Laminectomy and joint-procedure

Use of swabs

- Removal of blood to keep the field of surgery visible
- Packing away of viscera for a specific surgical procedure
- Blunt dissection/dissection - on Kocher (small dissecting swab) and swab holder (large dissecting swab)
- Protection of organs while retractors are in use

Swabs counting method

- According to a denominator – five (5)
- According to the type of swabs that vary in size and thickness
- According to the stereotype pattern:
 - Before swabs are sterilized, each separate bundle is checked by operating room professional nurse and preferably a second person
 - Requirements are:
 - No loose threads or broken parts
 - Presence of the röntgen shade band, thread or dot
 - Folded according to a pattern
 - In bundles of five (5) of the same swabs
 - Each bundle must be tied with a strong elastic band/or ribbon
 - Persons responsible for the packing must sign a control-slip

Important points to take into consideration

- Swabs are never removed from a theatre during an operation
- A swab is never used for another purpose, such as the wiping of an eyebrow or dusting or cover soaked instruments
- New bundles of swabs are not placed in the bowl with already counted swabs before it is checked and counted. It is placed on a separate part of the table to prevent any mistake, as a result of an incorrect bundle or a bundle which comes loose
- The operating room professional nurse must make sure that the circulating nurse record swabs correctly on the swab board
- Loose swabs are never taken out of the operating room if it has been counted
- Counted swabs are only found on the sterile field, on the swab rack or dirty in the swab bucket for discarded swabs
- At the end of the operation the clean unused swabs are placed in a container to be burnt

- A swab is never drawn from a bundle, e.g. at the end of the operation to wipe the patient. The whole bundle must be opened and those not used must also be discarded
- Large taped swabs may not be used before a major surgical procedure for pre-operative procedures e.g. cleaning of patient's abdomen, catheterization, sigmoidoscopy. If it has to be done, the swab must come from the checked bundles and be handed over to the circulating nurse who counted swabs with the operation room professional nurse (scrub nurse). The swab must then be placed on the swab rack to be counted with the other swabs
- Swab buckets must be checked before each operation for swabs which possibly stayed behind after a previous operation
- Swabs are not placed in the bucket direct from the rack. If the nurse has to perform another tasks before the swabs are in the bucket as mentioned above, she must hang up the swabs as soon as she has completed the task from the kidney dish and start the counting procedure from the beginning
- Umbilical (arterial) cord, as well as Bulldog-clamps, are counted like swabs and recorded on the board.

Swab count before skin incision

Requirements:

- Two (2) people – 1 operating room professional nurse who assists for the specific operative procedure, plus one other (circulating nurse)
- Counting should preferably take place in the operating room
- Circulating nurse must be able to identify the different aspects of swab counting
- Each bundle must be counted separately
- After bundles of specific types have been counted, it is written on the board in the operating room by the circulating nurse
- Thereafter the following type is counted
- The operating room professional nurse (scrub nurse) must check the figures written on the board

- Swabs must be opened to ensure that two (2) are not stuck to one another
- Counted swabs must be put in a container

Swab counting during surgery

Requirements:

- The same two (2) people who counted before surgery must check swabs
- Swab containers – one closed and one open must be used for swabs
- Used swabs are opened by the operating room professional nurse and discarded into the open swab container. The circulating nurse hangs it on the swab rack with a forceps. Swabs are never handled with the hands
- Anaesthetist's attention is drawn to the swabs to evaluation blood loss.
- When five (5) swabs of the same type hang on the swab rack, they are counted aloud by the two (2) people who initially started the swab count. Each swab is preferably touched with the forceps by the circulating nurse
- Swabs must then be counted again while the circulating nurse put the swabs in a big kidney bowl one by one as they are counted
- Thereafter swabs are placed in the swab container with the lid
- A line is drawn through the 5 recorded on the board. This indicate that the bundle is out of circulation
- Continuous accurate control by the circulating nurse regarding the swab count is essential
- Each additional bundle of swabs needed during the operative procedure, must be counted separately by both people responsible for the swabs
- A bundle with the wrong amount e.g. 4 or 6 must be removed from the theatre.

Swab count during closure of the wound

Requirements:

- As few swabs as possible must circulate at this stage
- All the circulating swabs must be checked before surgeon starts with suture e.g. peritoneum or first layer of a structure.

- Inform the surgeon so that the circulating nurse can hear it. The surgeon must acknowledge the count
- Circulating swabs are checked again before the closure of the sheath or second layer of a structure
- Inform the surgeon again and s/he must confirm
- Final swab count of circulating swabs is done before the skin is sutured. Surgeon informed again and s/he must confirm
- Swabs may only be removed from the swab rack after the final swab count was done and confirmed by the surgeon
- All three the swab counts must be clearly marked on the board with a tick above the amount of circulating swabs, e.g. 5 + 5.

Lost swabs

- As soon as a swab is missed the surgeon must be informed
- Check for swabs on the floor, under drapes, in the specimen jar, under the feet of the people standing around the operating table
- Inform the person in charge of the operating room
- All swabs are counted again thoroughly by the professional (scrub) nurse, circulating nurse and the person in charge of the operating room
- All swabs are placed in bundles of five (5), each type separately on a plastic bag on the floor and each bundle are counted carefully according to the amounts written on the swab board
- If the swab still has not been found, and the surgeon is not prepared to wait any longer, say it loud enough so that everyone present witness that the surgeon is now responsible for the swabs
- X-rays must be taken before the patient leaves the operating room
- If the swab is not found the professional nurse (scrub nurse) must write a statement and it is signed by herself, the surgeon and the circulating nurse
- Report goes to the Deputy Chief Nursing Services, Medical Superintendent and the copy is sent to Head Office to be filed.

- In the operation book and the register an asterisk (*) is made in red next to the patient's name
- If the swab, which has been noted as lost, is found in the patient at a later stage, the personnel cannot be accused of negligence
- If the professional (scrub nurse) nurse reports that the swab count is correct and a swab, instrument, or needle stays behind in a patient and is found at a later stage, it can result in a court case.

It is never mentioned in any patient's file that a swab has been lost.

7. PREPARATION FOR AND EXECUTION OF SURGICAL INSTRUMENT MANAGEMENT DURING AN OPERATIVE PROCEDURE

7.1 INTRODUCTION

Surgical instruments are the most important tools the surgeon uses during a surgical intervention (Fairchild, 1996, p.223). There are many surgical instruments with

variations in structure and design to meet a particular purpose with specific requirements. They are precision tools and merit respect in handling and care. Professional nurses are responsible for the use, care and maintenance of surgical instruments (Rothrock, 2003, p.205). Thus, it is expected of professional nurses to gain basic knowledge of how the instruments are manufactured, how to maintain and properly use all instruments to prolong their usefulness. Surgical instruments or appliances should function perfectly to prevent needless endangering a patient's life and increasing the operative time because of failure or malfunctioning of an instrument. Professional nurses working in the operating room (scrub nurse) are liable for the control (instrument count) of the surgical instrument during a surgical intervention.

7.2 PURPOSE

The purpose of this standard is to guide operating room personnel to understand the importance of evaluating instrument for cleanliness and function, handing instruments to the surgeon and handling surgical instruments to promote the art of surgery and prevent injuries to the patient related to the use of instruments during surgery.

7.3 DEFINITIONS

Surgical instruments can be defined as any item used for a surgical intervention.

7.4 STANDARD

7.4.1 Standard statement

Surgical instrument management requires professional knowledge and commitment to adhere to the instrument control policy and procedure.

7.4.2 Structure standard

Institutions should have policies guiding professional nurses regarding surgical instrument management. This information should include recommendation on when and how formal instrument count should be done and who the responsible parties are.

7.4.3 Process standard

The activities of professional nurses during planning, implementing and evaluation of surgical instrument management should reflect knowledge regarding the importance of surgical instrument management during a surgical intervention.

7.4.4 Outcome standard

The outcome identified is that professional nurses should have knowledge of formal instrument management as prescribed to ensure that the patient is free from injury related to extraneous objects after surgery (Spry, 1997, p.151). In this standard the extraneous object refers to surgical instruments.

7.5 OBJECTIVES

Professional nurses should be able to:

- Describe nursing responsibilities related to checking the instruments for cleanliness and function, caring for the instruments, handing instruments to others, and handling of surgical instruments.
- Describe the procedure for formal instrument count.

7.6 PROCEDURE

Instrument control

For an effective control programme, professional nurses should:

- Know the instrument inventory of the Ministry/Health Institution;
- The routine instruments needed for each type of operation;
- The use of each instrument;
- The individual surgeon's preferences;
- The correct use and handling of instruments;
- The method of preparation;
- Care of the instruments after surgery.

Handling and caring for instruments before skin incision

Actions	Rationale/Explanation
➤ Inspect each instrument before and after use;	To detect imperfection and determine cleanliness;
➤ Set aside damaged instruments and send for repair or replacement;	Proper use prolongs the life of an instrument. Fine
➤ Use instrument only for the purpose for which they are	clamps and deserting scissors can be forced out of

<p>designed;</p> <ul style="list-style-type: none"> ➤ Handle instruments gently at all times and avoid bunching, dropping and weighing them down under heavy pieces of equipment; ➤ All instruments must lie separated from one another in the instrument tray; ➤ Provide protection for cutting, lensed and fine delicate holding instruments that are unusually susceptible to damage by using specially designed racks and cases; ➤ Clean instruments meticulously and dry them before storage; 	<p>alignment, cracked or break if they are used on heavy tissue, gauze dressings, drapes or drainage tubing;</p> <p>To avoid bending and denting</p> <p>To avoid bending, denting, breaking of the tips of sharp instruments;</p> <p>Dry blood, tissue fluid and water may cause rust inside grooves of the instruments;</p> <p>Oil forms a bacterial protecting film that is difficult and time consuming to remove and it also</p>
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<ul style="list-style-type: none"> ➤ Keep oil away from instruments; 	<p>interferes with penetrating of steam during the sterilization process, except for silicone instrument spray that can be used for stiff or rusty instruments. The silicone must be removed before sterilization;</p> <p>To keep instruments in a</p>
<ul style="list-style-type: none"> ➤ Regular maintenance of instruments are important – sharpening of scissors; 	<p>good functioning condition;</p> <p>To spot chips, breaks, cracks or imperfections;</p>
<ul style="list-style-type: none"> ➤ Each instrument should be inspected before and after cleaning; 	<p>To provide good functioning during surgery;</p>
<ul style="list-style-type: none"> ➤ Forceps, clamps and other hinged instruments should be inspected for alignment of jaws and teeth and for stiffness; 	<p>To ensure the cut edges are not ragged, can cause tissue damage because of blunt scissors</p>
<ul style="list-style-type: none"> ➤ Edges of scissors should be tested for sharpness; 	<p>Promote smooth rust free function.</p>

<p>➤ All instruments should be lubricated periodically in instrument milk.</p>	
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Handling, caring and checking of instruments during surgery

Actions	Rationale/Explanation
<p>➤ The professional nurse (scrub nurse) who assist during an operative procedure is responsible for the instruments;</p> <p>➤ All instruments must be checked for cleanliness and function by the professional nurse (scrub nurse);</p> <p>➤ All instruments must be counted by the professional nurse (scrub nurse) together with the circulating nurse before skin incision;</p>	<p>A dirty instrument is a source of infection and a malfunctioning instrument may cause tissue damage and is time consuming;</p> <p>To estimate the amount of a certain type of instrument and what specific instrument is on the tray to prevent and instrument to be retained in a body cavity after surgery;</p>

<ul style="list-style-type: none"> ➤ Instruments must be arranged in an orderly manner on the mayo table; 	<p>To promote easy excess to instruments for time and instrument control;</p>
<ul style="list-style-type: none"> ➤ Do not overload the mayo table initially – add instruments and supplies as the operation progresses; 	<p>To facilitate quick handling checking and counting;</p>
<ul style="list-style-type: none"> ➤ Never leave instruments on the patient’s body especially sharp instruments e.g. scalpel handle with blade, scissors and needle holder with a needle; 	<p>It can injure the patient and the surgical team;</p>
<ul style="list-style-type: none"> ➤ Keep the active electrode diathermy tip away from the patient’s body; 	<p>To prevent diathermy burn;</p>
<ul style="list-style-type: none"> ➤ It is the responsibility of the scrub nurse to make sure that the surgeon and the assistant use the instruments correctly; 	<p>To prevent instrument damage;</p>
<ul style="list-style-type: none"> ➤ Under no circumstances should any instrument be removed from 	<p>For instrument control;</p> <p>To prevent cross infection;</p>

<p>the operating room during surgery;</p> <ul style="list-style-type: none"> ➤ Never touch the tip of an instrument during surgery; ➤ Do not throw the instrument in a heap at the end of the procedure, but clean them individually; ➤ A no-touch or hand-free technique should be used with sharps. ➤ Instrument count must be done before closure of the peritoneum or first layer of a structure 	<p>To prevent damage to instruments, blood from drying on the instruments and cause rust;</p> <p>To prevent injury due to sharp and needle prick during the procedure;</p> <p>To ensure that no instrument used is retained in a body cavity of a patient.</p>
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Care and cleaning of surgical instruments.

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ During use the instruments are kept clean by wiping and frequently rinsing in sterile water; ➤ Instruments are handled gently and individually or in small lots; ➤ Instruments are carefully, put into a basin, do not throw them; 	<p>Keep blood from drying that can cause infection;</p> <p>Prevent damage to instruments;</p> <p>Prevent breaking and bending of instruments;</p>

<p>➤ Lighter more delicate instruments are placed on top of heavy, less delicate instruments;</p>	<p>Delicate instruments can easily be damaged by the weight of heavy metal instruments;</p>
<p>➤ Following the operative procedure, instruments are promptly cleaned;</p>	<p>Prolonged exposure to blood and saline can cause corrosion and pitting of stainless steel;</p>
<p>➤ Instruments are washed in water and not saline;</p>	<p>To reduce the potential for spotting that is caused by alkaline mineral deposits;</p>
<p>➤ During cleaning all hinges and joints are opened;</p>	<p>To expose box locks and serrations where blood and debris may be concealed;</p>
<p>➤ All instruments with removable parts are disassembled for cleaning;</p>	<p>Because alkaline</p>
<p>➤ A neutral pH is recommended;</p>	<p>detergents can stain instruments and acid</p>
<p>➤ During manual washing, only soft brushes are used to clean</p>	<p>detergents can cause pitting;</p>
<p>brushes are used to clean</p>	<p>Steel wool, souring</p>

<p>serrations and joints;</p> <p>Only water-soluble lubricants are used;</p>	<p>powder and other abrasives are not used for cleaning;</p> <p>Oil based lubricants leave a residue that is not water-soluble and can compromise the sterilization process by preventing steam contact during the steam sterilization process.</p>
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8. PREPARATION FOR AND EXECUTION OF SURGICAL SUTURE MATERIAL AND SURGICAL NEEDLE MANAGEMENT DURING AN OPERATIVE PROCEDURE

8.1 INTRODUCTION

The aim of surgical wound suturing is to promote wound healing by primary intention (Rothrock, 2003, p.281). To promote primary wound healing professional nurses have to be proficient in the aseptic technique in the management of surgical

suture material and surgical needles. S/he also has the responsible to gain in-depth knowledge of the characteristics of surgical suture material and surgical needles.

8.2 PURPOSE

The purpose of this standard is to guide professional nurses to understand the characteristics of surgical material and surgical needles, the use thereof and their responsibilities related to surgical suture and needle management.

8.3 DEFINITIONS

A suture is a “thread, wire or other material used in the operation of stitching parts of the body together” (Fairchild, 1996, p.201). A suture also refers to “a strand of material used to ligate a blood vessel so as to occlude the lumen or sew tissue together” (Spry, 1997, p.214).

Atraumatic suture material can be defined as the surgical needle with the suture material attached to it. The needle and suture material forms a “continuous unit in which needle diameter and suture diameter are matched as closely as possible” (Spry, 1997, p.221).

8.4 STANDARD

8.4.1 Standard statement

The choice of suture material and needles, the management thereof should promote primary wound healing prevent infection and/or tissue damage and medical legal risks.

8.4.2 Structure standard

Institutional policy and procedure on management of surgical suture material and surgical needles must be up to date with the changing sciences and technology and available to all operating room personnel. The supporting system of an institution should make provision for the supply of any surgical suture material needed at any given time.

8.4.3 Process standard

The activities of the professional nurses should reflect knowledge of the process of manufacturing and characteristics of surgical suture material and surgical needles.

Management and care of suture material and surgical needles must be done competently and efficiently intra-operatively.

8.4.4 Outcome standard

The outcome identified is that there will be no patient injury related to the use of surgical suture material and surgical needles. Some tissue reaction is inevitable because surgical suture material is a foreign body.

8.5 OBJECTIVES

Professional nurses should be able to:

- Demonstrate knowledge of the characteristics of surgical suture material and surgical needles by means of choosing the most appropriate suture material and surgical needle for specific tissues
- Demonstrate knowledge of the preventative measures regarding infections related to surgical suture material
- Demonstrate the correct management of surgical suture material and surgical needles to prevent patient injury related to surgical suture material and surgical needles.

8.6 PROCEDURE

Significant information

Surgical needle characteristics

- Surgical needles are designed to carry suture material through tissue with minimum trauma
- They are precision made to prevent excessive bending and still provide some

flexibility without breaking

- Surgical needles may be characterized by their shape, type of point, size and how the suture material is attached
- Selection of the needle shape and size is determined by the size and properties of the suture material, nature of the surgery and the surgeon's preference
- The three basic parts of the needle are the point, shaft and eye

Needle points are tapered, cutting or blunt:

- Tapered needles are used in tissues such as peritoneum or intestines, that offer little resistance to the needle as it is passed through
- A taper point is designed so that the shaft gradually tapers to a sharp point so as to make the smallest possible hole in the tissue
- A cutting point needle is designed with a razor-sharp tip and is used for tissues that is difficult to penetrate such as skin or tendon
- Cutting needles have cutting edges that extend along the shaft
- Blunt tip needles have a rounded end and used in friable tissues such as the liver or kidney when neither piercing nor cutting is appropriate

The shaft of the needle may be:

- Straight or curved
- Curvatures are $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$ and $\frac{5}{8}$ circle

Needle attachment

- Suture may be attached to the needle during manufacturing or may be attached at the time of surgery
- Suture that is attached during manufacture is referred to as an atraumatic or swaged suture

- Needle and strand are a continuous unit in which needle diameter and suture diameter are matched as closely as possible
- Atraumatic suture eliminates the need for threading
- Use of an eye needle necessitates two strands of suture being pulled through tissue. This bulk causes tissue trauma and for this reason most surgeons prefer the eye-less atraumatic suture material.

Suture material packaging

- Sutures are supplied sterile from the manufacturer in a double envelope package
- The inner package contains the sterile suture
- The outer package is a see-through peel package designed to permit aseptic delivery of the suture to the sterile field
- Unused sutures should not be re-sterilized because packaging suture materials may not permit re-sterilization in hospital sterilizing processes without adversely affecting package or product integrity.

The type of suture material chosen

Depends on the following:

- The age and physical condition of the patient
- The type of tissue that must be sutured
- Surgeon's choice

Suture techniques

The primary suture line refers to those sutures that hold wound edges in approximation during healing by first intention. This line may have one continuous strand of suture material or a series of suture strands. A variety of techniques are used to place sutures in tissues.

The following techniques are the most commonly used:

- Interrupted suture – each stitch is taken and tied separately
- Continuous sutures – a series of stitches are taken with one strand of suture material tied only at the end of the suture line
- Purse-string suture – a continuous suture material is placed around a lumen and tightened, drawstring fashion, to close the lumen. This is used when inverting the stump of the appendix for example
- Traction suture – a traction suture may be used to retract a structure to the side of the operative field out of the way using a non-absorbable suture
- Subcutaneous suture – a continuous suture material is placed beneath the epithelial layer of the skin in short lateral stitches. The suture material comes through the upper layer of skin at each end on the incision only.

Classification of suture material**Absorbable suture material.**

- Absorbable suture material are assimilated by the body during the healing process and is considered temporary
- Absorbable suture material are made of material that is digested by body enzymes or broken down by water in tissue fluid
- Absorbable sutures material may be natural or synthetic

The most common **natural absorbable** suture material is plain or chromic gut and collagen that are digested by body enzymes through phagocytosis, which results in varying degrees of inflammatory reaction

- The rate of decline in tensile strength and absorption of surgical gut is influenced by the type of tissue in which it is used and the physical condition of the patients
- If the patient is anaemic, malnourished, protein deficient or has an infection, the rate of absorption and the loss of tensile strength may be accelerated
- **Plain suture** gut is natural suture material made from the submucosa of sheep intestines or serosa of beef intestines
- It has limited use and loses its tensile strength within 7-10 days

- It is mostly used to ligate superficial blood vessels and to suture subcutaneous tissue layers
- **Chromic gut** is treated with chromium salt solution
- Chromic gut retains its tensile strength for approximately 3 weeks and enable a wound to heal slowly while providing support
- **Collagen suture** is made from cattle tendon
- It is frequently supplied as a fine suture for eye surgery
- It loses tensile strength in approximately 3 weeks

Synthetic absorbable suture are made from synthetic polymers of lactic and glycolic acid.

- They are absorbed through hydrolysis that causes the polymer chain to break down
- Hydrolysis results in less tissue reaction than enzymatic suture absorption
- Synthetic suture is minimally affected by the presence of infection, the type of tissue or the patient's state of health
- Absorption time and loss of tensile strength are predictable
- Tensile strength varies from several weeks to 3 months and for some sutures a 25% tensile strength remain after 6 weeks
- Synthetic absorbable sutures material that provide the longest

wound support time are appropriate for patients who heal slowly such as the elderly, patients with acquired immune deficiency syndrome or those receiving radiation therapy

- Synthetic absorbable suture material are packet dry and should not be immersed in solutions because this can reduce tensile strength
- Examples of synthetic absorbable sutures material are Dexon, vicryl, PDS, maxon and monocryl.

Non-absorbable suture material

- Non-absorbable suture material is not assimilated and is considered permanent once it is placed in the body
- Non-absorbable suture material may be made of natural or synthetic material;

Natural non-absorbable suture material

- **Cotton** is a **natural non-absorbable** suture material made from cotton fibres that have been combed, aligned and twisted into a multifilament strand
- It is used very infrequently because it is somewhat reactive to tissue
- **Surgical silk** is a **natural synthetic** suture material made from

thread spun by silkworms in their making of cocoons

- The silk strand is twisted or braided and are usually dyed black
- Silk loses its tensile strength within 1 year after implantation
- It cannot be used where very long-term support is needed such as in a heart valve replacement
- On occasion a silk suture will migrate to the wound surface, referred to as splitting
- Silk is one of the most widely used non-absorbable suture and is often used in the gastrointestinal tract
- It is pliable and holds the knot securely
- Because of its capillarity, silk is treated to resist absorption of body fluid.

Synthetic non-absorbable suture material:

- Nylon, polyester, polyethylene, polybutester and polypropylene are synthetic polymers used to manufacture synthetic non-absorbable suture material
- Synthetic fibres cause less tissue irritation, retain their strength longer and have a higher tensile strength than natural fibres
- **Nylon** suture material (Ethilon, Dermalon, Nurolon and Surgilon) has high tensile strength and is inert in the body
- It is smooth and slide easily through the tissue

- Nylon is often used for skin closure
- It is suitable for ophthalmic surgery and micro-surgery because it can be manufactured into very fine strands
- **Polyester** suture material (Dacron, Mersilene, Ethibond, Tevdek and Tri-corn) is closely braided and coated with a specially designed lubricant that reduces drag as the suture is passed through tissue
- **Polybutester** suture material (Novafil) is a monofilament suture with more flexibility and elasticity than other synthetic polymers
- **Polypropylene** suture material (Prolene, Surgilene, Dermalene) is an inert monofilament suture
- Has good tensile strength and slide smoothly through tissue
- Its use is standard in cardiovascular surgery and other surgery where prolonged healing is anticipated because it can be made in very fine strands
- Polypropylene suture material should be gently stretched before use to prevent kinking

Stainless-steel suture material has the highest tensile strength and is the most inert of all sutures.

- It is particularly useful where strong permanent wound

security is needed, such as the sternum following cardiovascular surgery.

Monofilament suture material

- These suture material is comprised of a single strand of material
- Because they are a single strand they incur less resistance as they are drawn through the tissue and as they are tied
- Monofilament suture material does not harbour bacteria therefore reduce the potential for a suture-line infection.

Multifilament suture material

- These are several strands twisted or braided together
- They handle and tie securely and provide greater strength than the monofilament sutures
- Multifilament have a certain amount of capillarity that allows tissue fluid to be soaked into the suture and carried along the strand
- A disadvantage is that micro-organisms that may be contained in tissue fluid may be carried along the strand into the wound and result in infection.

Nursing responsibilities related to wound management

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ Although the selection and use of wound-closure suture material is primarily the surgeon's the professional nurse have the responsibility to have knowledge and understanding of suture material and needle characteristics ➤ Careful handling and maintenance of suture material is necessary. 	<p>Can help prevent patient injury e.g a cutting needle in a vascular procedure where a taper point is desired and anticipated, can cause trauma to the patient and result in additional bleeding. The more quickly the surgeon's needs can be anticipate</p> <p>Prevent the compromise of suture integrity and to ensure adherence to aseptic technique.</p>

Suturing technique

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ In the preparation and use of sutures in surgery, every precaution must be taken to keep the sutures material sterile and to prevent 	<p>To preserve the tensile strength of the suture material and to prevent wound infection</p>

<p>prolonged exposure and unnecessary handling</p> <ul style="list-style-type: none"> ➤ The scrub nurse should open only the suture material requested by the surgeon or as indicated as in emergencies ➤ Kinks should not be removed by running the fingers over the strand ➤ A suture or free ligature should not be too long or too short ➤ Surgical gut are sealed in packets that contain fluid ➤ Do not spill fluid on the sterile field or splash it into your eyes ➤ Rinsing of the suture gut is 	<p>Prevent wasting</p> <p>Fibres may break and cause tissue damage, specially with multifilament suture material</p> <p>A long ligature is difficult to handle and increase the possibility of contamination because it may be dragged across the sterile field or fall below it. A short ligature increase the difficulty to tie</p> <p>To keep material pliable</p> <p>This fluid is mainly alcohol and water, but may be irritating to ophthalmic tissues</p>
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<p>only necessary for surgical gut to be implanted into the eyes</p> <ul style="list-style-type: none"> ➤ Surgical gut should be used immediately after removal from their packets ➤ Silk sutures are dry. Therefore do not moisten before use 	<p>When the suture material is removed and not used the alcohol evaporates and the strand loses its' pliability and reduce its' tensile strength</p> <p>They lose their tensile strength if wet</p>
<p>Surgical needle count</p> <p>The responsible person (scrub-nurse) must realize that there are medical judicial risks incident to the use of needles in the operating room. Therefore, needle count forms an important part of the surgical count.</p> <ul style="list-style-type: none"> ➤ Count the amount of needles on the sterile field with the circulating nurse and record on the swab board e.g. 1+1+1+1 ➤ Atraumatic needles and traumatic needles are counted the same way, but kept separately and recorded separately on the swab board 	<p>For needle control intra-operatively</p> <p>Atraumatic needles are disposed</p>

<ul style="list-style-type: none"> ➤ Keep the paper holder in which the adhesive material was and place it in a gallipot on the trolley ➤ When the needle is received from the surgeon, keep needles in a separate galipot ➤ Count the same way as the swabs and mark on board ➤ After the final count it is discarded into a special sharp disposal container. ➤ Make sure that all needles that the surgeon gives back are not broken. ➤ Never leave a needle on a needle holder on the patients' body 	<p>of after surgery, but traumatic needles are reusable</p> <p>It is a means of double check</p> <p>To promote easy control and prevent injury by needle prick</p> <p>Prevent injury to other operating room personnel related to sharps</p> <p>If a broken needle is received, immediately notify the surgeon and find the lost part.</p> <p>May cause pricking yourself, other team members or part of the patient's body through the surgical drapes</p>
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9. PREPARATION FOR AND EXECUTION OF SURGICAL SKIN PREPARATION

9.1 INTRODUCTION

Surgical skin preparation is one of the activities used to control post-operative infection. The area should be free from septic lesions and allergy rash. Professional nurses must have knowledge of the surgical procedures to be able to prepare a wide area around the incision line.

9.2 PURPOSE

The purpose of this standard is to guide professional nurses to understand the importance of surgical skin preparation to render the operative site as free as possible from transient and resident micro-organisms, dirt and skin oil so the incision can be made through the skin with minimal danger of infection. This activity should be executed surgical competently.

9.3 DEFINITIONS

Surgical skin preparation can be defined as the mechanical cleaning of the surface of the skin on the incision line and a wide surrounding area using bacteriocidal solution.

9.4 STANDARD

9.4.1 Standard statement

The skin incision line and surrounding areas should be surgically cleaned with an aseptic solution that will not harm the patient.

9.4.2 Structure standard

Institutions should have written policies and procedures to guide professional nurses to understand the importance of surgical skin preparation and the skills to be acquired to perform the procedure competently.

9.4.3 Process standard

The actions of professional nurses should reflect knowledge of the process of surgical skin preparation with the aim to prevent bacteria to enter the wound through the incision.

9.4.4 Outcome standard

The outcome identified is that surgical skin preparation is done effectively and competently without any harm to the patient due to the aseptic solution and to prevent bacteria on the skin surface to enter the incision (Rothrock, 2003, p.147).

9.5 OBJECTIVES

Professional nurses should be able to:

- Know the guidelines for surgical skin preparation
- Perform the technique of a surgical skin preparation competently

9.6 PROCEDURE

Significant information

Purpose of surgical skin preparation

The purpose of the surgical skin preparation is to remove micro-organisms from the skin of the operative and surrounding areas before sterile draping. It is done by means of shaving, washing or bathing in the wards and application of skin disinfectant

preparation by a person who scrubbed his/her hands and arms, donned a sterile gown and gloves.

Shaving

- The patient is preferably shaved shortly pre-operating in the ward or in the operating room. When it is done in the operating room, it must not be done on the operating table
- When shaving the top epidermal layer is removal that provides an ideal growth medium (breeding ground) for micro-organisms with resulting sepsis
- Shave the prescribed area for the operation only
- Sterilize the razor after use but it is preferable to use a disposable razor
- In case of orthopedic surgery it is routine that the concerned limb is prepared, according to hospital policy and/or doctors' prescription.

Skin preparation in the operating room

- The surgical skin preparation is done after the patient is placed in the proper position, and the anaesthetist granted permission
- The operating area and a wide area all around are prepared, according to protocol

Guidelines for surgical skin preparation.

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ The patient must bath before admission to the operating room; ➤ Shaving must then be done in the operating room immediately before the operation 	<p>To remove organic dirt and skin oils;</p> <p>It is advisable to leave the hair at the operative site unless it interferers with the intended procedure</p>

<ul style="list-style-type: none"> ➤ Before the hair is removed the patient's skin must be assessed for the presence of rashes, moles, warts or other conditions ➤ Prior to the skin preparation the skin should be assessed for allergies or sensitivities to aseptic solutions ➤ The patient is put under anaesthesia first and the anaesthetist must grant permission to start with the skin prep ➤ The area prepped should include the incision line and the substantial area surrounding it ➤ If the patient is awake an explanation should be given regarding everything the nurse is doing ➤ Warm solution is preferable ➤ Unnecessary exposure of the 	<p>If the skin is broken by the shaving there is little time for micro-organism growth. Trauma to these can provide an opportunity for the colonization of micro-organisms;</p> <p>To maintain dignity and prevent unnecessary heat loss</p> <p>To remove organic dirt</p>
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patient must be avoided

- The surgical skin preparation is performed using mechanical friction
- The surgical skin preparation begins at the incision site and continues outwardly to the periphery in long even movements always starting at the beginning end – never use a back and forward movement
- The surgical skin preparation swab used is never reapplied to an area previously prepped - the swab should be discarded once the periphery is reached
- Prep solution is not allowed to pool under the patients or flow under the tourniquet cuff or electro-cautery negative electrode (patient plate)
- The dirties areas are prepped last –

So that bacteria from adjacent non-prepped areas are not inadvertently transferred to the prepped area;

To prevent the possibility of chemical burn

if there is an open wound it should be prepped last ➤ The umbilicus is prepped separately	
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10. PREPARATION FOR AND EXECUTION OF STERILE DRAPING

10.1 INTRODUCTION

Surgical draping forms part of infection control principles in the operating room. The drapes serve as a barrier to prevent micro-organisms to enter the wound from the surrounding areas. These drapes can be reusable or disposable. Because they are regarded as a barrier for micro-organisms it should adhere to specified characteristics to protect the patient from any injury related to incomplete and ineffective surgical drapes (Meeker & Rothrock, 1999, p.145).

10.2 PURPOSE

The purpose of this guideline is to guide operating room personnel to describe the activities of the nurse or other members of the operative and invasive procedure the management of surgical

draping to create a sterile field for the prevention of infection to the patient.

10.3 DEFINITIONS

Surgical draping can be defined as the covering of the patient and the adjacent surroundings of a patient's body for surgery to provide a sterile field (Rothrock, 2003, p.151).

10.4 STANDRARD

10.4.1 Standard statement

Professional nurses must have in-depth knowledge of principles and practices and acquire skills regarding the process of surgical draping (Spry, 1997, p.79). The barrier quality and fluid impermeability of surgical drapes must be estimated before use in the operating room to prevent cross infection during surgery.

10.4.2 Structure standard

The institution should have written policies and procedures regarding the characteristics of surgical drapes and the method of the draping procedure to provide high quality micro-organism barrier. Supporting structure of an institution should allow for different types and sizes of high quality surgical drapes.

10.4.3 Process standard

The activities of the operating room personnel should reflect careful planning to acquire desired types and sizes of surgical drapes required for surgery (Meeker & Rothrock, 1999, p.146). The implementation of the draping method should reflect high quality professional performance according to prescribed principles.

10.4.4 Outcome standard

The outcome identified is that the surgical drape must form a barrier between the patient's skin and everything on top of the surgical drape e.g. water, to prevent cross infection with resulting post-operative wound infection.

10.5 OBJECTIVES

Professional nurses should be able to:

- Demonstrate the principles of draping for a surgical procedure
- Demonstrate the method of surgical draping of the patient and surrounding area for any surgical procedure correctly and competently

10.6 PROCEDURE

Draping guidelines

Actions	Rationale/explanation
➤ Only sterile drapes that are intact are used for draping	To prevent time wasting and cross infection
➤ Ensure that you have the correct drapes for the operative procedure	To prevent time wasting
➤ Check the drapes for sterility – if the pack is dry, not torn and that the indicator for sterility is present	Prevent cross infection
➤ Get permission from the	If the anaesthetist still

<p>anaesthetist before draping</p> <ul style="list-style-type: none"> ➤ Ensure that the patient is in the correct position before draping ➤ Make sure that the anaesthetic screen is in position if needed ➤ Place the drapes on a dry area; ➤ Allow sufficient time ➤ Allow enough space ➤ Drapes should be handled as little as possible ➤ Place the drape gently ➤ Never shake or flip the drape ➤ Drapes are carried folded to the operating table ➤ Never reach over the operating table to drape the opposite side ➤ Drapes are not allowed to fall below waist of the scrubbed person 	<p>need to do something under the drapes s/he may contaminate the drapes</p> <p>To prevent the procedure to be repeated when the position needs to be corrected</p> <p>To screen the sterile area off from the un-sterile area;</p> <p>Moisture cause the area to be un-sterile with resulting infections</p> <p>To permit careful application;</p> <p>To maintain aseptic technique;</p> <p>Prevent contamination of the sterile drapes</p> <p>It causes air currents that are a vehicle for dust, lint and droplet nuclei</p>
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<p>carrying the drape</p> <ul style="list-style-type: none"> ➤ Hold the drape high enough but avoid touching the overhead operating light ➤ Drapes are done on the side of the scrubbed nurse first ➤ Hold the drape high until it is over the area, ➤ Place it where it is to remain ➤ Once the drape is placed do not adjust it ➤ If the drape is incorrectly placed, discard it ➤ The circulating nurse pull the contaminated drape down from the table without contaminating other drapes or the operating site ➤ Protect the gloved hands by cuffing the end of the drape over 	<p>To prevent contamination of the front of the sterile gown</p> <p>Drapes that lies below the waist are considered un-sterile and must be discarded</p> <p>To protect the sterility of the front of the sterile gown</p> <p>If the drape touches unsterile areas it is considered un-sterile</p> <p>A drape that is placed cannot be replaced but must be removed Adjustment will cause contamination</p> <p>To prevent contamination of the rest of the operating table and sterile area</p> <p>To prevent contamination of the sterile gloves</p>
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them

- Do not let your gloved hands touch the skin of the patient
- In unfolding the abdominal drape from the operative site towards the foot or the head of the table, protect the gloved hand by enclosing it in the turned-back cuff of the drape provided for this purpose
- Keep the hands at the table level
- If a drape becomes contaminated, do not handle it further
- Discard it without contaminating gloves or other items
- If in doubt as to its' sterility, consider the drape contaminated
- A towel clip that has been fastened through a drape has its points

The skin is not sterile but only surgically clean

Protect the sterile gloves from becoming contaminated

Below table level is considered unsterile area

contaminated

- Remove it only if absolutely necessary, then discard it from the sterile field without touching the tips and cover the area from where the towel clips were removed with another towel
- If a whole is found in a drape after it is placed, it must be removed or covered with another drape
- If a hair or any other loose piece of material is found on the drape the drape must be removed immediately.

11. SAFE HANDLING AND TRANSFER OF THE PATIENT FROM THE OPERATING TABLE TO THE PATIENT TRANSPORT TROLLEY IN THE OPERATING ROOM IMMEDIATELY AFTER THE SURGICAL PROCEDURE

11.1 INTRODUCTION

The duties of professional nurses include the safety of patients during the process of transferring the patient from the operating table to the patient transport trolley. The anaesthetist is primarily responsible for the patency of the airway, but the professional nurse who assisted during the surgical intervention have the responsibility to observe any change in the overall condition of the patient during the process of transfer of the patient. The dignity of the patient must be foremost in all activities even though the patient will still be in a state of unconsciousness.

11.2 PURPOSE

The purpose of this standard is to guide professional personnel to describe the activities of the professional nurse or other members of the operative and invasive procedure nursing team in the activities of transferring the patient from the operating table to the patient transport trolley to prevent medical legal risks and provided comfort to the patient.

11.3 DEFINITIONS

The definition for the transfer of the patient from the operating table to the patient transport trolley in this context can be the placing the patient from one bed to another without disturbing the normal functioning of the vital systems of the patient.

11.4 STANDARD

11.4.1 Standard statement

Transferring the patient describes the activities of professional nurses and/or other members of the operative and invasive procedure nursing team, in moving the patient from the operating table to the patient transport trolley without tissue injury, altered body temperature, ineffective breathing patterns, altered tissue perfusion, discomfort, pain, and/or falling (Rothrock, 1996, p.588-590).

11.4.2 Structure standard

Institutional policy and procedure should include steps whereby professional nurses can be guided to perform the activity of the transfer of the patient successfully. Equipment provided by the institution must be functional to safeguard the patient and personnel from medical legal hazards.

11.4.3 Process standard

Assessing, planning, implementation and evaluation of all nursing actions reflects principles of safety including human factors, equipment, and continuous high quality nursing care during the transfer of the patient from the operating table to the patient transport trolley.

11.4.4 Outcome standard

The outcome identified is that the patient will be transferred from the operating table to the patient transport trolley without loss of dignity, maintenance of baseline neuromuscular functions, intact skin, patent airway and free from any injury related to transfer of a patient (Rothrock, 2003, p.253-254).

11.5 OBJECTIVES

<p>Professional nurses should be able to:</p> <ul style="list-style-type: none"> ➤ Reflect knowledge of medical legal risks regarding the transfer of a patient from the operating table to the patient transport trolley and the preventative measure thereof by checking the equipment ➤ Instruct personnel regarding their actions during transferring the patient ➤ Execute actions to prevent medical legal hazards
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11.6 PROCEDURE

Actions	Rationale/Explanation
<ul style="list-style-type: none"> ➤ The professional nurse (scrub nurse) must never turn her/his back to the patient before the patient is transferred to the patient transport trolley 	<p>During this time the patient might be waking up and move with the possibility that s/he may fall from the operating table</p>
<ul style="list-style-type: none"> ➤ If the professional nurse need to move s/he have to order someone to stand next to the patient 	<p>Patient may fall from the operating table</p>
<ul style="list-style-type: none"> ➤ Ensure that there is an oxygen cylinder on the patient transport trolley 	<p>Patient might need oxygen from the operating room to the recovery room</p>
<ul style="list-style-type: none"> ➤ Ensure that enough people transfer the patient from the operating table to the patient transport trolley 	<p>The patient may be too heavy for two people and fall and/or personnel may injure themselves</p>
<ul style="list-style-type: none"> ➤ Keep the patient warmly covered 	<p>To ensure the dignity of the patient and preserve the body temperature</p>
<ul style="list-style-type: none"> ➤ Ensure that the urine bag is not on the trolley 	<p>Urine flow back into the bladder and</p>

➤ Ensure that there is nothing on the patient's legs	may cause infection
➤ Ensure that the patient is strapped to the trolley with safety belts	Prevent pressure, pain and discomfort Patient may fall from the trolley

12. REPORT ON PATIENT'S INTERVENTIONS BY THE PROFESSIONAL NURSE (scrub nurse) TO THE RECOVERY ROOM PERSONNEL

12.1 INTRODUCTION

Post-anaesthetic management of the surgical patient enclose the period when the patient should be assisted to recover and return to the "pre-anaesthesia physical state, including normal temperature, unimpeded air exchange, adequate ventilation, maintenance of cardiac output and fluid volume, electrolyte and fluid balance, absence of allergic reaction and unimpaired thought processes" (Spry, 1997, p.235). Therefore it is of the utmost importance that the report given by professional nurses (scrub nurses) after surgery should be detailed, correct, and complete to ensure continuous care in the recovery room.

12.2 PURPOSE

The purpose of this standard is to provide guidelines to professional nurses on the report of all activities done in the operating room during a surgical intervention to the recovery room nursing personnel to ensure continuous high quality care in the recovery room.

12.3 DEFINITIONS

Report to the recovery room personnel can be defined as the information given by one person to another regarding every intervention done, health status of the patient at that time, and prescriptions for further interventions.

12.4 STANDARD

12.4.1 Standard statement

The report given to the recovery room personnel should be detailed, correct and complete to enable them to assist the patient to gain her/his pre-operative health status.

12.4.2 Structure standard

Institutional and departmental policies and procedures should be complete to guide professional nurses (scrub nurse) to provide information to the recovery nurse to ensure continuous nursing care.

12.4.3 Process standard

The activities of professional nurses should reflect their knowledge of the content of the report to be given to recovery room nurses regarding the care that patients received in the operating room and the nursing care that patients should receive in the recovery room.

12.4.4 Outcome standard

The outcome identified is that professional nurses (scrub nurse) report all interventions done in the operating room completely and competently to ensure high quality continuous nursing care for the patient in the recovery room.

12.5 OBJECTIVES

Professional nurses should be able to:

- Assist the recovery room personnel to connect life saving support equipment;
- Assist the recovery room personnel to make the patient comfortable;
- Demonstrate reporting of information correctly and completely.

12.6 PROCEDURE

Actions	Rationale/Explanation
<p>As soon as the patient is placed on the recovery room bed:</p> <ul style="list-style-type: none"> ➤ Oxygen mask is placed correctly on the patient's mouth and nose; ➤ Connect the patient to all monitoring devices; ➤ Hang the intravenous infusion fluid on the stand; ➤ Make sure that the patient is strapped to the bed; ➤ All patients in the recovery room is nursed in a lateral position; 	<p>To ensure that the patient is adequately oxygenised;</p> <p>To monitor the physical status of the patient;</p> <p>To ensure that the intravenous infusion is in working order and to regulate the infusion droplets;</p> <p>To prevent the patient from falling off the bed;</p> <p>To prevent aspiration of vomit or</p>

<ul style="list-style-type: none"> ➤ Always stand next to the patient so that you can see the patient's face; <p>Report the following:</p> <ul style="list-style-type: none"> ➤ Patient's name and registration number; ➤ Medical personnel that attended to the patient; ➤ The surgical procedure that was performed; ➤ Anaesthesia given; ➤ Muscle relaxant given; ➤ Analgesics given during the surgical procedure; 	<p>any other secretion or blood;</p> <p>To be able to assess any changes in the patients' condition reflecting in facial expression;</p> <p>To introduce the patient to the recovery room personnel and to check that the right file is with the right patient;</p> <p>So that the recovery room personnel know who to notify if something happens to the patient;</p> <p>To enable the recovery room nurse to relate any complications to the surgical procedure;</p> <p>To enable the recovery room nurse to support the patient to regain consciousness after anaesthesia or any other physical function after regional anaesthesia;</p> <p>Muscle relaxant can cause respiratory apnea. The recovery room nurse have to monitor the ability of the patient to breathe on her/his own;</p>
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<ul style="list-style-type: none"> ➤ Suture material used; ➤ Type of drains used and the type of insertion, eg. through stab wound; ➤ Swab, needle and instrument count correct; ➤ Post-operative prescription by the medical practitioner; ➤ Show the integrity of the skin; ➤ Show the wound site for bleeding, dressing or any other specifics; 	<p>To enable the recovery room nurse to estimate when to administer the next analgesic if needed and report to the ward personnel;</p> <p>For report to the ward personnel for removal of the sutures;</p> <p>For report to the ward personnel to dress the wound and remove the drain. The ward personnel need to assess any complications e.g. a bleeder by observing fresh blood through the drain;</p> <p>The recovery room nurse is a witness to the report of swab, needle and instrument count;</p> <p>Prescription by the anaesthetist and/or surgeon for continuous nursing care;</p> <p>The recovery room nurse is a witness to the integrity of the skin especially at the site where the diathermy plate was placed and pressure points;</p> <p>To enable the recovery room nurse to assess any abnormalities concerning excessive bleeding and</p>
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<ul style="list-style-type: none"> ➤ Special orders and observations by the professional nurse; ➤ Show the tissue specimen; ➤ Show the information of the patient written on the tissue specimen form; ➤ Show the type of intra-venous infusion fluid and the amount that are infused; ➤ Show the urine drainage and colour of the urine. 	<p>wound stability;</p> <p>Special orders are related to the surgical procedure e.g. vaginal bleeding after an abdominal hysterectomy;</p> <p>The recovery room nurse is a witness that the specific organ or tissue correspond with the surgical procedure and information on the tissue specimen form;</p> <p>To check with the prescription for the correct infusion fluid and that the patient's body is not overloaded with fluid;</p> <p>To ensure that the urine output and colour is within the normal range.</p>
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13. BIBLIOGRAPHY

Fairchild, S.S. (1996). *Perioperative nursing. Principles and practice.* (2nded.). London: Little, Brown and Company.

Government notices No. 13 of 1999. No.2040. (1999). *Government Gazette of the republic of Namibia.*: Regulations relating to the scope of practice of persons who are registered or enrolled under the Nursing Professions Act, No 30 of 1993, pp.1-14

Hornby, A. S. (2005). *Oxford advanced learner's dictionary. International student's edition.* (7thed.). New York: Oxford University Press.

Katz, J.M., & Green, E. (1997). *Managing quality. A guide to system-wide performance management in health care.* London: Mosby.

Meeker, M.H., & Rothrock, J.C. (1999). *Alexander's care of the patient in surgery.* (11thed.). New York: Mosby.

Rothrock, J.C. (1996). *Perioperative nursing care planning.* (2nded.). New York: Mosby.

Rothrock, J.C. 2003. *Alexander's Care of the Patient in Surgery.* (12thed.). New York: Mosby.

Spry, C. (1997). *Essentials of perioperative nursing.* (2nded.). Maryland: Aspen Publication.

