Exploring a perceived competency profile for comserve nurses in South Africa

M Dinkelmann
orcid.org 0000-0002-4279-2099

Dissertation submitted in partial fulfilment of the requirements for the degree Master of Arts in Human Resource Management at the North-West University

Supervisor: Mr GH Rabie
Co-supervisor: Dr T Rabie

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Student number: 22122249
REMARKS

The reader is reminded of the following:

- The American Psychological Association (APA) reference, which is prescribed by the publication manual (4th edition), was used in this dissertation. The use of the APA reference and editorial format in scientific documents is in line with the policy of the School of Industrial Psychology and Human Resource Management of North-West University (Potchefstroom Campus).

- This full dissertation is submitted in the form of two research articles prepared in the newest editorial style of the South African Journal of Industrial Psychology (SAJIP).

- All ethical approval letters, data collection requesting forms and approval forms which identify the populations used was included in the appendices for ethical reasons. However, no identification was used in any of the two research articles that will be published.

- Please note that the articles and their abstracts in this study are longer because it is a dissertation, the articles as well as their abstracts will be abbreviated prior to submission to the journal.
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DECLARATION OF LANGUAGE EDITOR

24 October 2018

I, Ms Cecilia van der Walt, hereby declare that I took care of the editing of the dissertation of Ms Monica Dinkelmann titled "Exploring a perceived competency profile for conservae nurses in South Africa."

MS CECILIA VAN DER WALT

BA (Cum Laude),
TPED (Cum Laude),
Plus Language editing and translation at Honours level (Cum Laude),
Plus Accreditation with SATI for Afrikaans and translation
Registration number with SATI: 1000228

Email address: ceciliavdw@lantic.net

Mobile: 072 616 4943

Fax: 086 578 1425
DECLARATION

I, Monica Dinkelmann, hereby declare that ‘Exploring a perceived competency profile for comserve nurses in South Africa’ is my own work. The views and the opinions expressed in this dissertation are my own. All the relevant sources are cited in text and can be found in the bibliography.

I also declare that the content of this research project will not be handed in for any other qualification at any other tertiary institution.

Monica Dinkelmann

October 2018
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## ABBREVIATION LIST

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<tr>
<td>CPEs</td>
<td>Clinical Practice Environment/s</td>
</tr>
<tr>
<td>ETD</td>
<td>Education, training and development</td>
</tr>
<tr>
<td>HRD</td>
<td>Human Resource Development</td>
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<tr>
<td>KSAs</td>
<td>Knowledge, Skills and Attitudes</td>
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<tr>
<td>NEIs</td>
<td>Nursing Education Institution/s</td>
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SUMMARY

Title: Exploring a perceived competency profile for comserve nurses in South Africa

Keywords: Learning needs analysis, knowledge, skills, attitudes, competency profile, community service nurses and quality patient care.

Human resource development as a function or sub-function of human resource management plays a vital role in reaching organisation goals by aligning training and development initiatives with organisational strategy. One of the strategic goals of health care organisations, with specific reference to the clinical practice environment, is the delivery of quality patient care. The South African Department of Health also looks upon quality patient care to be a strategic priority to create the quality of life for all South Africans.

Clinical practice environments in the public health-care sector are affected by various factors such as staff shortages, poor infrastructure and high workloads. This caused many newly graduated nurses to apply for posts in the private health care sector. In order to guard against this the Minister of Health implemented a compulsory community service year for all nursing graduates also known as comserve (“community service”) nurses in the public health care sector.

When comserve nurses enter the clinical practice environment they are faced with the challenges of the public health care sector. At the same time they also need to deal with their own challenges such as not being adequately prepared for the new role and feelings of incompetence, theory-practice gaps, poor support and an absence of role-models. All these issues may influence the quality of care delivered by these nurses.

The South African Department of Health considers nursing education one of the main challenges to revitalise the nursing profession, as anecdotal evidence indicates that many nurses do not possess adequate competencies in various fields of nursing, which can cause poor-quality care. This problem is intensified by poor communication between clinical practice environments and nursing education institutions. Competence is a combination of knowledge, skills and attitudes needed to perform in specific situations in the clinical practice environment.
Human resource development (HRD), in conjunction with relevant stakeholders can assist in addressing this problem by means of a learning needs analysis. A learning needs analysis is used to identify the specific knowledge, skills and attitudes prospective community service nurses need to be considered competent in the delivery of quality patient care. The identification of learning needs will assist in the development of education, training and development initiatives specifically aimed at delivering quality patient care which is regarded as the main strategic goal of CPEs.

The current study formed part of a larger project comprising two separate studies. The intention of the larger project is to conduct a 360-degree learning needs analysis so as to determine the knowledge, skills and attitudes needed by community service nurses to deliver quality patient care. These aspects were only based on perceptions of participants and not on existing nursing education curricula. The current study focussed on the perceptions of nursing educators and final-year nursing students, representing the views of the Nursing Education Institution. The alternative study focussed on the perceptions of nursing managers and community service nurses, representing the perceptions that existed within the clinical practice environment. The larger project will also reflect a perceived competency profile from a 360-degree perspective for community service nurses which can later be compared with existing curricula to determine any educational gaps.

The research approach followed in this study was qualitative within a constructivism paradigm using exploratory and descriptive strategies. Semi-structured individual interviews were conducted with (N=42) participants which consisted of (n=23) nurse educators and (n=19) final-year nursing students. Multi-level sampling which consisted of an all-inclusive sampling which was two nursing colleges (N=2; n=2) and one university (N=2; n=1) and purposive sampling (nurse educators and final-year nursing students) was followed during data collection. A digital recorder was used to capture the data during the interviews and field notes were taken after the interviews. All interviews were transcribed verbatim. The researcher and co-coder applied thematic analysis following a deductive approach in contrast to an inductive approach for analysing and interpreting the data. A deductive approach is a top-down approach for which the researcher already has available predetermined codes based on concepts, ideas or topics for interpreting the data. In this study the predetermined codes were knowledge, skills and attitudes.
Phase 1 of the current study explored and described the perceptions held by nurse educators and final-year nursing students regarding the knowledge, skills and attitudes to enable prospective conservice nurses to delivering quality patient care. The results consisted of main themes, sub-themes and sub-sub-themes for both populations. The findings included *knowledge*, broken down into: theoretical knowledge, practical knowledge, knowledge of holistic care, cultural diversity and code of conduct. Each of these was further broken down into their respective sub-sub-themes. *Skills* included interpersonal, cognitive, management, administrative, practical and personal skills with their respective sub-sub-themes. *Attitudes* such as the following were also identified: being caring, positive, humble, compassionate, passionate, friendly, empathetic, sensitive, helpful, life-long learners and walking the extra mile.

In phase 2 of the study the results of phase 1 assisted the researcher in developing an integrated competency profile for prospective conservice nurses based on the similar and unique findings from the nurse educators and final-year nursing students’ perceptions and thereby reaching the purpose of this study.
Titel: Verkenning van ’n waargenome bevoegdheidsprofiel vir gemeenskapsdiens-verpleegkundiges in Suid-Afrika

Sleutelwoorde: Opleidingsbehoefte-analise, kennis, vaardighede, houdings, bevoegdheidsprofiel, gemeenskapsdiens-verpleegkundiges en kwaliteit pasiëntsorg.

Mensehulpbron-Ontwikkeling as ’n funksie of sub-funksie van Mensehulpbron-Bestuur speel ’n onontbeerlike rol daarin om organisasie-doelstellings te bereik deur opleiding en ontwikkelingsinisiatiewe met organisasiestrategie te belyn. Een van die strategiese doelwitte van gesondheidsorg-organisasies, met spesifieke verwysing na die kliniese praktykomgewing, is die levering van kwaliteit pasiëntsorg. Die Suid-Afrikaanse Departement van Gesondheid beskou kwaliteit pasiëntsorg ook as ’n strategiese prioriteit om lewenskwaliteit vir alle Suid-Afrikaners tot stand te bring.

Kliniese Praktykomgewings in die openbare gesondheidsorg-sektor word deur verskeie faktore aangetas soos personeeltekorte, swak infrastruktuur en hoë werkslatings. Dit het meegebreng dat talle pas-gegradueerde verpleegkundiges vir poste in die private gesondheidsorg-sektor aansoek gedoen het. Om hierteen te waak het die Minister van Gesondheid ’n verpligte gemeenskapsdiens-jaar vir alle gegradueerde verpleegkundiges, ook bekend as *comserve* (“community service”) verpleegkundiges ingestel.

Wanneer sodanige verpleegkundiges die kliniese praktykomgewing betree, word hulle deur die uitdaginge van die openbare gesondheidsorg-sektor in die gesig gestaar. Terselfdertyd moet hulle ook hul eie uitdagings die hoof bied, soos dat hulle nie volkome voorbereid is op die nuwe rol nie en gevoelens van onbevoegdheid, teorie-praktykgapings, swak ondersteuning en die afwesigheid van rolmodelle. Al hierdie kwessies kan die kwaliteit van sorg wat deur hierdie verpleegkundiges gelewer word, beïnvloed.

Die Suid-Afrikaanse Departement van Gesondheid beskou verpleegopleiding as een van die hoofuitdagings om nuwe lewe in die verpleegprofessie in te blaas, aangesien anekdotiese getuienis aandui dat talle verpleegkundiges nie oor toereikende vermoëns op verskeie gebiede
van verpleging beskik nie, wat swakkwaliteit-sorg kan meebreng. Hierdie probleem word verskerp deur swak kommunikasie tussen kliniese praktykomgewings en verpleegonderrig-instansies. Bevoegdheid is ’n kombinasie van kennis, vaardighede en houdings wat benodig word om in spesifieke situasies in die kliniese praktykomgesing te presteer.

Mensehulpbron-Ontwikkeling (MHO), in samewerking met relevante belanghebbendes kan meehelp om hierdie probleem die hoof te bied deur middel van ’n leerbehoeftes-analise. ’n Leerbehoeftes-analise word gebruik om die spesifieke kennis, vaardighede en houdings wat voornemende conserve-verpleegkundiges benodig om as bevoeg beskou te word om kwaliteit pasiëntsorg te lewer. Die identifisering van leerbehoeftes sal help met die ontwikkeling van onderrig, opleiding en ontwikkelingsinisiatiewe wat spesifiek gemik is op die levering van kwaliteit pasiëntsorg, wat beskou word as die hoofstrategiese doelwit vir Kliniese Praktykomgewings.

Die huidige studie het deel uitgemaak van ’n meer omvattende projek wat uit twee afsonderlike studies bestaan. Die bedoeling van die meer omvattende projek is om ’n 360-grade leerbehoeftes-analise uit te voer om daardeur die kennis, vaardighede en houdings wat gemeenskapsdiens-verpleegkundiges benodig om kwaliteit pasiëntsorg te kan lewer. Hierdie aspekte is slegs op deelnemers se persepsies gebaseer en nie op bestaande verpleegkunde-onderrig-kurrikula nie. Die huidige studie het op die persepsies van verpleegkunde-opvoedkundiges en finalejaar-verpleegkundestudente, wat die gesigspunte van die Verpleegkunde Opvoedkundige Instansie verteenwoordig, gefokus. Die alternatiewe studie het op die persepsies van verpleegbestuurders en gemeenskapsdiensverpleegkundiges gefokus wat die persepsies wat binne die kliniese praktykomgewing geheers het, verteenwoordig. Die meer omvattende projek sal ook ’n waargenome bevoegdheidsprofiel vanuit ’n 360-grade perspektief vir gemeenskapsdiens-verpleegkundiges weerspieël wat later vergelyk kan word met bestaande kurrikula om enige opvoedkundige gapings te bepaal.

Die navorsingsbenadering in hierdie studie was kwalitatief van aard binne ’n konstruktivisme-paradigma terwyl gebruik gemaak is van verkennende en beskrywende strategieë. Semi-gestrukturerte individuele onderhoude is met (N=42) deelnemers gevoer wat bestaan het uit (n=23) verpleegkunde-opvoeders en (n=19) finalejaar verpleegkundestudente. Multi-vlak steekproefneming wat bestaan het uit ’n allesinsluitende
steekproefneming wat twee verpleegkunde-kolleges (N=2; n=2) was en een universiteit (N=2; n=1) en doelbewuste steekproefneming (verpleegkunde-opvoedkundiges en finalejaar verpleegkundestudente) is tydens data-insameling gedoen. ’n Digitale opnemer is gebruik om die data tydens die onderhoude vas te lê, en veldnotas is na die onderhoude gemaak. Alle onderhoude is verbatim getranskribeer. Vir die analisering en interpretering van die data het die navorser en mede-kodeerder tematiese analyse toegespas deur ’n deduktiewe benadering te volg in teenstelling met ’n induktiewe benadering. ’n Deduktiewe benadering is ’n van-bo-na-onder-benadering waarvoor die navorser reeds voorafbepaalde kodes het wat gebaseer is op konsepte, idees of onderwerpe vir die interpretering van die data. In hierdie studie was die voorafbepaalde kodes *kennis, vaardighede en houdings*.

Fase 1 van die huidige studie het die persepsies van verpleegkunde-opvoedkundiges en finalejaar verpleegkunde-studente verken en beskryf ten opsigte van die kennis, vaardighede en houdings wat deur voornemende *comserve* verpleegkundige benodig word om kwaliteit pasiëntsorg te lewer. Die resultate is saamgestel uit hoof temas, sub-temas en sub-sub-temas vir beide populasies. Die bevindings het ingesluit: *kennis*, wat opgebreek is in: teoretiese kennis, praktyese kennis, kennis van holistiese sorg, kulturele diversiteit en gedragskode. Elkeen hiervan is verder opgebreek in hul onderskeie sub-sub-temas. *Vaardighede* wat ingesluit het: interpersoonlik, kognitiewe, bestuurs-, administratiewe, praktye en persoonlike vaardighede met hul onderskeie sub-sub-temas. *Houdings* soos die volgende is ook geïdentifiseer, naamlik omgee, positief, nederig, deernisvol en vriendelik, empatiek, sensitief, hulpvaardig, lewenslange leerders en loop die ekstra myl.

In fase 2 van die studie het die resultate van fase 1 die navorser gehelp om ’n geïntegreerde bevoegdheidsprofiel vir voornemende *comserve*-verpleegkundiges te ontwikkel wat gebaseerd is op die soortgelyke en unieke bevindings van die verpleegkunde-opvoedkundiges en finalejaar verpleegkunde-studente se persepsies, waardeur die doel van hierdie studie bereik is.
CHAPTER 1

INTRODUCTION TO THE STUDY
Introduction

Orientation

This dissertation focuses on the development of a competency profile for prospective community service nurses also referred to as comserve nurses based on the perceptions held by nurse educators and final-year nursing students. This chapter includes the problem statement, expected contributions of this study, research objectives, research design and method, overview of the chapters and chapter summary.

1.1. Problem statement

As a function or sub-function of human resource management, human resource development (HRD) is expected to play a more prominent role in aligning education, training and development (ETD) needs with organisational strategy (Ludike, 2016). The main goal of health systems, including clinical practice environments (CPEs), is to deliver quality patient care. HRD in conjunction with relevant stakeholders from both inside and/or outside the CPE can assist the CPE in reaching this goal. Nurses, the backbone of the South African healthcare system and the quality of patient care they deliver have a direct impact on the strategic goals of the CPEs in which they function.

During the 2011 South African National Nursing Summit, nursing education and training was identified as one of the challenges facing the South African nursing profession. It was agreed that this issue had to be addressed in order to reconstruct and revitalise the South African nursing profession and to create ‘a long and healthy life for all South Africans’ (Department of Health, 2013 p. 4). However, this is a challenge to revitalise the nursing profession as anecdotal research revealed that many nurses, including comserve nurses who are focused on in this study, do not have the necessary competencies in various fields of nursing – a aspect that can cause poor-quality patient care (Department of Health, 2012). Competencies include knowledge, skills and attitudes (KSAs) that enable a nurse to make the correct decisions to perform certain tasks in the CPE (Leung, Trevena & Waters, 2016). Some competency challenges identified in various research studies on newly graduated nurses (comserve nurses) include transition problems, overwhelming workloads, poor organisation for patient-

1In literature the terms ‘comserve nurses’ and ‘community service nurses’ are used interchangeable. This study uses the term ‘comserve nurses’.
care and poor response to patient problems caused by lack of competence (Zhang, Qian, Wu, Wen & Zhang, 2016). Hlosana-Lunyawo and Yako (2013) added poor record keeping, protocols not being followed and the lack of knowledge and skills. Many of these nurses also feel insecure and do not know whether they are adequately prepared once they enter the CPE (Hayes et al., 2006) and others experience role conflict and feelings of incompetence to fulfil their role as newly qualified professional nurses (Department of Health, 2013; Duchscher, 2008; Halfer & Graf, 2006). Odland, Sneltvedt and Sörlie (2014) added that these nurses feel incompetent and unprepared to handle tasks, duties and other challenges delegated to them due to a lack of knowledge and skills not having been acquired during training. The Department of Health (2013) admits that nursing students are not fully prepared for the CPE and that they often show a lack of competence when they are expected to act in the capacity as comserve nurses (fulfilling the duties of a professional nurse) directly after completion of their studies. As a strategic objective of CPEs this is concerning, since the lack of these competencies can lead to poor-quality patient care. HRD can however assist CPEs in addressing this problem by conducting a learning needs analysis pertaining to the delivering of quality patient care specifically. From the needs analysis certain KSAs can be identified from which a competency profile can be developed. Specific training interventions can then be used to address problem areas which cause poor-quality patient care.

Research purpose and objectives

The general purpose of this research study is to develop a competency profile for prospective comserve nurses based both on the nurse educators and final-year nursing students’ perceptions of the KSAs needed by these nurses to enable them to deliver quality patient care in the CPEs.

Objectives

Article 1:

- To conceptualise the concepts learning needs analysis, knowledge, skills, attitudes, community service nurses and quality patient care from the literature.
- To explore and describe the perceptions held by nurse educators regarding KSAs needed by prospective comserve nurses to enable them to deliver quality patient care.
To explore and describe the perceptions held by final-year nursing students concerning the KSAs needed by prospective community nurses to enable them to deliver quality patient care.

To make recommendations for future research, training and practice.

Article 2:

To conceptualise the concepts learning needs analysis, knowledge, skills, attitudes, competency profile, community service nurses and quality patient care from the literature.

To develop a competency profile for prospective community nurses while integrating the perceptions held by nurse educators and final-year nursing students.

To make recommendations for future research, training and practice.

Literature review

The importance of human resource management in contributing to organisational strategy has until recently been underestimated. Traditionally the human resource department was seen as the department responsible for personnel administration which included activities such as hiring and training personnel, paying salaries, managing personnel benefits and adhering to labour laws (Hassani, Mobaraki, Bayat & Mafimoradi, 2013). However, in recent years management experts predicted that human resource management will play a much more important role in organisations towards the achievement of the strategic goals of organisations (Hassani & Mobaraki et al., 2013). Elarabi and Johari (2014) recently provided a definition of human resource management which is in line with the aforementioned statement. The definition states that human resource management includes the systems and strategies that focus on managing employees in the organisation to achieve organisational outcomes. It is however also important for human resource management to ensure that the needs of employees within organisations are also satisfied (Grobler, Wärnich, Carrell, Elbert & Hatfield, 2011). The role of human resource management in reaching organisational outcomes while also ensuring need satisfaction of employees is crucial for organisational success.

Dressler et al. (2011) identified six major functions of human resource management which include: (1) human resource planning, recruitment and selection; (2) HRD; (3) compensation
and benefits; (4) health and safety, (5) employee and labour relations; as well as (6) human resource research. Since the effectiveness of organisations is closely linked to the competence of the workforce, the role of HRD has become particularly important to organisations.

HRD is defined by Meyer (2016, p. 2) as ‘all the processes, systems, methods, procedures and programmes an organisation employs to develop its human resources in order to equip its employees to be able to contribute to organisational performance’. HRD has evolved over the years, from only being a tool to provide employees with the necessary knowledge and skills to perform more effectively in the workplace to being a crucial part of any business leading to higher competitiveness and better performance (Meyer, 2016). Human resource planning and HRD complement one another in the sense that human resource planning ensures that the right employees with the right KSAs are appointed while HRD ensures that these employees (comserve nurses in this study) are further developed to the extent that they are capable of supporting organisational objectives to ensure organisational performance (quality patient care). The International Council of Nurses emphasises the necessity of a competent workforce to ensure a well-functioning health system. According to the Council the application of sound HRD is needed to ensure that enough well-trained health professionals are available (International Council of Nurses, 2009). HRD as a function or sub-functions of human resource management is therefore regarded as very important to ensure that nurses are trained and developed to such an extent that they contribute towards reaching the main objective of the CPE, namely quality patient care (Elarabi & Johari, 2014).

In South Africa, nurses leaving nursing education institutions (NEIs) after completion of their four-year degrees/diplomas must complete one year of community service within a public sector CPE. During this year these nurses are referred to as community service nurses or, in short, comserve nurses. After completion of this compulsory community service year these nurses are allowed to register as professional nurses at the South African Nursing Council. Community service for nurses was implemented as an initiative to prevent the outflow of newly graduated nurses to the private healthcare sector and to retain the necessary competencies to ensure that adequate healthcare coverage was possible to all South Africans, making use of the public healthcare system (Mohamed, 2005; Ndaki, 2004). In addition, instituting the compulsory community service year also aimed at providing young health care professionals with an opportunity of developing critical thinking, knowledge, skills and behaviour patterns that will assist them in their professional development (Department of Health, 2014).
Competent health care personnel, especially nurses, are the key to ensuring quality patient care. However, the competencies of nurses have been of great concern both to NEIs and CPEs since the discovery of the theory-practice gap (Scott Tilley, 2008). A theory-practice gap refers to the inability of nurses to apply the knowledge they have obtained during training in the CPE (Monaghan, 2015). Scott Tilley (2008) mentioned that health-care employers and educators acknowledge this gap between theory and practice. Landers (2000) mentions two factors that contribute to a theory-practice gap in the nursing education: (1) the way in which theory and practice are organised (teaching and learning strategy); and (2) the integration of theory-practice. Furthermore, Davhana-Maselesele, Tjallinks and Norval (2001) added that the curriculum, especially the theoretical content, is too academic and impractical to meet the real needs of the CPE. Contributing to this situation is the fact that NEIs find it difficult to determine how they should prepare final-year nursing students to have the necessary entry-level competencies and how to optimally validate these entry-level competencies (Scott Tilley, 2008). The Department of Health (2013) mentioned that the theory-practice gap may also be caused by inadequate clinical training facilities as well as poor management and supervision of nursing students.

To address the theory-practice gap De Swardt et al. (2012) suggested the implementation of special learning techniques with the prospect of promoting theory and practice integration. On the other hand, Lenners and Piccone (2006) suggested the implementation of a well-designed curriculum which includes both theory and practice. So that nurses can experience a balance between theory and practice, the revision of their existing KSAs is needed to function efficiently within the CPE (Ajani & Moez, 2011). In the context of the current study, the concept knowledge refers to what people know (information) and their understanding of applying this knowledge while the concept Skills refers to the ability of people to do certain tasks. The concept Attitudes refers to feelings and beliefs of people and the tendency thereof to influence their behaviour. Behaviour is therefore seen as an indicator of attitude (Hunter, 2012).

HRD can play an important role in determining the KSAs needed by prospective comserve nurses before they can be regarded as being competent in delivering quality patient care. In conjunction with relevant stakeholders, HRD can identify the learning needs of these nurses by means of a learning needs analysis. Clarke (2003) explains that a learning needs analysis
outlines an organisation’s data collection activities which leads to the identification of those in need of training and to making decisions about training which will improve organisational performance and outcomes. Kiley (2010, p. 389) defines a learning needs analysis as ‘the process of determining the gap between what is happening and should be happening.’ This analysis is necessary to provide information on what is needed for developing and the designing a training plan (Kiley, 2010). Denby (2010) refers to a learning needs analysis as an investigation into an organisation’s performance levels. In other words, a learning needs analysis assists in the analyses of the organisation’s current performance levels and compares it with what the desired levels should be by focusing on the organisation’s staff and support network.

Wolfson (2016, p. 157) provides an all-encompassing definition that best describes the learning needs analysis in the context of HRD. The learning needs analysis is defined as ‘the systematic process through which the strategic intent and plans of the organisation are translated into learning needs which describe the gap between present and desired future skills/competency/behaviour’. In terms of the current study the strategic intent refers to the CPE strategic goal of delivering quality patient care. By means of the learning needs analysis it can be determined what specific KSAs conserved nurses need to provide quality patient care. Once this is done relevant ETD initiatives can be used to address those issues that hamper the delivering of quality patient care. Training is therefore aligned with the strategic goal of the CPE.

Over the years companies started preferring the use of competencies rather than KSAs (Mankin, 2009). Cusveller (2012, p. 432) defines a competency as ‘integrated units of KSAs necessary to solve clinical problems or to provide clinical products.’ Peguero et al (2015, p. 14) mention that KSAs are required to keep up with competency demands. The South African Nursing Council Act (No 33 of 2005, p. 1) refers to competencies as ‘a level of performance demonstrating the effective application of knowledge, skills, judgement and personal attributes required to practice safely and ethically in a designated role and setting’. According to the South African Nursing Council (2005) professional nurses are considered competent when they have ‘the ability to integrate and apply the knowledge, skills, judgement, attitudes, values and abilities required to practise safely and ethically in a designated role and setting’. Competencies are therefore broader descriptions of the KSAs needed by employees to perform optimally in their jobs (Blanchard & Thacker, 2004). HRD can also use the learning needs analysis process to draft a competency profile for prospective conserved nurses.
Wolfson (2016, p. 162) proposed a generic process for the execution of a learning needs analysis consisting of the following steps: (1) the collection of information and identification of problems; (2) consulting management to determine whether the problem is related to training; (3) whether the problem is training-related and composes and identifies the relevant criteria; (4) the selection of a data collection method that fits the problem being analysed; data collection, analysis of results, identification of gaps and drawing conclusions; reporting of results and making recommendations to management; and (7) selecting or designing interventions. Since this study focussed on micro-level learning needs the steps of the process were however adapted to suit the context of the study. This is in line with Wolfson’s (2016) recommendation that the learning needs analysis may be adapted to fit the context in which it is being used.

HRD must be strategically involved in the alignment of ETD initiatives with organisational strategy. One of the key functions of HRD to achieve the aforementioned is its involvement with the learning needs analysis processes. HRD does not possess detailed knowledge of all the different jobs and professions within organisations (i.e. CPEs) and should therefore involve relevant stakeholders who are knowledgeable about the specific job being analysed. In the current study these stakeholders were external to the CPE (Mankin, 2009).

The current study contributes to a larger project in which a competency profile for comserve nurses is developed via a learning needs analysis. The larger project involves a 360-degree learning needs analysis and therefore included participants from the CPE (nursing managers and comserve nurses) as well as the NEI (nurse educators and final-year nursing). The current study contributed to the larger project by focussing on NEIs (nurse educators and final-year nursing students). The KSAs identified both for final-year nursing students and nurse educators in the current study were determined separately and then integrated into a competency profile to reflect the learning needs as perceived from the perspective of NEIs. An alternative study (in progress) focuses on the learning needs within the CPEs and includes the nursing managers and comserve nurses as participants. Integrating the results of the current study with that of the alternative study will provide a competency profile for nursing education as perceived by all the participants and therefore complete the 360-degree learning needs analysis of the larger project.
Research questions
The current research study will pose the following questions:

Article 1:
- How are the concepts learning needs analysis, knowledge, skills, attitudes, community service nurses and quality patient care conceptualised from the literature?
- What are the perceptions held by nurse educators’ regarding KSAs needed by prospective comserve nurses to enable them to deliver quality patient care?
- What are the perceptions held by final-year nursing students’ concerning the KSAs needed by prospective comserve nurses to enable them to deliver quality patient care?
- What recommendations can be made for future research, training and practice?

Article 2:
- How are the concepts learning needs analysis, knowledge, skills, attitudes, competency profile, community service nurses and quality patient care, conceptualised from the literature?
- What will a competency profile for prospective comserve nurses look like while integrating the perceptions held by nurse educators and final-year nursing students?
- What recommendations can be made for future research, training and practice?

1.2 Expected contribution of the study
1.2.1 Contribution for the individual
The needs analysis will result in improved ETD for prospective comserve nurses. This may build their confidence and make the transition from student nurse to comserve nurse less stressful. When these nurses are competent in delivering quality patient care they will also experience the satisfaction of observing the difference they can make in their patients’ lives. For those already appointed as comserve nurses there are the prospect that training is available to address inadequacies in their skill set.
1.2.2 Contribution to the organisation
This study will contribute to CPEs (public hospitals and PHC facilities) as well as NEIs (nursing colleges and universities that provide nursing education). CPEs will receive well-trained and confident comserve nurses who are capable of fulfilling the duties which are required for quality patient care. CPEs may expect higher productivity from these nurses and less complaints from other staff members and patients. The identification of learning needs will also ensure that the ETD initiatives of HRD are aligned with that of the CPE. This will address the main strategic goal of CPEs, namely quality patient care. When sharing the results of the learning needs analysis with NEIs it may close the theory-practice gaps that exist between nursing education and the requirements of the CPE. For the NEI the needs analysis may have the advantage of rendering nursing education that is aligned with the requirements of CPEs. The quality of education will improve and may also attract more students.

1.2.3 Contribution to human resource management literature
HRD as function or sub-function of human resource management can contribute towards the attainment of organisation goals. A proactive approach towards needs analysis will address potential problems for organisations before they occur. The indirect effect of aligning ETD initiatives with the strategy of the CPE may include higher productivity of the CPE, less complaints by fellow employees or patients, less disciplinary actions taken against comserve nurses, less retraining needed as well as an improvement of the image of the CPE.

1.3 Research design and method
1.3.1 Research design
The research design can be seen as a guide to be followed during the research study and it enables researchers to find answers to the questions in their studies in the most valid, objective, accurate and economic manner (Kumar, 2014). It is also seen as a plan that provides details of the different methods and procedures which are applied during the research process (Kumar, 2014). In the following section the researcher described how the research objectives of this study were addressed by applying the most appropriate research approach and research strategies.
1.3.2 Research Approach

This study followed a qualitative research approach also known as an unstructured approach (Kumar, 2014) within a constructivism paradigm (Creswell, 2014). The qualitative research approach seeks an understanding of the problems that exists, and attempts to describe and understand the problem from the participant’s viewpoint (Fouché & Delport, 2011). This approach does not only emphasise the descriptive and narrative manner in which the findings are communicated, but also the description and narration of feelings, perceptions and experiences discovered in the study (Kumar, 2014).

The current study was grounded within the constructivism paradigm this ontology assured the researcher that reality can only be known if questions can be answered accurately through interviewing participants who have experience and knowledge of a topic (Fouché & Schurink, 2011).

Constructivism is a paradigm that can be used to approach qualitative research and entails the understanding of the world (Creswell, 2014). In trying to understand the world, individuals try to gain perspective or develop a subjective meaning of experiences they go through, these meanings are usually directed at a certain object (Creswell, 2014). In a constructivist approach, the goal of the researcher is to rely on the participants’ views of the situation, and the constructivist researcher uses these views to interpret the meanings thereof rather than to create a theory (Creswell, 2014). Therefore the interpretivism (which is the epistemology of this research) is done by gaining knowledge from understanding the meanings that the participants attach to a topic (such as the views and perceptions of the participants) (Fouché & Schurink, 2011).

In this study the constructivism paradigm is appropriate, since the researcher will explore and describe not only the perceptions of the nursing educators but also those of final-year nursing students concerning the KSAs needed by prospective comserve nurses for delivering quality patient care. These empirical findings will assist the researcher in developing a competency profile for prospective comserve nurses with a view to improve quality patient care.

1.3.3 Research Strategies

The following section addresses the exploratory and descriptive strategies used in this study.
1.3.3.1 Exploratory research strategy
The exploratory strategy assists the researcher in becoming familiar with the details and facts of the problem so as to construct a general idea of the circumstances arising from the situation (Fouché & De Vos, 2011). According to Fouché and De Vos (2011), exploratory research is conducted when basic facts needed in an area of interest are lacking, which are in this study, the KSAs needed by comserve nurses for delivering quality patient care.

1.3.3.2 Descriptive research strategy
Descriptive research describes the attitudes of participants towards an issue, or it describes problems, situations or services (Kumar, 2014) as well as an area of interest (Hesse-Biber & Leavy, 2011). This type of research relies on information obtained from interviews, as was the case in this study. Descriptive research is an intensive examination of an existing problem and the deeper meanings thereof, which leads to a denser description of the problem (Miller & Salkind, 2002; Rubin & Babbie, 2011). Therefore this strategy is applicable because a severe examination of an area of interest and detailed description was performed regarding the perceptions held by nursing educators and final-year nursing students concerning the KSAs needed by comserve nurses.

1.4 Research Method
The research method consists of the literature review, research setting, entrée and establishing researcher roles, research participants and sampling methods, data collection method, data recording, strategies employed to ensure data quality and integrity, data analysis and reporting style.

1.4.1 Literature review
A literature review was performed with regard to learning needs analysis, knowledge, skills, attitudes, competency profiles, community service nurses, comserve nurses, nursing educators, final-year nursing students and quality patient care. Relevant articles, published between 2007 and 2018, were obtained by utilising the following search engines: S AePublications, EbscoHost, Emerald, GoogleScholar, SACat, Academic Search Premier, Nexus, ProQuest, Google Scholar and Science Direct.

1.4.2 Research setting
The research was conducted at NEIs offering nursing education on two campuses in a province of South Africa which included two nursing colleges and a Nursing School on two campuses of one university.

1.4.3 Entrée and establishing researcher roles
This research proposal was submitted and presented to the Universities Research Ethics Committee for scientific review and approval. Once ethical approval had been obtained (ethical approval number EMS 15/02/25-01/02/01) (see Appendix A) the researcher contacted the Director of Policy, Planning, Research, Monitoring and Evaluation of the Department of Health in a province of South Africa (see Appendix B) to apply for approval to continue with data collection within the two nursing colleges.

After having received approval from the Provincial Department of Health (see Appendix D) the principals of both the nursing colleges in the province were contacted and approval to continue with the study was obtained from them. During the same time the researcher also requested approval from both the Directors at the School of Nursing Sciences of the university providing nursing education at two campuses (see Appendix C) in the specific province. Approval to continue with the study was obtained from the Directors at both campuses of the university (see Appendix E). Once approval had been obtained the researcher commenced with data collection. Although the researcher obtained approval to conduct the study from all four NEIs, only two Colleges and a Nursing School on one campus were included as the other campus had student disruptions during the time of data collection, making it unsafe for the researcher to enter the campus or contact the nursing educators and final-year nursing students. Therefore that campus was excluded.
The participants in this study had the right to privacy, confidentiality and anonymity. According to Strydom (2011, p. 119), every participant has the right to privacy and the participants have the ‘right to decide when, where, to whom and to what extent his or her attitudes, beliefs and behaviour will be revealed’. Confidentiality can be seen as an agreement between the researcher and the participant that ‘limits others access to private information’ (Strydom, 2011, p. 119). All the semi-structured individual interviews were conducted in a private reserved room of each of the Nursing Colleges and University at the participants’ own convenience where the participant’s amenities were fulfilled such as adequate ventilation, good light and comfortable chairs. The researcher ensured privacy and confidentiality by placing a ‘do not disturb’ sign and a notification of ‘interviews in progress’ onto the outside of the door to prevent interruptions while the interviews were being conducted. All the interviews \(N=42\) conducted were anonymous by not mentioning the participant’s name and only attaching a code to the interview. The electronic documents were stored safely, with password protection, which were not accessible to others and all hard copies were shredded after completion of the analysis.

In this study all the participants were treated fairly because there was no exclusion or inclusion based on race, culture, social values and sexuality preference. Interviews were conducted with all the participants whatever their race, culture, social values and sexuality preference. Before any of the interviews commenced the researcher received training from a mentor with experience and sufficient knowledge of the interviewing technique. The researcher verbally explained the purpose of the study again, the role of the interviewer, the time required to conduct the interview, confidentiality of information, as well as the use of a digital recording device and the writing of field notes after the interviews. After the researcher had made sure that the participants understood the purpose of the study and were willing to participate by obtaining a verbal agreement, the researcher asked each participant to read an information letter and sign a voluntary consent for (see Appendix F). In this consent form a detailed overview was given of the procedure of the study which included that the participants were subjected to recording and questioning during the interviews. The purpose of this study and the approximate duration of the interviews were also given.

Strydom (2011) emphasises that every individual has the right to self-determination, which indicates that the participants have the right to make their own decisions. The participants for this study decided for themselves whether they wished to participate in the interviews. It is of utmost importance that participants voluntarily approve to participate in a research study and
that they are not forced to participate (Struwig, Struwig & Stead, 2001). Each participant was assured verbally and the consent form also informed that they could withdraw from the interview at any stage, without incurring any penalty, should they feel uncomfortable answering the questions. All the interviews were conducted in English and the interview questions were developed in such a manner that the participants were protected from emotional harm.

After each interview the researcher wrote field notes. Field notes assisted the interviewer to recall details such as experiences and observations made during the interviews (Greeff, 2011). All the interviews lasted between 15 and 40 minutes. The interviews were then transcribed by an independent transcriber on an Excel document. Co-coders assisted the researcher with data analysis. Data was analysed using thematic analysis (Braun & Clark, 2006) following a deductive approach (Braun, Clark & Jerry, 2014) (see 1.4.8.1) because the researcher asked questions that specifically focussed on specific categories which included knowledge, skills and attitudes to improve quality care. The findings were reported after completion of the data analysis. The researcher played the roles of a planner, organiser, interviewer, data analyst and reporter, and ensured that all the ethical considerations were followed.

1.4.4 Research participants and sampling methods
The researcher used multi-level sampling which included all-inclusive sampling and purposive sampling.

The all-inclusive sampling of NEIs consisted of two nursing colleges \((N=2; n=2)\) and one university providing nursing education at two different campuses \((N=2; n=1)\) in a province of South Africa.

Purposive sampling affords the researcher the opportunity of applying his or her own judgement in order to include specific characteristics that represent the studied population (Grinnell & Unrau, 2008; Monette, Sullivan, De Jong & Hilton, 2014) to ensure that the best results are obtained. Purposive sampling was used to include nurse educators who are responsible for lecturing nursing modules as well as final-year nursing students. These students were busy with their final year of study in order to obtain a diploma or degree and are obligated to practice as comserve nurses in the year following completion of their studies.
The inclusion criteria for nurse educators were as follows:

- Nurse educators had to be responsible for lecturing nursing modules to either 4 year nursing diploma or degree students, which lead to registration as professional nurses at the SANC. This ensured that the nurse educators knew the KSAs taught and what was necessary for prospective conserve nurses;
- Educators had to be diverse in terms of age, gender and culture;
- Educators had to be able to speak and understand Afrikaans and/or English;
- Nurse educators had to volunteer to participate; they had to sign a consent form and to agree to the recording of the interview; and
- Nurse educators had to be employed in one of the NEIs included in the study.

The inclusion criteria for nursing students were as follows:

- Final-year nursing students had to complete their diploma or degree during the 2016 academic year and start working through their compulsory community service year in 2017;
- These final-year nursing students also had to work with conserve nurses in practice and could therefore share their perceptions on what the necessary KSAs for conserve nurses should be;
- Students had to be diverse in terms of age, gender and culture;
- Students had to be able to speak and understand Afrikaans and/or English;
- Students had to volunteer to participate; they had to sign a consent form and agreed to the recording of the interview; and
- Students had to be enrolled in one of the NEIs included in the study.

1.4.5 Data collection method

Data was collected from all the participants by conducting semi-structured individual interviews. Greeff (2011) explains that semi-structured interviews assist the researcher in obtaining a comprehensive picture of the perceptions held by the participants on the specific topic under study.

Before data collection commenced pilot-test interviews were conducted. A pilot-test interview gives the researcher an opportunity to ensure that the interview questions are relevant and
correctly phrased and understood by the interviewees (Matthew & Ross, 2010). Should problems be identified with the research questions, it can be rectified before the actual interviews are conducted during the main study. Strydom (2011) adds that a pilot-test assists the researcher in ensuring that the study eventually is effective and successful. In this study two nurse educators and three final-year nursing students were included in the pilot-test who either spoke Afrikaans or English. All the questions were clearly understood by the interviewees and the questions were included in the interview schedule.

Before data collection commenced, the researcher informed each of the participants about the interview date, time and location where the interviews would take place. An interview schedule was developed for the nurse educators as well as the final-year nursing students to ensure that the questions that were posed during the interviews yielded the desired results for the success of the study (see Appendix G & H). The interview schedule was followed during each of the interviews. The interview schedule consisted of open-ended questions that guided the interview. Open-ended questions are useful for conducting an interview since a wider perspective of the participants’ opinions, attitudes and perceptions can be obtained (Kumar, 2014).

A total of \((N=42)\) semi-structured individual interviews were conducted consisting of \((n=23)\) nurse educators and \((n=19)\) final-year nursing students. The researcher continued interviewing until data saturation was reached. The interviewer used probing and clarified questions to illuminate vague responses in order to enable the participants to elaborate on their answers (Welman & Kruger, 2001). Each interview lasted approximately 15 – 40 minutes.

The following questions were put to the **nursing educators** and the **final-year nursing students**:
Table 1

Interview questions posed to nurse educators and final-year nursing students

<table>
<thead>
<tr>
<th>Interview Questions</th>
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<tbody>
<tr>
<td>According to you:</td>
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<tr>
<td>1. What does quality patient care mean to you?</td>
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<tr>
<td>2. Based on your own experiences, what do you think the challenges are that conserve nurses are faced with when attempting to deliver quality patient care?</td>
</tr>
<tr>
<td>3. What do you think must be done by NEIs to overcome these challenges conserve nurses are faced with when attempting to deliver quality patient care?</td>
</tr>
<tr>
<td>4. Do you think the problems CPEs experience with regard to quality patient care is due to a lack of KSAs? Why and why not?</td>
</tr>
<tr>
<td>5. Which of these three concepts knowledge, skills or attitudes (KSAs) do you think is the biggest problem? Prioritise them from 1 – 3 and elaborate.</td>
</tr>
<tr>
<td>6. Do you think the training nursing students receive at NEIs is adequate in assisting them in developing the necessary KSAs for delivering quality patient care? Please elaborate.</td>
</tr>
<tr>
<td>7. Do you think the nursing curriculum is presented by the NEI in such a manner that the focus is on the KSAs which nursing students need to effectively deliver quality patient care? Please elaborate.</td>
</tr>
<tr>
<td>8. What should the NEI focus on more with regard to KSAs?</td>
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<tr>
<td>9. What should the NEI focus on less with regard to the KSAs?</td>
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<tr>
<td>10. What does the NEI currently focus on with regard to the KSAs?</td>
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<tr>
<td>11. In your opinion, what knowledge does a prospective conserve nurse need to be able to deliver quality patient care?</td>
</tr>
<tr>
<td>12. In your opinion, which skills does a prospective conserve nurse need to be able to deliver quality patient care?</td>
</tr>
<tr>
<td>13. In your opinion, which attitudes does a prospective conserve nurse need to be able to deliver quality patient care?</td>
</tr>
</tbody>
</table>

1.4.6 Data recording

The interviews were recorded with a digital recorder, and field notes were taken immediately after the interview. Thereafter, the interviews were transcribed by an independent transcriber onto an Excel spread sheet. Codes were given to mark the interview recordings of each participant and in so doing the recordings remained anonymous. Once data analysis was completed the electronic copies were deleted from the computer and the paper copies were shredded. To ensure that the original recordings of the interviews and the transcribed data are stored safely the original recordings of the interviews and the transcribed data were placed on a memory stick and will be safely stored for 5 years.

1.4.7 Strategies employed to ensure data quality and integrity

In this research study, appropriate guidelines were followed to ensure that data collection and analysis was of good quality. Semi-structured individual interviews were conducted based on an interview schedule that ensured that the researcher asked the same questions to all the
participants; thereby ensuring consistency. Field notes were taken and written afterwards to ensure the researcher remembered the context in which the interviews had taken place. An independent transcriber was used to transcribe the data and thereafter the researcher and co-coders analysed the data using deductive thematic data analysis.

Botma et al. (2010) define trustworthiness as having four standards to ensure validity and reliability in qualitative research. In this research, the truth value, applicability, consistency and neutrality standards are used to ensure quality and trustworthiness. These standards are discussed below in more detail.

**Truth value (Credibility)**
The technique used to ensure epistemological standard of truth value in qualitative research is credibility. Klopper and Knobloch (2010) point out that credibility (truth value) can be seen as the self-assurance the researcher has concerning the research design, information, participants and the accuracy of the findings. The goal of credibility is to ensure that the study was done in such a manner that the problem investigated is accurately recognised and described (Schurik, Fouché & De Vos, 2011). To ensure that the findings were credible, the researcher used appropriate and trusted qualitative research methodology in this study.

Klopper and Knobloch (2010) contend that various techniques exist to ensure credibility of data, which will be discussed. Prolonged engagement suggests that the researcher collects data until data saturation is reached and it is important in the data collection section that an in-depth understanding of the views the participants have of a particular issue are gained. Prolonged engagement was adhered to during collection as a total of \((N=42)\) interviews were conducted until data saturation had been reached and an in-depth understanding of the topic was gained. Purposive sampling of the population was done prior to conducting the semi-structured individual interviews to ensure the correct population which could give the richest data to reach the general objective of the study. In this study the population included nurse educators and final-year nursing students. Thus prolonged engagement (in-depth understanding and data saturation) and purposive sampling (specific population) was used to assist the researcher in ensuring that the empirical data necessary for reaching the objectives of the study were correct.

The interviews were recorded verbatim and field notes were taken after the interviews to assist
the researcher in reflecting on interviews during data analysis. Data analysis was done with the assistance of a co-coder. Thereafter the supervisors of the study of which one had a nursing background also assisted in ensuring the credibility of the findings. Lastly a detailed description of the findings was given which also ensured the credibility of the study.

**Applicability (Transferability)**

The epistemological standard of applicability used in qualitative research is transferability. Transferability refers to the extent to which findings ‘can be transferred to other contexts and settings, and the ability to generalise from the findings to larger populations’ (Klopper & Knobloch, 2010 p. 320-321).

All-inclusive and purposive sampling was used to ensure the population was representative of the study objectives. Data saturation implies that the number of participants needed for a study is determined by the depth of information that is needed to increase insight into an issue (Klopper & Knobloch, 2010). In other words, the total number of participants needed to participate in a study is determined by the most applicable and in-depth information that is needed concerning a problem or issue that exists. In this study the researcher collected data until data saturation was reached and no new knowledge had merged during the interviews. A total of \(N=42\) interviews were conducted, \(n=23\) with nursing educators and \(n=19\) with final-year nursing students.

Data was analysed with the assistance of a co-coder from the School of Industrial Psychology and Human Resource Management. The researchers also had a co-supervisor from nursing to ensure the data was correctly interpreted and that findings were written in a logical manner. The researcher also provided a rich description of the research design and method which included the research setting, entrée and researcher roles, sampling methods, data collection method, recording of data and data analysis used in this study. Hence this study could be repeated in another context to evaluate contextual similarity.

**Consistency (Dependability)**

The techniques used to ensure the epistemological standard of consistency in qualitative research is dependability. Dependability focuses on the reliability of the study. If the study is repeated on the same population within the same context, the findings should be similar or comparable (Klopper & Knobloch, 2010). Dependability also refers to ‘the stability of data
over time and conditions’ (Klopper & Knobloch, 2010, p. 322). In this study dependability was ensured by giving a full description of the research design and method and a co-coder was used during data analysis. In addition, the researcher’s supervisors assisted in the reduction of the analysed data.

**Neutrality (Confirmability)**

The techniques used to ensure the epistemological standard of neutrality in qualitative research is confirmability. Confirmability refers to the evidence the researcher provides in order to ensure that the findings and the interpretations are valid (Schurink, Fouché & De Vos, 2011). Klopper & Knobloch (2010, p. 322) explain confirmability (neutrality) to be the objective collection, analysis of data and interpretation of data, to ensure personal biases, interests and perspectives of the researcher does not interfere with the research results. In this study the researcher used the correct research method and was guided by an interview scheduling data collection, and a co-coder also assisted with data analysis.

**1.4.8 Data analysis**

In this study, the researcher made use of thematic data analysis.

**1.4.8.1 Thematic analysis**

Thematic analysis is a method that can be used for identifying, analysing and reporting the themes within the data. A deductive approach to data coding and analysis was followed for thematic analysis in this study in contrast to the inductive approach. A deductive approach is a top-down approach which is followed when the researcher already has available predetermined codes (main themes) based on concepts, ideas or topics for interpreting the data (Braun, Clark & Terry, 2014). In this study the predetermined main themes was knowledge, skills and attitudes.

Braun and Clarke (2006) highlight the six phases of thematic data analysis, namely *phase one* (familiarise yourself with the data) it is important that the researcher should familiarise him or herself with the data to obtain a depth and breadth overview thereof. This includes actively reading, re-reading and transcribing the data. This starts with writing down ideas and taking notes during the research. *Phase two* (generating initial main themes) after the researcher is familiar with the data and has a list of ideas about the contents of the data, the researcher will begin to code the data to form a systematic order which includes organising the data set so that
it is relevant to its assigned codes. This assists the researcher to identify interesting aspects within the data. However, in this study a deductive approach was used, therefore predetermined main themes were used. These predetermined main themes included 1: knowledge, 2: skills and 3: attitudes. Undetermined sub-themes and sub-sub-themes were developed within each of the separate main themes.

Phase three (searching for themes). Once the data were coded, the researcher organised the data into different themes relevant to each potential. This assisted the researcher in analysing the themes and categorizing them into smaller and more comparable sub-themes and sub-sub-themes. This created an overview of how the different codes can combine to form an overlapping theme and to see the relations between the different levels of the themes. Phase four (reviewing themes). During this phase the researcher reviewed the themes that were assigned to determine whether it collaborates within the data set. Reviewing of the themes was done with the assistance of the co-coder from the human resource department and co-supervisor from the nursing environment in order to refine, merging and separating certain sub-themes and sub-sub-themes. This phase also granted the researcher the opportunity of identifying potential problematic sub-themes or sub-sub-themes which should rather be changed to fit with another main or sub-theme or totally removed from analysis. Thereafter, the entire data set was reviewed to ensure the coding and themes were correct.

Phase five (defining and naming themes). In this phase the researcher, with the assistance of the co-coder and supervisors, defined and refined the sub-themes and sub-sub themes that emerged during data analysis under the main themes. Each of the sub-themes and sub-sub themes was given meaning and the relationships were determined to prevent overlapping. Names were allocated to each of the sub-themes and sub-sub themes and the researcher ensured that the names reflected the accurate content of the data. Phase six (producing the report). Once all the themes had been assigned, the researcher and co-coders ensured that the themes, sub-themes and sub-sub themes collaborated with each other and followed a consistent pattern. Tables were used to report the data. Each of the main themes, sub-themes and sub-sub-themes were reported in table format. Each of the sub-sub-themes were substantiated with responses from the participants (see Article 1, Table 4 & 5).

In order to develop a competency profile for the purpose of Article 2, summary tables were
developed for each of the main themes: knowledge (Article 2, Table 2), skills (Article 2, Table 3) and attitudes (Article 2, Table 4). These tables compared the similar and unique sub-themes and sub-sub themes related to the perceptions of nursing educators and final-year nursing students about the KSA’s needed by prospective conserve nurses for the delivery of quality patient care. The KSA were all identified during phase 1 of the study. The findings as indicated in the summary tables (Article 2, Tables 2, 3 and 4) were integrated in order to develop a competency profile for prospective conserve nurses (Article 2, Table 5).

1.4.9 Reporting style
The findings of this research are displayed in tables containing the themes, sub-themes and sub-sub-themes which are reported in a qualitative writing style. The sub-sub-themes are followed by direct quotations to indicate to the reader their truth value.

1.5 Overview of the chapters
The chapters in this dissertation are presented as follows:

Chapter 1: Introduction
Chapter 2: Research article 1
Chapter 3: Research article 2
Chapter 4: Conclusions, limitations and recommendations

1.6 Chapter summary
This chapter focussed on the problem statement, expected contributions of this study, research objectives, research design and method, followed by an overview of the chapters.
References


Braun, V., Clarke, V., & Terry, G. (2014). Thematic analysis. Qualitative Research Clinical Health Psychology, 24, 95-114


CHAPTER 2

RESEARCH ARTICLE 1
EXPLORING THE KNOWLEDGE, SKILLS AND ATTITUDES NEEDED BY PROSPECTIVE COMMUNITY SERVICE NURSES FOR DELIVERING QUALITY PATIENT CARE

Abstract

Orientation: Human resource development as a function or sub-function of human resource management can assist clinical practice environment to reach their main goal of delivering quality patient care. This can be achieved by directing education, training and development initiatives towards this goal. To achieve this, human resource development in conjunction with nursing stakeholders can conduct a learning needs analysis to determine the knowledge, skills and attitudes required from prospective comserve nurses to enable them to deliver quality patient care when entering the CPE.

Research purpose: The purpose of this study was to determine the perceptions held by nurse educators and final-year nursing students concerning the knowledge, skills and attitudes needed by comserve nurses for delivering quality patient care when entering the clinical practice environment.

Motivation for this study: A gap exists in research regarding the specific competencies (knowledge, skills and attitudes) needed by comserve nurses for delivering quality patient care when entering the clinical practice environment.

Research approach, design and method: A qualitative research approach using exploratory and descriptive strategies was followed. Semi-structured individual interviews were conducted with two populations, namely nurse educators (n=23) and final-year nursing students (n=19). Data were collected at nursing education institutions in a province of South Africa. A deductive thematic analysis was performed to analyse the data. Three pre-determined main themes, namely Knowledge, Skills and Attitudes were used in the analysis.

Main findings: Results of both populations revealed that the main theme knowledge consists of theoretical, practical and holistic knowledge, cultural diversity and code of conduct. The main theme skills revealed interpersonal, cognitive, management, administrative, practical and personal skills and lastly the main theme attitudes consisted of being positive, caring,
compassionate, humble, non-judgemental, helpful, sensitive, passionate, friendly, approachable, empathetic, life-long learning and a willingness to walk the extra mile for others.

**Practical/managerial implications:**
Human resource development should be actively involved in assisting management with the identification of learning needs in order for them to proactively address any learning deficiencies that may have a negative impact on CPEs.

**Contribution:** Knowledge, skills and attitudes needed for delivering quality patient care by community service nurses were identified by means of a learning needs analysis.

**Key terms:** Human Resource Development, learning needs analysis, community service nurses.
Introduction

Orientation

As a section or sub-section of human resource management, human resource development (HRD) is becoming more strategically involved in the alignment of education, training and development with the strategic goals of organisations. This should also be the case in the public health sector to ensure that the health outcomes of clinical practice environments (CPEs) are reached. One such outcome is delivering quality patient care. Annually newly graduated nurses, also known as community service nurses or comserve nurses, are placed in these CPEs to complete their compulsory community service year.

The 2011 National Nursing Summit identified nursing education, training and development (ETD) as a significant challenge for the South African nursing profession. Nursing ETD was regarded as inadequate, resulting in nurses ending up in the CPE without having all the required competencies to function effectively (Department of Health, 2012). These competencies consist of the knowledge, skills and attitudes (KSAs) required from comserve nurses to enable them to deliver quality patient care (Leung, Trevana & Waters, 2016). A lack of specific competency criteria complicates the ETD situation even further in the sense that the specific required competencies are unclear (Leung et al., 2016). When nursing students do not develop the necessary competencies during their years of study it may have detrimental effects on those they care for. In addition, the transition from student nurse to comserve nurse may become a very stressful experience, especially in an environment that is renowned for high workloads, impeded infrastructures, staff shortages and lack of mentors (Rabie, 2016).

HRD can play a significant role in the future education, training and development of these nurses by conducting a learning needs analysis. As mentioned by Wolfson (2016), it is important to include relevant stakeholders such as education and training providers, critical interest groups and community groups when conducting such analysis. The learning needs analysis is used to determine the KSAs comserve nurses need to enable them to deliver quality patient care. Once these are determined, specific ETD interventions can be used to address the gaps that exist between these nurses’ existing KSAs and those they lack. A learning needs analysis can assist comserve nurses in being better prepared when entering the CPE, it can assist CPEs in reaching their strategic goals and it can assist external stakeholders such as Nursing Education Institutions (NEIs) in improving their nursing education so as to close the
gap between theory and practice.

The current study formed part of a larger project consisting of two separate studies. The intention of the larger project is to conduct a 360-degree learning needs analysis with a view to determine the KSAs needed by community service nurses to enable them to deliver quality patient care. These KSAs were based on perceptions held by participants only and not on existing nursing education curricula. The current study focussed on the perceptions held by nursing educators and final-year nursing students. These perceptions represented the views of the NEI. The alternative study (in progress) focussed on the perceptions held by nursing managers and community service nurses. These represented the perceptions that existed within the CPE. The larger project will also reflect a perceived competency profile for community service nurses that can later be compared with existing curricula to determine any educational gaps.

**Research purpose and objectives**

The purpose of this study was to determine the perceptions held by nurse educators and final-year nursing students concerning the KSAs needed by prospective community service nurses for delivering quality patient care on entering the CPE.

To reach the aim of the study, the following research objectives were set:

- To conceptualise the concepts learning needs analysis, knowledge, skills, attitudes, community service nurses and quality patient care from the literature.
- To explore and describe the perceptions held by nurse educators regarding KSAs needed by prospective community service nurses to enable them to deliver quality patient care.
- To explore and describe the perceptions held by final-year nursing students concerning the KSAs needed by prospective community service nurses to enable them to deliver quality patient care.
- To make recommendations for future research, training and practice.

**Literature review**

Human resource management plays an important role in achieving the strategic goals of organisations (Sathiyendran & Chandrasekar, 2017; Hassani, Mobarak, Bayat & Mafimoradi, 2013) and is a key factor in the triumph or failure of an organisation (Bastida, Marimon &
Human resource planning and HRD are two particularly important functions of human resource management for the achievement of strategic goals of organisations (Dressler et al., 2011). They complement one another in the sense that human resource planning ensures that the right employees with the right KSAs are appointed while HRD ensures that these employees are further developed to the extent that they are capable of supporting organisational objectives (International Council of Nurses, 2009; Meyer, 2016).

When looking at human resources for health, this also applies to the nursing context. The International Council of Nurses refers to human resources planning in nursing as the provision of ‘the right number of nurses with the right knowledge, skills and attitudes performing the right tasks in the right place at the right time to achieve the right predetermined health targets’ (International Council of Nurses, 2009, p. 4). Once individuals (i.e. conserve nurses (newly graduated nurses)) are employed, HRD will use its ‘processes, systems, methods, procedures and programmes’ to enhance their performance as well as that of the organisation or CPE, in context of this study (Meyer, 2016, p. 2). The present study focuses on HRD.

The International Council of Nurses emphasises the necessity of a competent workforce to ensure a well-functioning health system. According to them the application of sound HRD is needed to ensure that sufficient numbers of well-trained health professionals are available (International Council of Nurses, 2009). Human resource planning and HRD are important for ensuring that quality nurses are appointed, trained and developed who will contribute towards reaching the objectives of CPEs by delivering quality patient care (Elarabi & Johari, 2014).

Nurses are seen as the pillars of the healthcare system in South Africa (Swart, Pretorius & Klopper, 2015). Their delivering of quality patient care is important for reaching the health care targets of the CPEs in which they work. However, there are several gaps in delivering quality patient care, including shortages of staff, equipment and consumables, poor maintenance causing poor working conditions (Eygelaar & Stellenberg, 2012) and poor supervision and management of student nurses (Department of Health, 2012). Despite the drastic increase in the workloads of nurses (Eygelaar & Stellenberg, 2012) it was also found that many nurses, and especially conserve nurses, do not have the required comprehensive skills to function optimally and that several nursing functions are poorly supervised (Eygelaar & Stellenberg, 2012). Many nurses are not qualified in numerous nursing fields such as primary health care and do not receive continuing education, which contributes to poor coping in the
CPE. According to Rabie, Klopper and Watson (2016), gaps in delivering quality patient care include poor attitudes, amongst others, caused by staff shortages, high workloads and overcrowding. Oosthuizen (2012) added laziness, uncaring and negative attitudes, incompetence, ruthlessness and burnout. The Department of Health (2013) points out that competence is lacking among nurses and it is the responsibility of NEIs to ensure that students receive adequate training so as to enable them to deliver quality patient care.

In South Africa student nurses who completed their four-year degrees or diplomas must complete a compulsory community service year prior to becoming registered with the South African Nursing Council. Community service is described by the South African Nursing Act, (No. 33 of 2005) as a South African citizen, who plans to register to practise a profession for the first time in an arranged category, must complete paid community service for one year at a public health facility prior to becoming registered with the South African Nursing Council.

Comserve nurses (newly graduated nurses) face various challenges when entering the CPE for the first time as comserve nurses. They are expected to ‘hit the ground and run’, by immediately taking responsibility for and fitting into their new roles (Zhang, Wu, Fang, Zhang, Wong, 2017). Hlosana-Lunyawo and Yako (2013) add that several complaints have been lodged about newly graduated nurses such as poor record-keeping, protocols not being followed and the lack of knowledge and skills. These nurses also feel insecure and do not know whether they are adequately prepared once they enter the CPE (Hayes et al., 2006). The Department of Health (2013) agrees with this statement by mentioning that students are not fully prepared and lack competence when they are expected to immediately take the role of a professional nurse after completion of their studies.

HRD is responsible for the alignment of ETD with the strategic goals of organisations, including CPEs (Meyer, 2016). Together with other role players (i.e. nursing managers, nurses and doctors) HRD plays an important role in identifying and addressing learning-related gaps in nursing ETD. Addressing these gaps will ensure the delivery of quality patient care that contributes to the attainment of the strategic goals of CPEs. A learning needs analysis is an important tool for determining the learning needs of employees. The process thereof involves training problem identification, data collection with regard to the problem and the interpretation thereof. The information obtained through the analysis is used to design HRD interventions (training) to address the training problem (Opperman & Meyer, 2008). According to Wolfson
(2016) a learning needs analysis might lead to effective learning experiences, help to keep up with current developments, increase the effectiveness of the organisation and help to achieve HRD’s strategic purpose namely individual, group and organisational performance.

Wolfson (2016) proposes the following steps when conducting a learning needs analysis: (1) the collection of information and identification of problems; (2) consulting management to determine whether the problem is related to training; (3) if the problem is training related, compose and identify the relevant criteria; (4) selecting a data collection method that fits the problem being analysed; (5) data collection, analysis of results, identification of gaps and drawing conclusions; (6) reporting results and making recommendations to management; and selecting or designing interventions. The aforementioned steps were used as a guideline to conduct a learning needs analysis in the current study. This was done in order to determine the competencies needed by prospective consvere nurses. The steps can be adjusted to fit the context in which it is applied (Wolfson, 2016).

The term competence is a combination of the ‘complex attributes of KSAs’ (Leung et al., 2016, p. 190) to perform wisely in particular circumstances. A competency cannot be openly witnessed from a person’s behaviour but is determined by their performance. As a result competence can be explained as an individual’s ‘cognitive approach to a task, encompassing the multiple attributes of KSAs’ (Leung et al., 2016, p. 190). According to Rothwell (2012), a competency is a characteristic of a successful performer. Competencies relate to the individuals who are doing the work which leads to successful work results (Rothwell, 2012). In this study the competencies needed by prospective consvere nurses to enable them to attain the desired results in terms of quality patient care are described in terms of specific KSAs.

Knowledge refers to what people know. According to Hunter (2012, p. 30), knowledge ‘consists of information and the understanding of how to apply this information’. As a result of this, information includes several facts, standards, figures and values that relates to an occupation. Therefore knowledge is gained when employees (current and future) memorise the facts, understand principles and theories as well as know how to apply the information. Skills refers to what employees can do. According to Hunter (2012, p. 31), a skill is a ‘practised ability to perform a specific task’. Therefore employee skills ‘are the action part of performance’ which differ from knowledge where knowledge might or might not be applied (Hunter, 2012, p. 31). An attitude can be defined as a ‘lasting belief, feeling and tendency to
behave in a certain way towards a specific person, object, idea or issue’ (Hunter, 2012, p. 34). According to Mankin (2009) an attitude is a certain type of behaviour shown by employees in the workplace.

**Research design**

This research employed a qualitative research design. This section consisted of the research approach, research strategies and research method.

**Research approach**

A qualitative research approach, adopting exploratory and descriptive research strategies within a constructivism paradigm, was used in the study.

**Research strategies**

The constructivism paradigm was applicable to use in the current study because this ontology assured the researcher that questions can be answered more accurately and that reality can be known through interviewing participants that possesses the relevant knowledge and experience of a topic (Fouché & Schurink, 2011). The goal of a constructivist researcher is to interpret the meanings of participants’ views of a situation therefore relying on the views of participants (Creswell, 2014). In this study, interviews were done with participants that possess knowledge and experience of a topic and their views were interpreted.

Exploratory and descriptive research strategies were used. Exploratory research investigates an area that has not yet been researched and the obtained data may assist in future research (Hesse-Biber & Leavy, 2011). This strategy assists in gaining an understanding of a problem or a situation (Schurink, Fouché & De Vos, 2011). The current study explored the perceptions held by nurse educators and final-year nursing students regarding the KSAs needed by consente nurses to enable them to deliver quality patient care; the exploratory research design was therefore deemed appropriate. Descriptive research strategies richly describe aspects of an area of interest (Hesse-Biber & Leavy, 2011) and gives a detailed description of a situation (Schurink, Fouché & De Vos, 2011). This strategy is applicable because a detailed description was given regarding the nurse educators and final-year nursing students’ perceptions of the KSAs consente nurses need to deliver quality patient care in CPEs.
**Research method**

The research method entailed the research setting, entrée and the establishment of researcher roles, research participants and sampling methods; data collection methods, data recording, strategies for ensuring data quality and integrity, data analysis and reporting style.

**Research setting**

Data were collected at three NEIs within a province of South Africa. These consisted of a School of Nursing Sciences at one campus of a university as well as two Nursing Colleges.

**Entrée and the establishment of researcher roles**

Approval for the study was firstly obtained from the university’s Ethics Research Committee (Ethics number EMS 15/02/25-01/02/01) where after the approval was obtained for data collection from the Directors of the School of Nursing Sciences situated at the two campuses of the University. Ethical approval was also obtained from the Department of Health in order to conduct the study in the Nursing Colleges. Thereafter the principals of the two Nursing Colleges were contacted to request approval. Access to the participants for the purpose of data collection was then arranged via the directors of the School of Nursing Sciences and the principals of the two Nursing Colleges.

Participants had the right to self-determination and participation in the study was voluntary. Participants were informed about the purpose of the study and what to expect during the interviews after which an informed consent form was signed by each participant. Participants were assured that they may withdraw from the study at any time without incurring any penalty. The identities of the participants were protected by coding the interview schedules. After transcribing the interviews it was safely stored and electronic copies were password protected.
In terms of the roles of the researcher it was important to properly plan the entire data collection exercise which included obtaining the necessary ethical approval from the university and the Department of Health, the sampling techniques to be used and the actual data collection from the participants. As interviewer it was important to listen actively and to apply the necessary facilitation skills. In conjunction with an independent transcriber and co- coder the researcher also fulfilled the role of gathering, analysing and interpreting the data to ensure that the perceptions held by participants were accurately presented. As report writer the findings of the study had to be reported in a scientific manner without being influenced by personal beliefs, values or experiences (Creswell, 2014).

**Research participants and sampling methods**

A total sample of N=42 participants were included in the study. The sample (n=23) consisted of nurse educators lecturing practical and/or theoretical modules to student nurses who were enrolled for a 4-year integrated nursing diploma or degree in one of the selected NEIs. This ensured that the nurse educators knew the KSAs necessary for prospective conserve nurses. The (n=19) final-year student nurses needed to be enrolled in this diploma or degree in one of the selected NEIs. They had to complete their diploma or degree during the 2016 academic year and start working through their compulsory community service year in 2017. These final-year nursing students also had to work with conserve nurses in practice and could therefore share the perception they held of what the necessary KSAs for conserve nurses should be. Educators and final-year nursing students of any gender, age or culture were included as long as they were willing to participate and able to speak either English and/or Afrikaans. The demographic information of these participants is described below in table one and two. A multi-level sampling was used and included all-inclusive sampling and purposive sampling. The all-inclusive sampling consisted of two nursing colleges (N=2; n=2) and a campus of a university (N=2; n=1) in a province of South Africa. Initially the School of Nursing Sciences at the two campuses of the university were included but due to student protests and violence at the time of data collection one of the campuses was excluded for safety reasons. Purposive sampling was done for identifying participants within these settings.
Table 1
Characteristics of the nurse educators as participants (n=23).

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>19-29</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>30-39</td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>12</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
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<td>5%</td>
</tr>
<tr>
<td>Race</td>
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<td>48%</td>
</tr>
<tr>
<td></td>
<td>African</td>
<td>11</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td>Mixed race</td>
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<td>4%</td>
</tr>
<tr>
<td>Gender</td>
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<td>9%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
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</tr>
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<td>First language</td>
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<td></td>
<td>English</td>
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</tr>
<tr>
<td></td>
<td>Setswana</td>
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<td>10%</td>
</tr>
<tr>
<td></td>
<td>Xhosa</td>
<td>3</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Tswana</td>
<td>3</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Venda</td>
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<tr>
<td></td>
<td>Sesotho</td>
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<td>4%</td>
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<tr>
<td>Highest level of qualification (NQF level)</td>
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<td>52%</td>
</tr>
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<td></td>
<td>8</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
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</tr>
<tr>
<td>International experience</td>
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<td>Which country of international experience</td>
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</tr>
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<td>China</td>
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<td>4%</td>
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<td></td>
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<tr>
<td></td>
<td>Saudi Arabia</td>
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<td>4%</td>
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</tr>
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<td>Part time</td>
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<td>0%</td>
</tr>
<tr>
<td></td>
<td>Both</td>
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<td>Midwifery</td>
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</tr>
<tr>
<td></td>
<td>Community nursing</td>
<td>3</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Critical care nursing</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>Operating theatre nursing</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>Clinical health assessment, treatment and care</td>
<td>3</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Paediatric nursing</td>
<td>1</td>
<td>4%</td>
</tr>
</tbody>
</table>

Nurse Educators
Most of the nurse educators (52%) were aged between 50 and 59 while 34% of educators were aged between 30 and 49 (30 to 39 = 17% and 40 to 49 = 17%). The 19 to 29 age group only represented 9% of the sample while the 60 to 69 age group represented the least (5%). White and African participants represented 96% of the sample (48% White and 48% African); only 4% were represented by mixed race participants. The sample mainly consisted of females 21 (91%) with only 2 (9%) males included. Different African languages (44%) were mostly indicated as home language followed by Afrikaans (43%) and English (13%). As many as 52% of the nurse educators had NQF level seven (Bachelors degree) qualifications, 9% NQF level eight (Honours degree) qualifications; 30% NQF level nine (Masters degree)
qualifications and 9% had NQF level 10 (Doctoral degree) qualifications. Seventeen percent (17%) of educators had acquired international experience in Nigeria, China, Kenya and Saudi Arabia. Thirty one percent (31%) of nurse educators specialised in midwifery, 22% in general nursing, 13% in community nursing, 13% in clinical health assessment, treatment and care, 9% in critical care nursing, 4% in psychiatric nursing, 4% in operating theatre nursing and 4% in paediatric nursing. Most (96%) of the nurse educators were employed full-time.

Table 2
Characteristics of the final-year nursing students as participants (n=19).

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>19-29</td>
<td>15</td>
<td>79%</td>
</tr>
<tr>
<td></td>
<td>30-39</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Race</td>
<td>White</td>
<td>6</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>African</td>
<td>13</td>
<td>68%</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>4</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>79%</td>
</tr>
<tr>
<td>First language</td>
<td>Afrikaans</td>
<td>6</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>Tswana</td>
<td>4</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>Tsonga</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Sets Kiana</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Sotho</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Xitsonga</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Setswana</td>
<td>3</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>South Sotho</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>SiSwati</td>
<td>1</td>
<td>5%</td>
</tr>
</tbody>
</table>

Final-year nursing students
Most (79%) of the final-year nursing students were aged between 19 and 29, this was followed by the 30 to 39 age group (11%), the 40 to 49 age group (5%) and the 50 to 59 age group (5%). Africans made up 68% of the sample and white participants made up 32% of the sample. Males comprised 21% and females 79% females. African languages were spoken by 68% of participants while Afrikaans was spoken by 32% of the participants.

Data collection methods
Before data collection commenced a pilot-test was conducted with two nursing educators and three final-year nursing students. This ensured that the data obtained were applicable and that the interview questions were clear and understood by participants (Matthews & Ross, 2010). All interviews were conducted in a private room with comfortable chairs and a ‘do not disturb’ sign outside the door. Before data collection commenced the researcher firstly explained the
purpose of the study and after obtaining verbal consent, the participants received an information letter and informed consent from to sign. Once the consent forms were signed, data collection commenced. Semi-structured individual interviews were conducted in English, lasting 15 – 40 minutes each. The interviewer was guided by an interview schedule and the following questions were posed as indicated in table three below to the nursing educators and the final-year student nurses.

**Table 3**

*Interview questions posed to nurse educators and final-year nursing students*

<table>
<thead>
<tr>
<th>Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>According to you:</td>
</tr>
<tr>
<td>1. What does quality patient care mean to you?</td>
</tr>
<tr>
<td>2. Based on your own experiences, what do you think the challenges are that conserve nurses are faced with when attempting to deliver quality patient care?</td>
</tr>
<tr>
<td>3. What do you think must be done by NEIs to overcome these challenges conserve nurses are faced with for them to be able to deliver quality patient care?</td>
</tr>
<tr>
<td>4. Do you think that the problems which CPEs experience with regard to quality patient care is due to a lack of KSAs? Why and why not?</td>
</tr>
<tr>
<td>5. Which of these three concepts <em>knowledge, skills or attitudes</em> (KSAs) do you think is the biggest problem? Prioritise them from 1-3 and elaborate.</td>
</tr>
<tr>
<td>6. Do you think the training that nursing students receive at NEIs is adequate in assisting them in developing the necessary KSAs to deliver quality patient care? Please elaborate.</td>
</tr>
<tr>
<td>7. Do you think the nursing curriculum is presented by the NEI in such a way that the focus is on the KSAs which nursing students need for them to effectively deliver quality patient care? Please elaborate.</td>
</tr>
<tr>
<td>8. What should the NEI focus on more with regard to KSAs?</td>
</tr>
<tr>
<td>9. What should the NEI focus on less with regard to the KSAs?</td>
</tr>
<tr>
<td>10. What does the NEI currently focus on with regard to the KSAs?</td>
</tr>
<tr>
<td>11. In your opinion, what knowledge does a prospective conserve nurse need to be able to deliver quality patient care?</td>
</tr>
<tr>
<td>12. In your opinion, which skills does a prospective conserve nurse need to be able to deliver quality patient care?</td>
</tr>
<tr>
<td>13. In your opinion, which attitudes does a prospective conserve nurse need to be able to deliver quality patient care?</td>
</tr>
</tbody>
</table>

**Data recording**

With the permission of the participants the interviews were recorded and field notes were taken. Data was transcribed by an independent transcriber and the data analysed by the researcher and co-coder. All the information was presented in an Excel sheet and a co-coder was used to ensure quality before the findings were reported.
**Strategies employed to ensure data quality and integrity**

Credibility, transformability, dependability and confirmability were used as strategies to guarantee the quality and integrity of the data. Credibility (similar to validity in quantitative research) involves the extent to which the data as a whole is representative of the sample (Gauche, De Beer & Brink, 2017). Purposive sampling ensured that data were collected from the correct participants. An experienced co-coder in the field of Industrial Psychology and human resource management as well as a co-supervisor from the nursing education environment ensured that the data was correctly interpreted and representative of the sample.

The transferability (equivalent to external validity in quantitative research) of the findings from one setting to another was established with a methodological description of: (1) the context in which the study was conducted; (2) the sampling population (including all-inclusive and purposive sampling); (3) the data collection process (including the saturation of data); (4) the data analysis; and (5) the way in which the findings were written up (Gauche et al., 2017).

Dependability (similar to reliability in quantitative research) refers to the consistency and repeatable nature of the findings of a study (Shenton, 2004). Dependability was ensured by means of a proper methodological description that makes it possible for other researchers to repeat this study. The assistance of a co-coder during the data analysis process also contributed towards dependability.

Confirmability (similar to the concept of objectivity) refers to the validity of the results and the interpretations provided by the researcher. To ensure confirmability it was important for the researcher to set aside any personal beliefs and assumptions that may have impacted on the objectivity with which data were interpreted and the results reported (Shenton, 2004).

**Data analysis**

Thematic analysis was used for analysing the data. A deductive approach to data coding and analysis was followed for purposes of this study. In contrast to the inductive approach, a deductive approach is a top-down approach which is followed when the researcher already has available predetermined codes based on concepts, ideas or topics for interpreting the data (Braun, Clark & Terry, 2014), in this study KSAs. All the interviews were transcribed verbatim. The six phases of thematic analysis as proposed by Braun and Clarke (2006) were followed. During *phase one* the researcher and co-coder familiarized themselves with the data so as to
form an idea of all the data gathered. In the second phase the initial predetermined codes: code 1: knowledge; code 2: skills and code 3: attitudes were identified. The undetermined sub-themes and sub-sub-themes were developed within each code. During phase three, the researcher searched for potential sub-themes and sub-sub-themes. The themes were analysed and categorised into smaller and similar sub-themes and sub-sub-themes to combine and form overlapping themes. In phase four the researcher collaborated the themes into two levels. Firstly by re-reading the organised extracts in each theme to determine whether it follows a consistent pattern. Secondly the entire data set was included and validated. Phase five involved defining and naming the themes. The themes were refined and the importance of each theme was determined. This assisted in determining which aspect of the data estimated each theme. Lastly, during phase six, a report was produced by collaborating all the themes to ensure a consistent pattern. The report contained adequate evidence concerning the themes within the data.

**Reporting style**

The findings were captured onto an Excel sheet and reported in a qualitative writing style following the APA and SAJIP guidelines for reporting the findings. From the data themes, sub-themes and sub-sub-themes were extracted from the interviews and direct quotations were used to validate the data. The main themes, sub-themes, sub-sub-themes as well as the direct responses were noted down on an Excel sheet. The interviews were conducted in English and some of the interviews in Afrikaans, after transcribing the Afrikaans data the information was translated into English by a language editor.

The main themes were stated in the first column (see Tables 4 and 5, Column 1), followed by the sub-themes (see Tables 4 and 5, Column 2), sub-sub-themes (see Tables 4 and 5, Column 3) and lastly a direct extraction from the interview was included next to the sub-sub-theme (see Tables 4 and 5, Column 4).

**Results**

The results obtained from the research are presented below. The perceptions of the nurse educators as well as those of the final-year nursing students concerning the KSAs needed by conserve nurses to deliver quality patient care are reported. The categories and themes were extracted from the interviews and direct quotations were used to confirm the results. Table 4
reports on the nurse educators’ perceptions while Table 5 reports on the perceptions held by final-year student nurses.

The coding at the end of the expert for example EIP06:138 indicate ‘E’ for educator, ‘I’ for interview and the last letter is a code for the NEI (there are three different letters P, E and M), 06 is the participant number and 138 is the line from which the excerpt is drawn.
Table 4

Nurse educators’ perceptions of KSAs needed by prospective conserve nurses to enable them to deliver quality patient care

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-theme</th>
<th>Sub-sub theme</th>
<th>Extractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Theoretical knowledge</td>
<td>Anatomy and physiology</td>
<td>‘A really good underpinning of anatomy, physiology and pharmacology.’ (EIP06:138)²</td>
</tr>
<tr>
<td></td>
<td>Pharmacology</td>
<td>‘I think basic anatomy, physiology, pharmacology.’ (EIM01:101)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biochemistry</td>
<td>‘Physiology is important, pharmacology is important, biochemistry is important.’ (EIP06:108-109)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Midwifery</td>
<td>‘They need to be able to deliver a baby.’ (EIP08:128)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community nursing</td>
<td>‘There are certain knowledge regarding immunization, family planning, you need to know.’ (EIP04:245)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patient safety</td>
<td>‘Always make sure that you work safe, protect yourself, protect your patients, do the work as it should be done.’ (EIP04: 283-284)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pathology</td>
<td>‘All the conditions, the pathology.’ (EIM05: 68)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sociology</td>
<td>‘But I think they’ve made sociology specific to us, because we need it.’ (EIP01: 179-180)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psychiatry</td>
<td>‘Third level and fourth level with the psychiatric.’ (EIM04:60)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intensive care</td>
<td>‘Fourth year, they concentrate on midwifery, things like ICU.’ (EIP04:55)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ethos of care</td>
<td>‘We try to teach them the ethics, to link in with their knowledge and skills, and how to work with the patients.’ (EIE01:64)</td>
<td></td>
</tr>
<tr>
<td>Practical knowledge</td>
<td>Medication administration, procedures and effects</td>
<td></td>
<td>‘And it’s important for them to know the effect of medication on that very body’ (EIE03:288)</td>
</tr>
<tr>
<td></td>
<td>Nursing diagnosis</td>
<td>‘They have to be able to do basic diagnosis and treatment’ (EIP08:129)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diseases</td>
<td>‘They should have knowledge of the impact of the prominent diseases and ailments that they will see.’ (EIP02: 91-92)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinical manifestations</td>
<td>‘All the conditions, the pathology, the clinical manifestations.’ (EIM05:68-69)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fundamental nursing</td>
<td>‘I think the knowledge they need to have all the basic skills.’ (EIM05:68)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patient assessment</td>
<td>‘The independent (conserve nurse) must know how to do the assessment of that patient.’ (EIE08:118-119)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patient diagnosis and treatment</td>
<td>‘They have to be able to do basic diagnosis and treatment’ (EIP08:129)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patient evaluation</td>
<td>‘They need to know how to evaluate a patient.’ (EIP05:21)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patient referrals</td>
<td>‘We should refer when it is necessary to refer that particular patient.’ (EIE05:161)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patient needs</td>
<td>‘Because in their training they have been taught about knowledge of the person the needs of the patient.’ (EIM03:110)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ward and hospital functioning</td>
<td>‘They need to know how a ward functions and how a hospital functions.’ (EIP02:95)</td>
<td></td>
</tr>
</tbody>
</table>

²The code for example EIP06:138 indicate ‘E’ is for educator, ‘I’ is for interview, the last letter is a code for the NEI, 06 indicate the participant and 138 is the excerpt line number.
Table 4

Nurse educators’ perceptions of KSAs needed by prospective conserve nurses to enable them to deliver quality patient care (continued)

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-theme</th>
<th>Sub-sub theme</th>
<th>Extractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infection control</td>
<td></td>
<td></td>
<td>‘Infection control, it’s very important.’ (EIE03:289)</td>
</tr>
<tr>
<td>Community profile</td>
<td></td>
<td></td>
<td>‘They need the knowledge of the diseases and the profile and area that they are working in.’ (EIP05:78)</td>
</tr>
<tr>
<td>Holistic care</td>
<td>Physical</td>
<td></td>
<td>‘Quality patient care means caring for a patient in totality, which means you care for his or her physical wellbeing.’ (EIM02:2-3)</td>
</tr>
<tr>
<td></td>
<td>Spiritual</td>
<td></td>
<td>‘It is if you nurse a patient holistically, spiritually.’ (EIE07:4)</td>
</tr>
<tr>
<td></td>
<td>Psychological</td>
<td></td>
<td>‘This includes the physical, psychological and spiritual.’ (EIE08:2)</td>
</tr>
<tr>
<td></td>
<td>Social</td>
<td></td>
<td>‘To me quality patient care means taking total care of the patients’ needs, the physicals, socials.’ (EIM05:2)</td>
</tr>
<tr>
<td>Cultural diversity</td>
<td>Multi-lingualism</td>
<td></td>
<td>‘She also must try to be multicultural in terms of language.’ (EIE08:114-115)</td>
</tr>
<tr>
<td></td>
<td>Inclusiveness</td>
<td></td>
<td>‘You have to accept people regarding their culture, beliefs, race and sexuality.’ (EIP05:95-96)</td>
</tr>
<tr>
<td>Code of conduct</td>
<td>Professionalism (image)</td>
<td></td>
<td>‘Now you see nurses in theatre wearing rings, wearing these fake nails, wearing.’ (EIM01:30)</td>
</tr>
<tr>
<td></td>
<td>Policies and procedures</td>
<td></td>
<td>‘If a nurse knows what independent functions are, which are the practice of functions that a person do within realize of the law or regulations.’ (EIE08:117-118)</td>
</tr>
<tr>
<td>Skills</td>
<td>Interpersonal skills</td>
<td></td>
<td>‘They must be able to manage conflict.’ (EIE02:179)</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td></td>
<td>‘You also need your interpersonal skills, like your communication.’ (EIP04:274)</td>
</tr>
<tr>
<td></td>
<td>Listening</td>
<td></td>
<td>‘‘Really being able to listen to your patient, hear what they are saying.’ (EIP04:275)</td>
</tr>
<tr>
<td></td>
<td>Respect</td>
<td></td>
<td>‘Respect humanity. It doesn’t matter their social class.’ (EIM01:117)</td>
</tr>
<tr>
<td></td>
<td>Emotional intelligence</td>
<td></td>
<td>‘I think she requires emotional intelligence.’ (EIP06:145-146)</td>
</tr>
<tr>
<td></td>
<td>Accommodating</td>
<td></td>
<td>‘Working together, accommodating each other.’ (EIE03:119-120)</td>
</tr>
<tr>
<td></td>
<td>Advocate for the patient</td>
<td></td>
<td>‘We must advocate for the patient.’ (EIE05:161)</td>
</tr>
<tr>
<td></td>
<td>Team work</td>
<td></td>
<td>‘Because they must be able to cooperate within the team that they are working in, because if they don’t have that, then they don’t work together.’ (EIE02:191-192)</td>
</tr>
<tr>
<td></td>
<td>Problem solving</td>
<td></td>
<td>‘For me problem solving skills, it’s very much important.’ (EIE06:136)</td>
</tr>
<tr>
<td></td>
<td>Ability to prioritise</td>
<td></td>
<td>‘The skill to prioritise.’ (EIE08:137-138)</td>
</tr>
<tr>
<td></td>
<td>Critical analytical thinking</td>
<td></td>
<td>‘They need that critical analytical way of thinking.’ (EIP05:8)</td>
</tr>
<tr>
<td></td>
<td>Decision making</td>
<td></td>
<td>‘The other skill that she need to have, it is the skill to make decision, decision making skills.’ (EIE08:135)</td>
</tr>
<tr>
<td></td>
<td>Crisis management</td>
<td></td>
<td>‘They have to have effective crises management.’ (EIP08:141)</td>
</tr>
<tr>
<td></td>
<td>Innovative thinking</td>
<td></td>
<td>‘So they would learn to think in innovative ways to do something with what you know already.’ (EIP06:60-61)</td>
</tr>
<tr>
<td></td>
<td>Improvise</td>
<td></td>
<td>‘They must really think and what they can do if there are no resources. What can they do with what they have, to deliver safe patient care?’ (EIP04:36-37)</td>
</tr>
</tbody>
</table>
### Table 4

**Nurse educators’ perceptions of KSAs needed by prospective conserve nurses to enable them to deliver quality patient care (continued)**

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-theme</th>
<th>Sub-sub theme</th>
<th>Extractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management skills</td>
<td>Business skills</td>
<td></td>
<td>‘The community the conserve nurse will also have business skill.’ (EIM02:86)</td>
</tr>
<tr>
<td>Time management</td>
<td></td>
<td></td>
<td>‘Specifically time management skills.’ (EIP02:68)</td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td>‘Yes, definitely the management skill or leadership skill she has to display.’ (EIE08:141)</td>
</tr>
<tr>
<td>Management of a ward</td>
<td></td>
<td></td>
<td>‘And then another thing, for example, we, we should teach them how to run a ward.’ (EIP02:66)</td>
</tr>
<tr>
<td>Administrative skills</td>
<td>Record keeping</td>
<td></td>
<td>‘Yes, record keeping is also very important.’ (EIE02:185)</td>
</tr>
<tr>
<td>Practical skills</td>
<td>Performance of general</td>
<td></td>
<td>‘I would say for example they should perhaps the insertion of the intravenous drip.’ (EIE02:167)</td>
</tr>
<tr>
<td></td>
<td>nursing procedures</td>
<td></td>
<td>‘They should be able to perform different procedures.’ (EIM05:69-70)</td>
</tr>
<tr>
<td></td>
<td>Immunizations</td>
<td></td>
<td>‘You need to have your practical skills, which have to do with your like give an injection or to give an immunization.’ (EIP04:272)</td>
</tr>
<tr>
<td></td>
<td>Administration of medication</td>
<td></td>
<td>‘For instance medication administration skills.’ (EIP02:93)</td>
</tr>
<tr>
<td></td>
<td>Administration of an injection</td>
<td></td>
<td>‘To give an injection on the buttocks, on the arm.’ (EIP07:76)</td>
</tr>
<tr>
<td></td>
<td>Monitoring of vital signs</td>
<td></td>
<td>In the first year they get basic stuff done like how to do blood pressure (EIP07:75)</td>
</tr>
<tr>
<td></td>
<td>Antenatal care and delivering babies</td>
<td></td>
<td>‘They have to have some specialized knowledge also of delivering babies, or antenatal care actually.’ (EIP08:127-128)</td>
</tr>
<tr>
<td></td>
<td>Blood drawing</td>
<td></td>
<td>‘Stuff like doing, putting drips and draw bloods.’ (EIP07:77)</td>
</tr>
<tr>
<td></td>
<td>Glucose testing</td>
<td></td>
<td>‘In the first year they get basic stuff done like how to do blood pressure, how to bath a patient, test glucose.’ (EIP07:75)</td>
</tr>
<tr>
<td></td>
<td>Patient observation</td>
<td></td>
<td>‘They should be able to observe. If you see something on a patient then you should be able to do something with that.’ (EIP05:91)</td>
</tr>
<tr>
<td>Personal skills</td>
<td>Creative thinking</td>
<td></td>
<td>‘I would say ability to think out of the box.’ (EIM01:103)</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td></td>
<td>‘They are supposed to know everything, do everything on their own.’ (EIP04:79)</td>
</tr>
<tr>
<td></td>
<td>Emotional stability</td>
<td></td>
<td>‘She need to have emotional stability herself in order to be able to go on.’ (EIE08:112)</td>
</tr>
<tr>
<td></td>
<td>Coping</td>
<td></td>
<td>‘You must also be psychologically prepared.’ (EIP01:224)</td>
</tr>
<tr>
<td></td>
<td>Integrity</td>
<td></td>
<td>‘Really to be responsible and trustworthy so even if no one is there to see what you do.’ (EIP04:283)</td>
</tr>
<tr>
<td></td>
<td>Adaptable</td>
<td></td>
<td>‘Yes they need to adapt to their circumstances.’ (EIP05:85)</td>
</tr>
<tr>
<td></td>
<td>Confident</td>
<td></td>
<td>‘If you have the attitude of I can do this, I am able, I have all the competency.’ (EIP02:32-33)</td>
</tr>
<tr>
<td></td>
<td>Patience</td>
<td></td>
<td>‘Patience I think. Patience.’ (EIP010:121)</td>
</tr>
<tr>
<td></td>
<td>Responsible and trustworthy</td>
<td></td>
<td>‘Really to be responsible and trustworthy so even if no one is there to see what you do.’ (EIP04:283)</td>
</tr>
<tr>
<td></td>
<td>Endurance</td>
<td></td>
<td>‘They must have endurance because it’s not easy where they go.’ (EIP07:104)</td>
</tr>
<tr>
<td></td>
<td>Determination</td>
<td></td>
<td>‘They also need determination.’ (EIP05:90-91)</td>
</tr>
</tbody>
</table>
### Table 4

Nurse educators’ perceptions of KSAs needed by prospective conserve nurses to enable them to deliver quality patient care (continued)

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-theme</th>
<th>Sub-sub theme</th>
<th>Extractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>Positive</td>
<td></td>
<td>‘You should have a positive attitude with the patient.’ (<a href="#">EIE05:59-60</a>)</td>
</tr>
<tr>
<td></td>
<td>Caring</td>
<td></td>
<td>‘You can really, if you want to be a nurse, you must have a caring attitude.’ (<a href="#">EIP03:117-118</a>)</td>
</tr>
<tr>
<td></td>
<td>Humble</td>
<td></td>
<td>‘That’s the biggest thing, to place their own needs aside so that the patient always comes first.’ (<a href="#">EIP01:250-251</a>)</td>
</tr>
<tr>
<td></td>
<td>Compassionate</td>
<td></td>
<td>‘She needs as well to have compassion.’ (<a href="#">EIE08:145</a>)</td>
</tr>
<tr>
<td></td>
<td>Passion</td>
<td></td>
<td>‘Be passionate about what you are doing.’ (<a href="#">EIE06:143</a>)</td>
</tr>
<tr>
<td></td>
<td>Approachable</td>
<td></td>
<td>‘Approachability, welcoming and that reassurance and all those.’ (<a href="#">EIM03:125</a>)</td>
</tr>
<tr>
<td></td>
<td>Friendly</td>
<td></td>
<td>‘Friendliness knowing that the patient comes first.’ (<a href="#">EIM04:73</a>)</td>
</tr>
<tr>
<td></td>
<td>Empathetic</td>
<td></td>
<td>‘The nurse should show empathy, understanding of the patients stories.’ (<a href="#">EIM05:79</a>)</td>
</tr>
<tr>
<td></td>
<td>Sensitive</td>
<td></td>
<td>‘They need to be sensitive.’ (<a href="#">EIP05:95</a>)</td>
</tr>
<tr>
<td></td>
<td>Helpful</td>
<td></td>
<td>‘Think of how best can I help this patient.’ (<a href="#">EIE06:147-148</a>)</td>
</tr>
<tr>
<td></td>
<td>Life-long learner</td>
<td></td>
<td>‘You must really be open to learn don’t think I know everything because I am qualified, and realize that you will be a life-long learner.’ (<a href="#">EIP04:261-282</a>)</td>
</tr>
<tr>
<td></td>
<td>Walking the extra mile</td>
<td></td>
<td>‘And also you must go an extra mile, extra mile in the sense that you know there will be things (resources) that are not available in the institution.’ (<a href="#">EIE06:146-147</a>)</td>
</tr>
<tr>
<td></td>
<td>Courageous</td>
<td></td>
<td>‘Courageous enough, you know, if he can carry out quality nursing care.’ (<a href="#">EIE03:92</a>)</td>
</tr>
<tr>
<td></td>
<td>Values</td>
<td></td>
<td>‘And that caring for the patient, that real caring, and … and they must have values.’ (<a href="#">EIE02:200</a>)</td>
</tr>
<tr>
<td></td>
<td>Assertive</td>
<td></td>
<td>‘Assertiveness and certain stubborness in sticking to do what is right.’ (<a href="#">EIP02:105</a>)</td>
</tr>
<tr>
<td></td>
<td>Life-long learner</td>
<td></td>
<td>‘You must really be open to learn don’t think I know everything because I am qualified, and realize that you will be a life-long learner.’ (<a href="#">EIP04:261-282</a>)</td>
</tr>
<tr>
<td></td>
<td>Walking the extra mile</td>
<td></td>
<td>‘And also you must go an extra mile, extra mile in the sense that you know there will be things (resources) that are not available in the institution.’ (<a href="#">EIE06:146-147</a>)</td>
</tr>
</tbody>
</table>
Table 4 portrays the nurse educators’ perceptions of KSAs needed by prospective conserve nurses to enable them to deliver quality patient care. Each main theme, sub-theme and sub-sub-theme is reported below.

Knowledge
Under the main theme knowledge the sub-themes theoretical knowledge, practical knowledge, holistic care, cultural diversity and code of conduct emerged.

Theoretical knowledge reported by nurse educators which conserve nurses should possess to deliver quality patient care include anatomy and physiology, pharmacology, biochemistry, midwifery, community nursing, patient safety, pathology, sociology, psychiatry, intensive care and ethos of care.

Practical knowledge included medication administration procedures, and effects of medication on patients were highlighted by the nurse educators. They also reported that conserve nurses should be able to make basic nursing diagnoses and be knowledgeable about treatments of different diseases, specifically the prominent diseases and ailments. Other nurse educators reported that conserve nurses should know about clinical manifestations and have fundamental nursing practical knowledge with reference to basic nursing skills. Patient assessments, patient diagnoses and treatments were also reported by the nurse educators as required competencies of conserve nurses. Nurse educators emphasised that conserve nurses must know how to evaluate and refer patients. They also need to know what a patient’s needs are, how wards and hospitals function, how to control infections and be knowledgeable about the community profile (including knowledge of different diseases and the profile of the area where they are working).

Holistic care included physical, spiritual, psychological, social and emotional care.

Cultural diversity included multi-lingualism. It was highlighted by the nurse educators that conserve nurses should ideally be multi-lingual to enable them to accommodate patients’ needs and to consider patients’ cultures, beliefs, races and genders.

Code of conduct comprised a professional image in practice and that conserve nurses must be knowledgeable about policies and procedures and know their dependent and independent functions, laws and regulations.
Skills
Under the main theme skills the sub-themes interpersonal, cognitive, management, administrative, practical and personal skills were identified.

*Interpersonal skills* comprised conflict management, and communication and listening skills were highlighted. Some nurse educators reported that conserve nurses must respect their patients, whatever the patient’s social class and they need to demonstrate emotional intelligence. Conserve nurses should accommodate colleagues by cooperating in teams to deliver quality patient care and act as advocates for patients.

*Cognitive skills* required by conserve nurses that enable them to deliver quality patient care include problem-solving skills, the ability to prioritise, critical analytical thinking and decision-making skills, crisis management skills, innovative thinking skills and the ability to improvise when resources are unavailable.

*Management skills* required included business skills, time management and leadership and ward management.

*Administrative skills* included record-keeping and report-writing skills.

*Practical skills* needed by conserve nurses that enable them to deliver quality patient care: insertion of an intravenous infusion, skill to perform general nursing procedures, immunization, administration of medication, administration of injections in arms and buttocks, providing ante-natal care and delivering babies. Monitoring vital signs (such as blood pressure) and being able to draw blood samples and interpret the results, testing a patient’s glucose levels and observing patients to identify potential problems are further practical skills required of conserve nurses to deliver quality patient care.

*Personal skills* that conserve nurses should possess include creative thinking, the ability to think outside the box, independence to act on their own, emotional stability, coping and integrity, and doing the right things even when alone. Furthermore, conserve nurses should be able to adapt to their circumstances, be confident and have an attitude of ‘I can do this, I am able and I am competent’. Conserve nurses should have patience, act responsibly and be trustworthy even when not supervised. A desire to deliver quality patient care should be
supported by endurance, determination, courage and assertiveness because comserve nurses will come across difficult situations while working through their compulsory community service year. Lastly, comserve nurses must honour values to care for a patient as well as demonstrate assertiveness to do the right thing.

**Attitudes**

Under the main theme *attitudes*, various sub-themes emerged. Some nurse educators reported that comserve nurses require a positive attitude towards patients while others regarded caring attitudes towards patients as an essential requirement. Comserve nurses must be humble, put their own needs aside, ensuring that the patient comes first while being compassionate, and having passion for what they are doing. They must be approachable and friendly towards patients to make them feel welcome and reassured. Other nurse educators highlighted that comserve nurses should be empathetic towards patients and understand patients’ situations while remaining sensitive and helpful, always considering the best way to help a patient even if resources are unavailable in the institution. Comserve nurses must also remain life-long learners, and be receptive to learning from their colleagues. Lastly, comserve nurses must be willing to walk the extra mile for their patients if there are no resources available in the institution.

A discussion follows in the subsequent section, Table 5, which deals with the perspectives of the final-year nursing students concerning KSAs needed by prospective comserve nurses to enable them to deliver quality patient care.

At the end of the expert there is a code for example SIP05:3 which indicate ‘S’ for student, ‘I’ for interview and the last letter is the code for the NEI, 05 is the number of the participant and 3 is the line from which the excerpt is drawn.
Table 5
Final-year nursing students’ perceptions of KSAs needed by prospective conserve nurses to enable them to deliver quality patient care

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-theme</th>
<th>Sub-sub theme</th>
<th>Extractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Theoretical knowledge</td>
<td>Anatomy</td>
<td>‘His body from the inside out.’ <em>(SIP05:3)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pharmacology</td>
<td>‘We’ve got pharmacology, it’s a subject that teaches you about all the different types of drugs and how they work.’ <em>(SIE04:165)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Microbiology and biochemistry</td>
<td>‘Sociology, microbiology and biology.’ <em>(SIP02:83)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Midwifery</td>
<td>‘They expect you to know all the foundation about maternity.’ <em>(SIMM02:37)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sociology</td>
<td>‘Community, where it talks about community we have sociology.’ <em>(SIE03:158)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Psychiatry</td>
<td>‘We also do psychiatry for a year, which we did towards the end.’ <em>(SIP03:34)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ethos of care</td>
<td>‘We have books such as ‘Ethos,’ that teaches you on how to present yourself.’ <em>(SIMM03:137)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management and administration</td>
<td>‘As a worker you must understand your leaves and how, everything that comes under HR.’ <em>(SIE07:125)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Research</td>
<td>‘I think knowledge, many of them don’t keep up to date with new things coming out, new research that’s been done.’ <em>(SIP03:66)</em></td>
</tr>
<tr>
<td>Practical knowledge</td>
<td>Medication administration</td>
<td>Procedures and effects</td>
<td>‘We need to know which medication helps for hypertension, these are the side effects and why do you use it.’ <em>(SIP05:72)</em></td>
</tr>
<tr>
<td></td>
<td>Nursing diagnosis</td>
<td></td>
<td>‘Basic nursing skills, you need to know in order to diagnose.’ <em>(SIMM02:168)</em></td>
</tr>
<tr>
<td></td>
<td>Diseases</td>
<td></td>
<td>‘Let's say a specific condition or a disease then immediately when that person presents then you would know.’ <em>(SIE05:219-220)</em></td>
</tr>
<tr>
<td></td>
<td>Patient assessment</td>
<td></td>
<td>‘To deliver quality care to the patient you need to know how to assess.’ <em>(SIE04:175-176)</em></td>
</tr>
<tr>
<td></td>
<td>Patient treatment</td>
<td></td>
<td>‘They should know how to issue treatment according to the illness of the patient.’ <em>(SIE08:75)</em></td>
</tr>
<tr>
<td></td>
<td>Patient referrals</td>
<td></td>
<td>‘If you don’t have that skill so that you know this one I have to refer.’ <em>(SIE07:148)</em></td>
</tr>
<tr>
<td></td>
<td>Community profile</td>
<td></td>
<td>‘I would say that if people don’t know much about something, especially the community, they don’t know much about the conditions that are around.’ <em>(SIE04:85-86)</em></td>
</tr>
<tr>
<td></td>
<td>Follow-up of patients</td>
<td></td>
<td>‘Do follow-ups if needed.’ <em>(SIE04:191)</em></td>
</tr>
<tr>
<td></td>
<td>Handling of patients</td>
<td></td>
<td>‘If a patient becomes aggressive you must be able to handle it.’ <em>(SIP05:127)</em></td>
</tr>
<tr>
<td></td>
<td>Vital signs</td>
<td></td>
<td>‘Like for example understanding the importance of your vital signs.’ <em>(SIE06:268)</em></td>
</tr>
<tr>
<td>Holistic care</td>
<td>Physical</td>
<td></td>
<td>‘Taking care of patient in every needs of the patient, physically.’ <em>(SIE01:4)</em></td>
</tr>
<tr>
<td></td>
<td>Spiritual</td>
<td></td>
<td>‘Quality patient care, its nursing a patient like holy, spiritually.’ <em>(SIE02:2)</em></td>
</tr>
<tr>
<td></td>
<td>Psychological</td>
<td></td>
<td>‘It is the caregiving of the holistic patient, by not just looking at his physical but also his psychological.’ <em>(SIP05:2)</em></td>
</tr>
<tr>
<td></td>
<td>Emotional</td>
<td></td>
<td>‘It is to holistically care for the patient. You must care physically and emotionally for the patient in every way not just wound dressing.’ <em>(SIP06:2-3)</em></td>
</tr>
<tr>
<td></td>
<td>Cultural diversity</td>
<td>Multi-lingual</td>
<td>‘Improve English, for most of the nurses’ <em>(SIE01:124)</em></td>
</tr>
</tbody>
</table>

In the code, for example SIP05:03, ‘S’ indicates student, ‘I’ indicates interview, the last letter is a code for the NEI and 05 is the participant number and 3 is the excerpt line number.
Table 5

Final-year nursing students’ perceptions of KSAs needed by prospective comserve nurses to enable them to deliver quality patient care

(continued)

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-theme</th>
<th>Sub-sub theme</th>
<th>Extractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance of cultural diversity</td>
<td></td>
<td></td>
<td>'Their cultures differently, know how to deal with it, and the likes and dislikes of the patient.' (SIE01:362)</td>
</tr>
<tr>
<td>Code of conduct</td>
<td>Professionalism (image and attitude)</td>
<td></td>
<td>'On how to handle the patients and how to present yourself as a nurse and your professional conduct.' (SIP06:172)</td>
</tr>
<tr>
<td>Policies and procedures</td>
<td></td>
<td></td>
<td>'I think if you can know the policies, code of conduct.' (SIE07:124)</td>
</tr>
<tr>
<td>Scope of practice</td>
<td></td>
<td></td>
<td>'I think if you can know the policies, code of conduct, scope of practice.' (SIE07:124)</td>
</tr>
<tr>
<td>Nurses rights</td>
<td></td>
<td></td>
<td>'Their rights, comserves need to know their rights.' (SIE01:324)</td>
</tr>
<tr>
<td>Confidentiality and privacy</td>
<td></td>
<td></td>
<td>'Towards my patients I must always treat them with dignity and respect and ensure privacy at all times and confidentiality.' (SI07:155)</td>
</tr>
<tr>
<td>Skills</td>
<td>Interpersonal skills</td>
<td>Conflict management</td>
<td>'I would say, both communication skills and conflict skills.' (SIM01:160)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communication</td>
<td>'I think the communication skills are very important because you walk into a new environment with new and different cultures.' (SIP06:195)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Listening</td>
<td>'You need to listen to what the patient is saying here.' (SIM02:169)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Respect</td>
<td>'I think just respect in general if you can respect a patient then respect the others then you can provide the good patient care.' (SIE03:205-206)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Team work</td>
<td>'One must learn to work together, so cooperation is also definitely something, because you are going to be working in a team.' (SIP02:294-295)</td>
</tr>
<tr>
<td></td>
<td>Interaction skills</td>
<td></td>
<td>'I think definitely interaction between people.' (SIP04:126)</td>
</tr>
<tr>
<td></td>
<td>Patient relationships</td>
<td></td>
<td>'You would have to build a relationship with your patient.' (SIP05:132)</td>
</tr>
<tr>
<td></td>
<td>Calm</td>
<td></td>
<td>'But if you have a skill, you’ll know when the patient is angry you must always be calm.' (SI07:82-83)</td>
</tr>
<tr>
<td></td>
<td>Polite</td>
<td></td>
<td>'You must treat everybody with courtesy.' (SI07:150)</td>
</tr>
<tr>
<td>Cognitive skills</td>
<td>Problem solving</td>
<td></td>
<td>'I think it would be your logical reaction, or your problem solving abilities would follow logically.' (SIP03:148)</td>
</tr>
<tr>
<td></td>
<td>Ability to prioritise</td>
<td></td>
<td>'So you must really, you must be able to prioritise and to say this is what must be done now, the next task is this one.' (SIP02:278)</td>
</tr>
<tr>
<td>Critical analytical thinking</td>
<td></td>
<td></td>
<td>'It must be a critical thinker.' (SI02:147)</td>
</tr>
<tr>
<td>Decision making</td>
<td></td>
<td></td>
<td>'Independent in terms of making decisions.' (SIP02:271)</td>
</tr>
<tr>
<td>Crisis management</td>
<td></td>
<td></td>
<td>'Handle an emergency situation.' (SIP01:132-133)</td>
</tr>
<tr>
<td>Innovative thinking</td>
<td></td>
<td></td>
<td>'You must think on your feet.' (SIP01:133-134)</td>
</tr>
<tr>
<td>Patient observation</td>
<td></td>
<td></td>
<td>'I must pay attention.' (SIM03:255)</td>
</tr>
<tr>
<td>Management skills</td>
<td>Leadership</td>
<td></td>
<td>'You must be a leader; you must know how to lead.' (SIM04:135-136)</td>
</tr>
<tr>
<td></td>
<td>Management of a ward</td>
<td></td>
<td>'You must know how to manage the ward and to schedule time off.' (SIP05:120)</td>
</tr>
<tr>
<td></td>
<td>Administration</td>
<td></td>
<td>'We must still learn, is the admin of a clinic or a hospital.' (SIP03:167-168)</td>
</tr>
<tr>
<td></td>
<td>Computer skills</td>
<td></td>
<td>'In a ward you need to have computer skills, there are a lot of computer in it.' (SIE01:211)</td>
</tr>
</tbody>
</table>
Table 5

Final-year nursing students’ perceptions of KSAs needed by prospective conserve nurses to enable them to deliver quality patient care (continued)

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-theme</th>
<th>Sub-sub theme</th>
<th>Extractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical skills</td>
<td>Insertion of intravenous drip</td>
<td>‘You should be able to put a drip in if you want to be a conserve nurse.’ (SIP01:143-144)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administration of an injection</td>
<td>‘... you are going to give injections, so that is basic things that you must know and be able to do.’ (SIP03:176-177)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delivering babies</td>
<td>‘You should have experience to know how to deliver a baby.’ (SIP01:144)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monitoring vital signs</td>
<td>‘How to monitor the vital signs.’ (SIE04:183)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blood drawing</td>
<td>‘Even if I had done it two months ago if I have to draw blood now I would know how to do it.’ (SIP06:201)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cardio Pulmonary Resuscitation</td>
<td>‘There is a procedure of CPR and then they say practice on a doll.’ (SIM02:90)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Management of aggressive patients</td>
<td>‘If a patient becomes aggressive you must be able to handle it.’ (SIP05:127)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bed wash a patient</td>
<td>‘Like in your third year how to bed wash a patient.’ (SIP06:41)</td>
<td></td>
</tr>
<tr>
<td>Personal skills</td>
<td>Independence</td>
<td>‘You must be able to work independently, because you are going to have to.’ (SIP02:264)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adaptable</td>
<td>‘You must definitely be positive and open to change and you must be adaptable.’ (SIP05:138)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patience</td>
<td>‘I think when it comes to patients we should try to have more patience.’ (SIP05:77)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Responsible</td>
<td>‘Only thing that we have to understand to know more is that is to be responsible when we get to the clinics.’ (SIE03:171)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assertive</td>
<td>‘Like I said, treat the patient like an individual, you know, be more assertive.’ (SIM01:177)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Courageous</td>
<td>‘You know you have to show that courage.’ (SIM02:22)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flexibility</td>
<td>‘You must be flexible as well.’ (SIE06:278)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improvise</td>
<td>‘Many of the presenters, if we are learning a particular skill, they will tell us okay but you can use this or that as an alternative.’ (SIP02:55-56)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resilient</td>
<td>‘They must try to keep their head above water and they would not be able to go sit and cry.’ (SIP05:152-153)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diligent</td>
<td>‘Don’t do anything half measure – do the procedures properly and don’t be lazy.’ (SIP04:04)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trustworthy</td>
<td>‘The patient must be able to express themselves, when they have problem they must have a trust on you.’ (SIE07:161-162)</td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>Positive</td>
<td>‘You have to have a positive attitude if you are going to work.’ (SIP01:148)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Caring</td>
<td>‘You have to have an attitude to help people and you want to help patient to get well and you want to show love to patients.’ (SIP01:148-149)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humble</td>
<td>‘You must always remember that you are never too good to do things like bed wash or changes bed pans or a patient’s diaper.’ (SIE06:214-215)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Friendly</td>
<td>‘You must be friendly towards the patient, the personnel.’ (SIP03:194)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Empathetic</td>
<td>‘Yes I think the most important one should be you should always portray empathy and not sympathy.’ (SIM02:172)</td>
<td></td>
</tr>
</tbody>
</table>
Table 5

Final-year nursing students’ perceptions of KSAs needed by prospective comserve nurses to enable them to deliver quality patient care (continued)

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Sub-theme</th>
<th>Sub-sub theme</th>
<th>Extractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-judgemental</td>
<td></td>
<td></td>
<td>‘Like a teenage girl who needs to go for family planning.’ (S1E05:124)</td>
</tr>
<tr>
<td>Life-long learning</td>
<td></td>
<td></td>
<td>‘You would have to learn from the other nurses and ask them what medication would they give to a patient if a certain medication used are out of stock and how would they handle it.’ (SIP05:139-140)</td>
</tr>
<tr>
<td>Walking the extra</td>
<td></td>
<td></td>
<td>‘Nursing is about giving but you get very little back.’ (SIP06:77-78)</td>
</tr>
<tr>
<td>mile</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5 portrayed the final-year student nurses’ perceptions of KSAs needed by prospective comserve nurses to enable them to deliver quality patient care. Each main theme with its sub-theme and sub-sub-themes is reported below.

**Knowledge**
Under the main theme knowledge, theoretical knowledge, practical knowledge, holistic care, cultural diversity and code of conduct emerged as sub-themes.

*Theoretical knowledge* which comserve nurses should possess to enable them to deliver quality patient care includes anatomy, pharmacology, microbiology and biochemistry, midwifery, sociology, psychiatry, ethos of care, management and administration and research.

*Practical knowledge* among final-year student nurses, of medication administration, procedures and effects (including side-effects), were deemed essential. Furthermore, comserve nurses must have the basic skills to make nursing diagnoses, be knowledgeable about diseases and to manage patients’ conditions. Patients’ assessments (including the assessments of vital signs), treatments and referrals were perceived to be comserve nurses’ essential skills as well as know the profile of different conditions in their communities. Comserve nurses also need to manage patients’ follow-up visits and to handle aggressive patients, and lastly be able to take vital signs.

*Holistic care* included physical care, but the importance of spiritual and psychological care was also highlighted to nurse a patient wholly not just physically. Comserve nurses should not only, for example, do a wound dressing (physical care) but they should also provide emotional care by talking to the patient at an emotional level.

*Cultural diversity* comprised of multi-lingualism, emphasising that comserve nurses must improve their English proficiency. Acceptance of cultural diversity (dealing patients’ different cultural issues) is also important for comserve nurses to deliver quality patient care.

*Code of conduct* included that comserve nurses must be knowledgeable about professionalism (image and attitude) including how to deal with patients and how to conduct oneself as a nurse.
practice and their rights as comserve nurses is required but comserve nurses should also ensure that their patients’ confidentiality and privacy are maintained.

Skills
The main theme skills consisted of the following sub-themes: interpersonal, cognitive, management, practical and personal skills.

Interpersonal skills comprise the ability of comserve nurses to manage conflict and to communicate skilfully (including effective listening) because they will encounter patients from different cultures. Comserve nurses also need good listening skills because, as reported, they have to listen what the patients’ needs are and they must also have respect for their patients and others to deliver good patient care. Comserve nurses must be able to cooperate with team members and they need to be resilient to be able to care for their patients, interact with them, and build patient relationships. Calmness and politeness are required towards patients and colleagues – even when patients are angry.

Cognitive skills required from comserve nurses to deliver quality patient care include logical problem-solving skills, prioritisation of tasks, critical analytical thinking and decision-making skills, crisis-management skills, innovative thinking skills and skills that enable them to observe when something is wrong with a patient.

Management skills that comserve nurses should possess, included Leadership skills to lead colleagues and to manage a ward, manage the administration of a clinic and a hospital and be a skilled computer user.

Practical skills comprised the inserting intravenous infusions, administrating injections, delivering babies, monitoring patients’ vital signs, taking blood samples, performing cardio pulmonary resuscitation, managing aggressive patients and skills to wash a patient in his/her bed.

Personal skills included independence and ability to work on their own, adaptable to be receptive to change and have patience with patients. Comserve nurses must act responsibly in the health facilities and be assertive, courageous, flexible, resilient, diligent, trustworthy and confident to improvise when necessary.
Attitudes
Under the main theme *attitudes*, sub-themes included that conserve nurses must demonstrate positive and caring attitudes but that they also need to be humble enough to bed-wash a patient, change bed pans or even to change patients’ diapers. They must be friendly to patients and personnel and portray empathy towards patients, never be judgemental towards their patients, especially in community nursing (family planning). Furthermore, conserve nurses must be life-long learners, be willing to learn from other nurses and ask questions if they do not know what medication to give to a patient if a certain medication is out of stock and how to handle such situations. They must also be willing to go the extra mile for their patients and they must show courage in the institutions to help patients.

Discussion
Outline of the results
The purpose of this study was to explore the KSAs needed by conserve nurses to deliver quality patient care when entering the CPE. These KSAs were based on the perceptions held by nurse educators and final-year student nurses.

During the reporting of the research results the main themes, sub-themes and sub-sub-themes were highlighted by the nurse educators as well as the final-year student nurses. The discussion below focuses specifically on the significant differences between the perceptions held by nurse educators and final-year nursing students pertaining to the KSAs needed by conserve nurses to enable them to deliver quality patient care.

Knowledge
The first main theme, *knowledge*, illustrated that conserve nurses require detailed theoretical, practical knowledge as well as knowledge of holistic care, cultural diversity and the code of conduct. Nurse educators reported that conserve nurses require theoretical knowledge (which was not reported by the final-year student nurses), namely physiology, community nursing, patient safety, pathology and intensive-care nursing, whereas the final-year student nurses students considered microbiology, management and administration and research to be important. However, most of the theoretical knowledge aspects form part of the four-year degree and diploma nursing curricula. Hatlevik (2012) views theoretical knowledge to be fundamental to the development of reflective skills. As stated in The Nursing Education
Stakeholders (2012), the competencies of nurses should enable them to integrate knowledge from different disciplines (modules) to identify a patient’s problem, understand the relevant theoretical knowledge, ensuring the conserve nurse’s correct response to care for and treat patients. Comserve nurses need to apply theoretical knowledge in clinical environments to improve the organisational goals of delivering quality patient care. Practical knowledge, according to Ehrenberg and Häggblom (2006), is gained through experience from practical training and ‘know-how’. Hence practical knowledge could be regarded as knowing how to do a certain task.

Under the sub-theme, nurse educators highlighted clinical manifestations, fundamental nursing, patient diagnosis, patient evaluations, patients’ needs, ward and hospital functions and infection control, which was not highlighted by the final-year nursing students. Whereas, the final-year student nurses reported that conserve nurses must possess practical knowledge regarding follow-up of patients’ treatments, handling of patients and monitoring patients’ vital signs. Under holistic care, nurse educators included the importance for conserve nurses to provide social care to patients, which was not reported by the students.

Cultural diversity inclusiveness was highlighted by nurse educators as important knowledge which conserve nurses should possess. In terms of the South African Nursing Act (No. 33 of 2005), the uniqueness of patients and the acknowledgement of their diversity should be valued by nurses, implying that conserve nurses must respect and accept patients’ diversities. The final-year nursing students added acceptance of cultural diversity. According to Ruddock and Turner (2007), awareness of people’s diversity is vital to care efficiently for patients from different cultural backgrounds. The code of conduct implies what nurses must follow including codes implied by the South African Nursing Act (No. 33, of 2005). Under the sub-theme code of conduct the students, but not the educators, reported that conserve nurses must be knowledgeable about professionalism, specifically about attitudes and not only about the image, nurses’ scope of practice, nurses’ rights and ensuring patients’ confidentiality and privacy.

Skills

Skills as main theme included interpersonal, cognitive, management, administrative, practical and personal skills. According to Mumford, Campoin and Morgenson (2007, p. 156), interpersonal skills ‘involve the interpersonal and social skills relating to interacting with and
influencing others’. Robbins, Judge, Odendaal and Roodt (2009) stated that interpersonal skills include, but are not limited to, being a good listener, communicating clearly and being an effective team player. Under the sub-theme interpersonal skills, nurse educators mentioned that conserve nurses must demonstrate emotional intelligence, be accommodating and be advocates for patients. MacDonald (2007) maintained that it is a worthy activity for a nurse to advocate for a patient, and it is also a moral imperative according to the professional code of ethics. Conversely, the students reported that conserve nurses should have good interpersonal skills including building relationships with patients, being calm and polite. Work performance depends on effective interactions with co-workers and employers (Robbins et al., 2009). Thus conserve nurses must portray good interaction skills with a patient and co-workers to be able to deliver good quality care.

Cognitive skills highlighted by the nurse educators indicated that conserve nurses must be able to improvise when there are limited resources. Bergh and Theron (2009, p. 413) explain that cognitive skills are ‘mental operations individuals use in order to perform the mental requirements in tasks’ for example reasoning, problem-solving and creativity. Final-year nursing students added patient observation as an important cognitive skill, which was not mentioned by nurse educators. Consequently it is important that conserve nurses must possess cognitive skills in order to be creative and demonstrate problem-solving skills to improvise in certain situations. Management skills, reported by nurse educators, included business and time management skills. Said (2014) supports this finding by maintaining that it is important for nurses to learn how to manage their time at work in order to reduce stress and to ensure that they deliver quality care. The students reported that conserve nurses also need administrative and computer skills. Administrative skills, such as record-keeping and report-writing, were only highlighted by the nurse educators.

Practical skills, reported by nurse educators, included performance of general nursing procedures, immunization and administration of medication. Clark and Holmes (2007) identified medication administration as a core skill which newly qualified nurses need. Furthermore nurse educators also reported that conserve nurses need the ability to do antenatal care, test glucose and observe patients. Student nurses added skills such as cardio pulmonary resuscitation, the ability to manage aggressive patients and to wash a patient in bed. Personal skills, mentioned by nurse educators, included creative thinking, emotional stability, coping ability, integrity, confidence, endurance, determination and values, whereas
students included flexibility, ability to improvise, resilience and diligence. According to Hanley and Fenton (2007) ‘improvisation is a unique expression of being as a nurse in relationship with a nurse’ support the findings of the current study.

**Attitudes**

Under the main theme *attitudes* nurse educators mentioned that various attitudes are important. According to the South African Nursing Act (No. 33 of 2005), the code of ethics for nurse practitioners in South Africa is based on the belief that nurses value kindness, respect and dignity (attitudes) towards patients so as to comply with the code of ethics. These include being compassionate, having passion, being approachable, sensitive and helpful whereas students reported the importance of being non-judgemental towards patients. Griffiths, Speed, Horne and Keeley (2012) also maintain that ‘nurses need to practise with empathy and without judgement’ (p. 125).

**Practical implications**

Comserve nurses (newly graduated nurses) lack competence (knowledge, skills and attitudes) when entering the CPE (Department of Health, 2013). This is concerning as these comserve nurses are expected to immediately fulfil their roles as ‘professional nurses’ directly after completion of their studies.

The CPE is affected by various factors such as lack of resources, staff shortages, heavy workloads (Rabie et al., 2016) and poor role-models, as a result the adaption of comserve nurses to CPE is also not without challenges. This study aimed at exploring and describing the perceptions held by nurse educators and final-year nursing students concerning the KSAs needed by prospective comserve nurses to enable them to deliver quality patient care by conducting a learning needs analysis. ETD interventions can be developed based on the identified KSAs to assist CPEs in reaching their main strategic goal, namely quality patient care.

**Limitations and recommendations**

As part of a larger study, the current study only represented half of the 360-degree learning needs analysis by exclusively focussing on the NEIs. Further analysis of the CPE (which represents the other half of the learning needs analysis) needs to be done in order to complete.
the entire 360-degree learning needs analysis. Therefore, for purposes of this study, not all steps were followed that are included in the learning needs analysis process.

The interviews only included NEIs in one of the nine South African provinces, generalisation of findings to other provinces may thus be limited. This study should however serve as a guide for similar studies in other provinces.

Only one of the two university campuses was included in the study due to protests and riots during the data collection period, which made the campus inaccessible due to safety reasons.

HRD, as a function or sub-function of human resource management, should strategically align themselves with the management of CPEs. This will ensure that all ETD initiatives are aligned with the CPE strategy and assist the CPE in achieving its strategic goals. Learning needs analysis should be a continuous activity of HRD in order for them to proactively identify any deficiencies that may impact negatively on the CPE. These deficiencies can be addressed by means of ETD interventions before the impact thereof can be felt by the CPE. Due to HRD not being an expert in all the jobs that exist within the CPE, the involvement of relevant stakeholders from inside and/or outside the CPE is needed to conduct the needs analysis.

The findings of the current study can be shared with external stakeholders such as NEIs in order for them to close the gap between nursing education and the requirements of CPEs. This will ensure that prospective conservé nurses possess the necessary KSAs that will enable them to deliver quality patient care when entering the CPE as community service nurses. CPEs can follow up on these findings to initiate ETD interventions within the CPE to ensure that current conservé nurses are competent to deliver quality patient care.

**Conclusion**

Taking into consideration newspaper headlines, social media, television and radio reports it is a well-known fact that most CPEs in especially the public health care sector in South Africa are delivering poor-quality care. However, this is caused by various factors; amongst others poor competency of nurses (possibly caused by theory-practice gaps), staff shortages, heavy workloads, limited resources and poor role-models. HRD in conjunction with relevant stakeholders can assist CPEs in addressing this problem by identifying the learning needs of
comserve nurses and by addressing these learning needs with appropriate interventions. The findings of this study will not only improve quality patient care delivered by prospective comserve nurses but also improve their performance, decrease the number of complaints against them by colleagues and patients, less disciplinary actions taken against them and a lower demand for re-training. In addition it will also improve the image of the CPE and the broader health service delivery system.

The findings of the learning needs analysis conducted in this study included knowledge that consisted of theoretical, practical and holistic knowledge, cultural diversity and code of conduct. Skills comprised interpersonal, cognitive, management, administrative, practical and personal skills. Attitudes included being positive, caring, compassionate, humble, non-judgemental, helpful, sensitive, passionate, friendly, approachable, empathetic, life-long learning and a willingness to go the extra mile for others.

This study also highlighted that generic KSAs are found in all nursing environments but that knowledge of cultural diversity in different health care contexts and especially in the South African health care context with its various ethnic groups and rich culture is very important, as highlighted in this study.
References


CHAPTER 3

RESEARCH ARTICLE 2
COMMUNITY SERVICE NURSES KNOWLEDGE, SKILLS AND ATTITUDES: A QUALITATIVE EXPLORATION OF A COMPETENCY PROFILE

**Orientation:** A strategic partner to the management of organisations human resource development, as a function or sub-function of human resource management, is responsible for reaching organisational goals through education, training and development initiatives. An important task in this regard is the analysis of learning needs in conjunction with relevant stakeholders within and outside the organisation. Quality patient care is a major objective of health care delivery systems such as clinical practice environments. It has come to light that community service nurses or comserve nurses are not adequately prepared to deliver high-quality patient care when entering these institutions after their studies. The human resource development function can assist in developing a competency profile for these nurses.

**Research purpose:** The purpose of this study was to develop a competency profile for prospective comserve nurses based on the knowledge, skills and attitudes required for delivering quality patient care.

**Motivation for this study:** A competency profile is needed to ensure that comserve nurses are adequately prepared for delivering quality patient care. The competency profile can be used to develop education, training and development interventions to address poor-quality patient care delivered by these nurses. Training interventions will therefore be aligned with the strategic goals of clinical practice environments by addressing quality patient care.

**Research approach, design and method:** This study used a qualitative approach with exploratory and descriptive strategies. Data were collected by conducting semi-structured individual interviews. The participants (N=43) included (n=29) nurse educators and (n=19) final-year nursing students from two Nursing Colleges and a School of Nursing Science on one campus in a province of South Africa. Data analysis included thematic analysis using a deductive approach.

**Main findings:** A competency profile for prospective comserve nurses were developed. Competencies related to knowledge included theoretical knowledge, practical knowledge, knowledge about holistic care, cultural diversity and code of conduct. Competencies related to skills included interpersonal, cognitive, management, administrative, practical and personal
skills. In terms of attitudes competencies such as being humble, sensitive and non-judgemental were identified.

**Practical/managerial implications:** Clinical practice environments must recognise the role of human resource development in achieving its strategic goals. Delivering quality patient care is one of the main goals that need to be achieved. Human resource development can align education, training and development initiatives of the clinical practice environment to reach this goal. The competencies identified for comserve nurses in the current study can therefore be used as a guide for preparing comserve nurses for delivering quality patient care.

**Contribution/value-add:** This study developed a competency profile for prospective comserve nurses specifically aimed at delivering quality patient care.

**Key terms:** Learning needs analysis, knowledge, skills, attitudes, competency profile, community service nurses, quality patient care
Introduction

Orientation
In the past the human resource development (HRD) function of many organisations responded reactively towards the training needs of organisations. One of the causes hereof was HRDs’ limited or non-involvement in the strategic planning of these organisations (Mankin, 2009). In recent years the importance of the HRD function becoming involved in the strategic process of organisations became all the more apparent (Ludike, 2016). Its proactive contribution towards attaining organisational goals could no longer be ignored.

The International Council of Nurses considers the application of sound HRD necessary to ensure that enough well-trained health professionals are available (International Council of Nurses, 2009). The HRD function is responsible for various interventions and activities that assist organisations (i.e. clinical practice environments (CPEs)) to achieve their strategic goals. When the health-related strategic goals of CPEs are achieved, it may also have a positive impact on national health outcomes. Continuous strategic-level collaboration between the HRD function and key stakeholders is however needed for the HRD strategy to succeed (Mankin, 2009).

The identification of learning needs is one of the activities with which HRD can assist in conjunction with other stakeholders. This involves the translation of organisational strategy into learning needs and the identification of gaps between the current and desired future skills/competencies/behaviour needed by the organisation. These gaps are then closed by means of interventions and training (Wolfson, 2016).

An important gap identified in the health sector is the delivering of quality patient care by community service nurses (comserve nurses) when entering the CPE after completion of their studies. These nurses are often expected to be competent professionals when entering the CPE and may therefore be left without supervision and leadership (Hansen-Salie & Martin, 2014). In actual fact these graduate nurses are still adjusting to the new role of comserve nurse taking charge of a unit while having to cope with its different priorities, pressures and expectations (Parker, Giles, Lantry & McMillan, 2014; Department of Health, 2013; Duchscher, 2008; Halfer & Graf, 2006). In addition to these adjustments they have to manage numerous and complex challenges such as lack of resources, staff shortages, heavy workloads.
(Rabie, Klopper & Watson, 2016b; Hansen-Salie & Martin, 2014), unfamiliar role expectations, lack of organisational or professional support, negative workplace cultures (Parker et al., 2014) and the transition into the new work environment (Zhang et al., 2017).

A number of studies revealed that newly graduated nurses were not yet competent enough to practise independently (Brown & Crookes, 2016; Hansen-Salie & Martin, 2014). Specific areas were identified where newly graduated nurses lacked competence. These included poor communication abilities, poor leadership, inability to organise, lack of critical thinking in specific situations and poor stress management (Janelle, Theisen, Kristin & Sandau, 2013).

In support of the aforementioned the 2011 South African National Nursing Summit identified nursing education, training and development (ETD) in South Africa as a challenge that needed to be addressed to revitalise the nursing profession (Department of Health, 2012). One of the strategic objectives suggested for addressing the nursing education issue was the alignment of nursing education and training programmes with health service delivery needs. The gap between nursing education and practice was therefore recognised. Such a gap may have an influence on delivering quality patient care. Dinkelmann (2018) conducted a study to identify the learning needs of prospective comserve nurses in terms of the knowledge skills and attitudes (KSAs) they need to enable them to deliver quality patient care. The current study is a continuation of the aforementioned study and is also based on the findings thereof.

**Research purpose and objectives**

The purpose of this study was to develop a competency profile for prospective comserve nurses. The competency profile was based on the perceptions held by nurse educators and final-year nursing students regarding the KSAs needed by these nurses that will enable them to deliver quality patient care.

The research objectives for this article are:

- To conceptualise the concepts learning needs analysis, knowledge, skills, attitudes, competency profile, comserve nurses and quality patient care from literature;
- To develop a competency profile for prospective comserve nurses while integrating the perceptions held by nurse educators and final-year nursing students; and
- To make recommendations for future research, training and practice.
Literature review

According to Dressler et al. (2011), human resource management comprises six major functions, namely human resource research, health and safety, compensation and benefits, employee and labour relations, HRD and human resource planning, recruitment and selection. Human resource planning and HRD are two complementary functions that are particularly important in terms of the provision and training of employees. According to the International Council of Nurses human resource planning in nursing entails the provision of ‘the right number of nurses with the right KSAs performing the right tasks in the right place at the right time to achieve the right predetermined health targets’ that are capable of meeting the strategic objectives of an organisation (International Council of Nurses, 2009, p. 4). However, in many organisations the importance of the contribution of HRD towards the achievement of organisational outcomes is still not fully recognised (Mankin, 2009).

HRD is defined as all those ‘processes, systems, methods, procedures and programmes’ used by organisations to enable employees to impact positively on organisational performance (Meyer, 2016, p. 2). Over the years, HRD, as a function or sub-function of human resource management (depending on the size and structure of the organisation), has evolved from only focussing on training towards becoming a consultancy function that supports and enables organisations to reach strategic objectives (Ludike, 2016). To achieve this, a constant strategic level of collaboration needs to exist between HRD and key stakeholders (i.e. senior and line managers) within these organisations to guarantee the effectiveness of the HRD strategy (Mankin, 2009). One of the activities of HRD that requires close collaboration with other stakeholders within and outside the organisation is the identification of learning needs via a learning needs analysis process. This process involves the identification of specific KSAs that are required to function effectively in one’s job. Knowledge refers to facts, procedures, concepts and principles while skills are described as the ability to act and think competently; this also relates to interaction with other people. Attitudes can be described as feelings or emotions towards a fact or state and is reflected in behaviour of employees (Attitude, n.d; Mankin, 2009).

In recent years organisations started to prefer the use of competencies instead of KSAs. A competency refers to specific skills or abilities individuals must possess or master and also the combined KSAs that are needed to solve problems and to provide a service (Leung, Trevena & Waters, 2016; Wärnich, Carrel, Elbert & Hatfield, 2015; Cusveller, 2012; Klein &
Kaplan, 2010). Vlok (2012) defines a competency as a complete combination of requirements to perform in situations that are unpredictable and uncertain, which requires more than skills that are mastered in a profession. Competencies can also be referred to as the quality of being adequately qualified in one’s physical or intellectual capacity in terms of certain broadly based KSAs that are important for employee success in various related tasks (Definitions, n.d; Blanchard & Thacker, 2004). In contrast to KSAs, competencies are considered to be broader statements of what employees must be able to do. The advantage of this is that they are less susceptible to change than KSAs in an ever-changing environment. An additional advantage of competencies above those of KSAs is the incorporation of feelings and emotions and an increased focus on organisational goals (Mankin, 2009).

The International Council of Nurses emphasises the importance of a workforce that is competent to ensure a good functioning health system. According to the Council, HRD is needed to ensure the availability of adequately trained and competent health professionals (International Council of Nurses, 2009). This will ensure that quality patient care is delivered by competent nurses and that the objectives of CPEs are achieved (Elarabi & Johari, 2014). The growth, complexity and constant change of health care systems requires all healthcare professionals (including nurses) to be highly competent. Nurses are seen as forming the backbone of CPEs and they play an important role in ensuring that quality patient care is delivered (Gardulf et al., 2016).

Before South African nurses may register as professional nurses with the South African Nursing Council they are required to complete a four-year degree or diploma and one year of community service. While completing their compulsory community service year in the public sector CPEs nurses are referred to as community service nurses or, in short, comserve nurses. The compulsory community service year was implemented to ensure that quality health care is provided in the public health care sector to all South Africans and to prevent the outflow of newly qualified health care personnel after graduating (Mohamed, 2005; Ndaki, 2004). The compulsory community service year affords young health care professionals opportunities to develop skills, acquire knowledge, behaviour patterns and critical thinking that will promote their professional development (Department of Health, 2014).
Unfortunately these nurses are reported as not always being competent enough to function independently in their new role as comserve nurses, which leads to poor-quality patient care. Contributing to this is the inability of nursing education institutions (NEIs) to optimally validate the competencies needed by graduate nurses to enter the CPE as comserve nurses (Scott Tilley, 2008). In addition, De Swardt et al. (2012) also refer to a theory-practice gap that exists in nursing education. A theory-practice gap refers to the inability of nurses to apply the knowledge in the CPE which they obtained during training (Monaghan, 2015). This theory-practice gap is recognised by healthcare employers as well as nursing educators (Scott Tilley, 2008).

Some of the factors causing the theory-practice gap are the teaching and learning strategies followed when theory and practice are taught; theory-practice integration; and a lack of proper role-models (Landers, 2000). Davhana-Maselesele, Tjallinks and Norval (2001) added that the theoretical content of the curriculum may be too idealistic and academic, losing focus of the real CPE needs. Other factors that contribute to the theory-practice gap include inadequate clinical training facilities, a lack of supervision and poor management of students, causing a shortage of good clinical role-models in the process, which results in poor-quality patient care (Department of Health, 2013).

Quality patient care is referred to as care that leads to optimal patient functioning (Laschinger & Fida, 2015). In essence this is also what nursing is all about. Health delivery systems (CPEs) also regard quality patient care as a strategic priority (Laschinger & Fida, 2015). It is however very difficult for health delivery systems or CPEs to reach this goal when their employees (i.e. comserve nurses) are not adequately prepared for delivering quality patient care. It is therefore important for CPEs to determine where the gaps in education, training and development lie in order to address them with a variety of interventions. By involving the relevant stakeholders, HRD can assist in the development of a competency profile for comserve nurses.

The current study formed part of a larger project that intended to develop a competency profile for comserve nurses. The larger project involved a 360-degree learning needs analysis that included different stakeholders in the education, training and development of comserve nurses. These included nursing educators, final-year nursing students, nursing managers and comserve nurses. These stakeholders represented the perceptions held by NEIs and CPEs.
concerning the knowledge, skills and attitudes needed by comserve nurses to deliver quality patient care when entering the CPE. Combining the results of the two studies will complete the 360-degree learning needs analysis and result in a competency profile for comserve nurses.

This study developed a competency profile for prospective comserve nurses based on the perceptions held by nursing educators and final-year nursing students. Results of the study were reported in two separate phases. Phase 1 reported on the needs analysis process and the identification of KSAs as perceived by the participants. In phase 2 (present phase) a competency profile for comserve nurses is proposed.

**Research design**

The research design comprises the research approach, research strategy and research method which are described below.

**Research approach**

A qualitative research approach was followed in conducting this study, within a constructivism paradigm (Creswell, 2014). This qualitative research approach is followed when the researcher attempts to understand and describe the participants’ views of a certain problem that arises (Fouché & Delport, 2011).

This approach also helps the researcher to give a description of the participants’ experiences and perceptions (Kumar, 2014). Therefore this approach is applicable because, in Phase one, the collected perceptions held by nurse educators and final-year nursing students regarding the KSAs comserve nurses need that will enable them to deliver quality patient care were comprehensively described. Hence the results based on the two population’s perceptions were used in phase 2 to develop a competency profile for these nurses. For this reason the constructivism paradigm is applicable seeing that the researcher depended on the participants’ views or their perceptions where these perceptions were interpreted rather than used to develop a theory (Creswell, 2014).
Research strategies
In this research exploratory and descriptive research strategies were applied. The exploratory research strategies simply investigate a problem or a situation that has not been researched before and by means of which the findings can be used for future research (Hesse-Biber & Leavy, 2011). Descriptive research strategy speaks for itself in the sense of the term ‘describing’ because; this strategy gives a rich, detailed description of a problem that exists (Schurink, Fouché & De Vos, 2011).

Data consisting of main themes, sub-themes and sub-sub-themes obtained in phase 1 of the study were used as basis on which to develop the perceived competency profile. The development of the competency profile was based on the generic steps for conducting a learning needs analysis as proposed by Wolfson (2016). As pointed out by Wolfson (2016) the steps of the process can be adapted to suit the context in which it is applied. In order to fit the context of the current study not all the steps of the process were followed. Furthermore, the completion of the whole 360-degrees needs analysis was dependent on an alternative study investigating the perceptions held by nursing managers and conserve nurses in CPEs. The results of the aforementioned study still need to be integrated with the results of the current study before the learning needs analysis process can be completed.

Research method
The research setting, entrée and establishing researcher roles, sampling, data collection methods, data recording, strategies employed to ensure quality of data, data analysis, reporting and the ethical considerations are described below.

Research setting
The research setting was two nursing colleges and a School of Nursing Science at a university providing nursing education at one campus in a province of South Africa. The interviews took place in offices, class rooms and reserve rooms to guarantee privacy. To ensure avoidance of noise and interruptions during the interviews a sign that stated ‘do not disturb’ was placed on the outside of the doors.
Entrée and establishing researcher roles
The researcher was the organiser, interviewer, data analyst and coder in this research. The researcher planned the design of the study and compiled a research proposal which was presented by the university’s Ethics Research Committee for approval. Ethics number EMS 15/02/25-01/02/01 was granted. The researcher was responsible for contacting the Department of Health, principles of two Nursing Colleges and the directors of the School of Nursing Sciences of a university on different campuses for approval to collect data. Once permission had been granted, the researcher conducted semi-structured individual interviews as representing the first phase of the study which was to determine the perceptions held by nurse educators and final-year nursing students regarding KSAs needed by prospective comserve nurses that will enable them to deliver quality care. The interviews were transcribed by an independent transcriber and the researcher captured the data onto an Excel sheet and analysed the data with the assistance of a co-coder. The findings of phase 1 were used as a basis for this phase (phase 2) which is the development of a competency profile.

Research participants and sampling methods
The research participants included nurse educators and final-year nursing students in NEIs in a province of South Africa. Multi-level sampling was done which included all-inclusive and purposive sampling. All-inclusive sampling of NEIs in one province of South Africa included two Nursing Colleges (N=2; n=2) and one University with a School of Nursing Sciences on two campuses (N=2; n=1). Purposive sampling was used, for nurse educators and final-year nursing students. Due to the large number of practical hours stipulated by the South African Nursing Council nursing students have to work in practice, the final-year nursing students work closely with comserve nurses during their training in the CPEs.

The inclusion criteria for nurse educators included: lecturing modules of the 4-year integrated Nursing diploma or degree and for final-year nursing students included that they had to be enrolled for the 4-year integrated Nursing diploma or degree which leads to registration as a professional nurse at the South African Nursing Council. The participants were diverse in age, gender and culture that speak and understand Afrikaans and/or English. A total of (N=42) semi-structured individual interviews were conducted with nurse educators (n=23) and final-year nursing students (n=19).
Nurse educators
Seventeen percent (17%) of the nurse educators were aged between 30 and 39 years and 17% between 40 and 49 years, whereas 52% were 50-59 years old and only 5% were aged between 60 and 69 years. Nine percent (9%) of the nurse educators were between 19 and 29 years old. Only two (9%) educators were male and twenty-one (91%) female. Forty-four percent (44%) of the participants spoke an African language, forty-three (43%) of the participants spoke Afrikaans and 13% English. The sample size of the participants included 48% White, 48% African and the rest (4%) were of mixed race. Nine percent (9%) of the nurse educators had a Bachelor’s degree qualification which is an NQF level seven and 9% had an NQF level eight (Honours degree) qualification. Thirty percent (30%) had an NQF level nine (Master’s degree) qualification, and lastly nine (9%) had an NQF level 10 (Doctoral degree) qualification. Seventeen percent (17%) of the nurse educators had international experience in Nigeria, China, Kenya or Saudi Arabia. Most of the nurse educators (31%) specialised in midwifery nursing and (22%) in general nursing, and 26% of whom 13% specialised in community nursing and 13% in clinical health assessment, treatment and care. Nine percent (9%) of the nurse educators specialised in critical nursing care and a total of 12% (of whom 4% specialised in psychiatric nursing, 4% in operating theatre nursing and 4% in paediatric nursing). Most (96%) of the nurse educators were employed full-time.

Final-year nursing students
The majority of the final-year nursing students (79%) were between ages 19 and 29 and 21% were older than 30 years. Twenty-one (21%) were male and 79% were female participants and a total of 68% were African and 32% White. Thirty-two percent (32%) of the participants’ first language was Afrikaans and 68% indicated that their first language was one of a variety of African languages.

Data collection methods
Prior to data collection a pilot-test study was performed on a small sample of 2 nurse educators and 3 final-year nursing students who spoke either Afrikaans or English. The pilot-test was performed to ensure the wording of the questions was correct and that the research participants understood the questions in order to make sure changes could be made on the questions before the main research would start (Matthews & Ross, 2010). No questions needed restructuring or change after the pilot-test was completed and the questions were added to the interview schedule. Before data collection commenced the researcher explained the purpose of the study
to all the individual participants. After verbal consent the participants received an information letter and informed consent form which they had to sign. Once the consent forms had been signed the participants were requested to complete a biographical questionnaire (age, race, gender etc.).

Data was collected via semi-structured individual interviews with both populations, based on an interview schedule. The interview schedule bellow (see Table 1) was used for the nurse educators as well as the final-year nursing students.

**Table 1**  
*Interview questions posed to nurse educators and final-year nursing students*

<table>
<thead>
<tr>
<th>Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>According to you:</td>
</tr>
<tr>
<td>1. What does quality patient care mean to you?</td>
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<tr>
<td>2. Based on your own experiences, what do you think the challenges are that conserve nurses are faced with when attempting to deliver quality patient care?</td>
</tr>
<tr>
<td>3. What do you think must be done by NEIs to overcome these challenges to delivering quality patient care?</td>
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<tr>
<td>4. Do you think the problems which CPEs experience with regard to quality patient care is due to a lack of KSAs? Why and why not?</td>
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<tr>
<td>5. Which of these three concepts knowledge, skills or attitudes (KSAs) do you think is the biggest problem? Prioritise them from 1-3 and elaborate.</td>
</tr>
<tr>
<td>6. Do you think the training that nursing students receive at NEIs is adequate in assisting them in developing the necessary KSAs to deliver quality patient care? Please elaborate.</td>
</tr>
<tr>
<td>7. Do you think the nursing curriculum is presented by the NEI in such a way that the focus is on the KSAs which nursing students need to effectively deliver quality patient care? Please elaborate.</td>
</tr>
<tr>
<td>8. What should the NEI focus on more with regard to KSAs?</td>
</tr>
<tr>
<td>9. What should the NEI focus on less with regard to the KSAs?</td>
</tr>
<tr>
<td>10. What does the NEI currently focus on with regard to the KSAs?</td>
</tr>
<tr>
<td>11. In your opinion, what knowledge does a prospective conserve nurse need to deliver quality patient care?</td>
</tr>
<tr>
<td>12. In your opinion, which skills does a prospective conserve nurse need to deliver quality patient care?</td>
</tr>
<tr>
<td>13. In your opinion, which attitudes does a prospective conserve nurse need to deliver quality patient care?</td>
</tr>
</tbody>
</table>

After analysis of the semi-structured interviews in phase 1, the main-themes, sub-themes and sub-sub-themes that emerged were used as the basis for this phase (phase 2) of the study, which was to develop a competency profile.

**Data recording**
A digital recorder was used to record the semi-structured individual interviews, and added to this, field notes were taken after each interview. Identities of the participants were kept anonymous by using a code for each of the participants during recording. The recordings and transcribed data were safeguarded in a double-lock safe in a secure location. Electronic documents and electronic backup copies were stored safely with a password. The data that was captured on the digital recorder was transcribed by an independent transcriber and was captured onto an Excel sheet.

**Strategies employed to ensure quality data**

The strategies used in this study to ensure good quality of the data were: (1) credibility, (2) transformability, (3) dependability and (4) confirmability. To ensure credibility (collected data that represents the sample) purposive sampling was done, which ensured that the appropriate participants from whom rich data was needed, were included (Gauche, De Beer & Brink, 2017; Grinnell & Unrau, 2008; Monette, Sullivan, De Jong & Hilton, 2014). A co-coder was also used to ensure that the right themes were identified (Gauche, De Beer & Brink, 2017). Transferability of the data refers to generalising the findings, which was done by means of a detailed description that was given of the sampling, context of the study, data collection process and analysis thereof and lastly the report of the findings (Gauche, De Beer & Brink, 2017). The dependability, which is the consistency of the findings, was ensured through a detailed description of the methodology and the use of a co-coder (Shenton, 2004). Confirmability, the validity and interpretation of the results, was ensured by using a co-coder. This ensured that the data were interpreted and reported correctly and all personal assumptions were set aside (Shenton, 2004).

**Data analysis**

The interviews based on the perceptions held by the nurse educators and final-year nursing students were analysed using thematic data analysis. The semi-structured interviews were digitally recorded and thereafter transcribed by an independent transcriber and captured onto an Excel sheet. A deductive approach to data coding and analysis was followed. In contrast to the inductive approach, a deductive approach is a top-down approach which is followed when the researcher already has available predetermined codes based on concepts, ideas or topics for interpreting the data (Braun, Clark & Terry, 2014). Braun and Clarke’s (2006) six phases of thematic analysis were used. Firstly the coder and co-coder familiarized themselves with the data in order to gain an idea of all the data that had been gathered. Secondly, initial pre-
determined codes were generated, namely code 1: knowledge; code 2: skills and code 3: attitudes. The themes and sub-themes were developed within each of these three codes. Thirdly, sub-themes relevant to the potential themes were determined. The themes were analysed and categorised into smaller and similar sub-themes which required some codes to be combined, and some overlapping themes emerged. Fourthly, the coder organised the themes within the data set in two levels. Firstly by re-reading the organised extracts in each theme to establish whether it had a consistent pattern. Secondly the entire data set was included and validated. Fifthly themes were defined and named, themes were refined and the importance of each theme was determined. This assisted in determining which aspect of the data estimated each theme. Lastly, a report was developed by collaborating all the assigned themes to ensure a consistent pattern.

In this phase (phase 2) an integrated competency profile for prospective comserve nurses, based on the findings of the perceptions held by nurse educators and final-year nursing students as determined in phase 1, were developed. This analysis was done step-wise by comparing the similar and unique KSAs for prospective comserve nurses based on the nurse educators and final-year nursing students’ perceptions.

The researcher firstly compared the similar and unique KSAs for prospective comserve nurses based on the nurse educators and final-year nursing students’ respective empirical findings. Knowledge (main theme 1) with its respective sub-themes and sub-sub themes are represented in Table 2. Skills (main theme 2) with its respective sub-themes and sub-sub themes are indicated in Table 3. Attitudes (main theme 3) and its respective sub-themes are shown in Table 4. In both tables 2 and 3, the sub-themes that emerged under the main themes were indicated in column 1. This was followed by the similar sub-sub-themes between nurse educators and final-year nursing students in column 2, the unique sub-sub-themes of the nurse educators in column 3 and the unique sub-sub-themes of final-year nursing students in column 4.

Since there were no sub-sub-themes identified for attitudes, Table 4 looked slightly different than Tables 2 and 3. In Table 4, column 1 indicated the similar sub-themes between the nurse
educators and final-year nursing students. Column 2 represented the unique sub-themes of the nurse educators while column 3 represented the unique sub-themes of the final-year nursing students.

In order to compile the competency profile for prospective conserve nurses, the main themes, sub-themes and sub-sub-themes of the nurse educators and final-year nursing students’ perceptions from tables 2, 3 and 4 were integrated (see Table 5). This was done by merging the main themes, sub-themes and sub-sub themes of both populations.

**Reporting style**
The findings were reported following the APA and SAJIP guidelines.

**Results**
In the following section the KSAs identified from phase 1 of the study is presented from which a competency profile were developed. Table 2 below represents the first main theme (knowledge) with its sub-themes as well as similar and unique sub-sub-themes identified from the perceptions of nurse educators and final-year nursing students during phase 1 of the study.
Table 2
Knowledge needed by prospective conserve nurses based on the perceptions of both nurse educators’ and final-year nursing students

<table>
<thead>
<tr>
<th>Main Theme 1: Knowledge</th>
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<tbody>
<tr>
<td>Sub-themes</td>
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<tr>
<td>Theoretical knowledge</td>
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<td>Practical knowledge</td>
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<td>Holistic care</td>
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<tr>
<td>Cultural diversity</td>
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<td>Code of conduct</td>
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</tbody>
</table>

Knowledge
Under the main theme *knowledge*, theoretical knowledge, practical knowledge, holistic care, cultural diversity and code of conduct with their various sub-sub-themes emerged.

Under the sub-theme *theoretical knowledge* the similar sub-sub-themes that emerged between the nurse educators and final-year nursing students, included anatomy, pharmacology, biochemistry, midwifery, sociology psychiatry and ethos of care. However, the nurse educators uniquely added physiology, community nursing, patient safety, pathology and intensive care, whereas the final-year nursing students uniquely indicated that microbiology, management and administration and research are important aspects of theoretical knowledge which the conserve nurse should acquire.
Under the sub-theme *practical knowledge*, similar themes that emerged included medication administration procedures and effects, nursing diagnosis, diseases, patient assessment, patient treatment, patient referrals and community profile. The nurse educators uniquely added clinical manifestations, fundamental nursing, patient diagnosis, patient evaluation, patient needs, ward and hospital functioning and infection control. The final-year nursing students uniquely added follow-up of patients, handling of patients and management of patients’ vital signs.

The sub-theme *holistic care* mentioned by nurse educators as well as final-year nursing students were physical, spiritual, psychological and emotional care, and only the nurse educators uniquely added social care.

*Cultural diversity* was also a sub-theme that emerged with multi-lingualism mentioned by both groups, whereas the nurse educators uniquely added inclusiveness and the final-year nursing students uniquely added acceptance of cultural diversity.

Under the sub-theme *code of conduct* both groups mentioned professionalism with specific reference to the image of the nurse and policies and procedures. Only the final-year nursing students uniquely indicated important aspects of professionalism including attitudes, the scope of practice, nurses’ rights as well as confidentiality and privacy.

Table 3 below represents the second main theme (skills) with its sub-themes as well as similar and unique sub-sub-themes identified from the perceptions of nurse educators and final-year nursing students during phase 1 of the study.
Table 3
Skills needed by prospective conserve nurses based on the perceptions of both nurse educators’ and final-year nursing students

<table>
<thead>
<tr>
<th>Main theme 2: Skills</th>
<th>Similar sub-sub-themes between nurse educators and final-year nursing students</th>
<th>Unique sub-sub-themes of nurse educators</th>
<th>Unique sub-sub-themes of final-year nursing students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal skills</td>
<td>Conflict management, Communication, Listening, Respect, Team work</td>
<td>Emotional intelligence, Accommodating, Advocate for a patient</td>
<td>Interaction skills, Patient relationships, Calm, Polite</td>
</tr>
<tr>
<td>Cognitive skills</td>
<td>Problem solving, Ability to prioritise, Critical analytical thinking, Decision making, Crisis management, Innovative thinking</td>
<td>Improvise</td>
<td>Patient observation</td>
</tr>
<tr>
<td>Management skills</td>
<td>Leadership, Management of a ward</td>
<td>Business skills, Time management</td>
<td>Administration, Computer skills</td>
</tr>
<tr>
<td>Administrative skills</td>
<td>Record keeping, Report writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practical skills</td>
<td>Insertion of intravenous drip, Administration of an injection, Deliver a baby, Monitoring vital signs, Blood drawing</td>
<td>Performance of general nursing procedures, Immunizations, Administration of medication, Antenatal care, Glucose testing, Patient observation</td>
<td>Cardio Pulmonary Resuscitation, Management of aggressive patients, Bed-wash a patient</td>
</tr>
<tr>
<td>Personal skills</td>
<td>Independence, Adaptable, Patience, Assertive, Responsible, Trustworthy, Courageous</td>
<td>Creative thinking, Emotional stability, Coping, Integrity, Confident, Endurance, Determination, Values</td>
<td>Flexibility, Improvise, Diligent, Resilient</td>
</tr>
</tbody>
</table>

Skills
Under the second main theme *skills*, the sub-themes, interpersonal, cognitive, management, administrative, practical and personal skills with their respective sub-sub-themes emerged.

*Interpersonal skills.* Important to both groups, were conflict management, communication, listening, respect and teamwork, whereas the nurse educators uniquely added emotional intelligence, being accommodating and being an advocate for a patient. The final-year
nursing students uniquely added interaction skills, patient relationships, being calm and polite.

*Cognitive skills* included problem-solving, ability to prioritise, critical analytical thinking, decision-making, crisis management and innovative thinking. The nurse educators uniquely added improvising, and the final-year nursing students uniquely added patient observations.

Under the sub-theme *management skills* both groups included leadership and management of the ward, whereas the nurse educators uniquely added business skills and time management. The final-year nursing students uniquely added administration and computer skills.

Under the sub-theme *administrative skills*, only the nurse educators added record keeping and report writing.

Under the sub-theme *practical skills* both groups included insertion of intravenous drip, administration of injections, delivering babies, monitoring vital signs and blood drawing. The nurse educators uniquely added performance of general nursing procedures, immunizations, administration of medication, antenatal care, glucose testing and patient observation, whereas the final-year nursing students uniquely added cardio pulmonary resuscitation, management of aggressive patients and washing a patient in bed.

The sub-theme *personal skills* for both groups included independence, adaptability, patience and being assertive, responsible, trustworthy and courageous. The nurse educators uniquely added creative thinking, emotional stability, coping, integrity, confidence, endurance, determination and values and the final-year students uniquely added flexibility, ability to improvise, being diligent and resilient.

Table 4 below represents the third main theme (attitude) with its similar and unique sub-themes identified from the perceptions of nurse educators and final-year nursing students during phase 1 of the study. Note that there were no sub-sub themes that emerged under attitudes.
Table 4

*Attitudes needed by prospective conserve nurses based on the perceptions of both nurse educators’ and final-year nursing students*

<table>
<thead>
<tr>
<th>Main theme 3: Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Similar sub-themes between nurse educators and final-year nursing students</strong></td>
</tr>
<tr>
<td>Positive</td>
</tr>
<tr>
<td>Caring</td>
</tr>
<tr>
<td>Humble</td>
</tr>
<tr>
<td>Friendly</td>
</tr>
<tr>
<td>Empathetic</td>
</tr>
<tr>
<td>Life-long learning</td>
</tr>
<tr>
<td>Going the extra mile</td>
</tr>
</tbody>
</table>

**Attitudes**

The *attitudes* included by both groups was being positive, caring, humble, friendly, empathetic, life-long learning and going the extra mile, whereas the nurse educators uniquely added being compassionate, having passion and being approachable, sensitive and helpful. The final-year nursing students uniquely added being non-judgemental.

Table 5 below represents an integration of the KSA’s from Tables 2, 3 and 4 above that resulted in a competency profile for prospective conserve nurses.
<table>
<thead>
<tr>
<th>Knowledge</th>
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</thead>
<tbody>
<tr>
<td><strong>Theoretical knowledge</strong></td>
<td></td>
</tr>
<tr>
<td>• Anatomy</td>
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<tr>
<td>• Pharmacology</td>
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<tr>
<td>• Biochemistry</td>
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<tr>
<td>• Midwifery</td>
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<tr>
<td>• Sociology</td>
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<tr>
<td>• Psychiatry</td>
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<tr>
<td>• Ethos of care</td>
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<tr>
<td>• Physiology</td>
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<tr>
<td>• Community nursing</td>
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<tr>
<td>• Patient safety</td>
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<tr>
<td>• Pathology</td>
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<tr>
<td>• Intensive care</td>
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<tr>
<td>• Microbiology</td>
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<tr>
<td>• Management and administration</td>
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<tr>
<td>• Research</td>
<td></td>
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<tr>
<td><strong>Practical knowledge</strong></td>
<td></td>
</tr>
<tr>
<td>• Medication administration procedures and effects</td>
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<tr>
<td>• Nursing diagnosis</td>
<td></td>
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<tr>
<td>• Diseases</td>
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<tr>
<td>• Patient assessment</td>
<td></td>
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<tr>
<td>• Patient treatment</td>
<td></td>
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<tr>
<td>• Patient referrals</td>
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<td>• Community profile</td>
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<tr>
<td>• Clinical manifestations</td>
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<tr>
<td>• Fundamental nursing</td>
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<td>• Patient diagnosis</td>
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<td>• Patient evaluation</td>
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<td>• Patient needs</td>
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<tr>
<td>• Ward and hospital functioning</td>
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<tr>
<td>• Infection control</td>
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<td>• Follow-up of patients</td>
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<tr>
<td>• Handling of patients</td>
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<tr>
<td>• Vital signs</td>
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<tr>
<td><strong>Holistic care</strong></td>
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<td>• Physical</td>
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<td>• Spiritual</td>
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<td>• Psychological</td>
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<td>• Emotional</td>
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<tr>
<td>• Social</td>
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<tr>
<td><strong>Cultural diversity</strong></td>
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<tr>
<td>• Multi-lingual</td>
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<tr>
<td>• Inclusiveness</td>
<td></td>
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<tr>
<td>• Acceptance of cultural diversity</td>
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<tr>
<td><strong>Code of conduct</strong></td>
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<tr>
<td>• Professionalism (image &amp; attitude)</td>
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<tr>
<td>• Policies and procedures</td>
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<tr>
<td>• Scope of practice</td>
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<tr>
<td>• Nurses’ rights</td>
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<tr>
<td>• Confidentiality and privacy</td>
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<tr>
<td><strong>Skills</strong></td>
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<tr>
<td><strong>Interpersonal skills</strong></td>
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<tr>
<td>• Conflict management</td>
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<td>• Communication</td>
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<td>• Listening</td>
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<td>• Respect</td>
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<tr>
<td>• Team work</td>
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<td>• Emotional intelligence</td>
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<td>• Accommodating</td>
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<tr>
<td>• Advocate for a patient</td>
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<td>• Interaction skills</td>
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<td>• Patient relationships</td>
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<td>• Calm</td>
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<td>• Polite</td>
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<tr>
<td><strong>Cognitive skills</strong></td>
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<tr>
<td>• Problem-solving</td>
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<td>• Ability to prioritise</td>
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<td>• Critical analytical thinking</td>
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<td>• Decision-making</td>
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<td>• Crisis management</td>
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<tr>
<td>• Innovative thinking</td>
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<tr>
<td>• Improvise</td>
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<tr>
<td>• Patient observation</td>
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<td><strong>Management skills</strong></td>
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<tr>
<td>• Leadership</td>
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<td>• Management of a ward</td>
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<td>• Business skills</td>
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<td>• Time management</td>
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<td>• Administration</td>
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<td>• Computer skills</td>
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<td><strong>Administrative skills</strong></td>
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<tr>
<td>• Record-keeping</td>
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<td>• Report-writing</td>
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Table 5

Competency profile for prospective conserve nurses (continued)

<table>
<thead>
<tr>
<th>Skills (continued)</th>
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<tr>
<td><strong>Practical skills</strong></td>
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| **Attitudes** |
| ● Positive |
| ● Caring |
| ● Humble |
| ● Friendly |
| ● Empathetic |
| ● Life-long learning |
| ● Going the extra mile |
| ● Compassionate |
| ● Passion |
| ● Approachable |
| ● Sensitive |
| ● Helpful |
| ● Non-judgemental |

Discussion

Outline of the results

HRD as function or sub-function of human resource management plays an important role in the attainment of strategic organisational goals by increasing the performance of employees (Sathiyendran & Chandrasekar, 2017). Delivering quality patient care is seen to be a strategic goal of health care systems, including CPEs. HRD can assist in aligning education, training and development initiatives of CPEs with this goal by teaming up with relevant stakeholders. The challenges conserve nurses face when entering the CPE after completion of their studies necessitated a further investigation into the competencies they need to deliver quality patient care.
Due to rapidly growing and more complex health-care systems a high level of competence is expected of health-care professionals, especially nurses (Gardulf et al., 2016; Backhaus, Verbeek & Van Rossum, Capezuti & Hamers, 2015; Parker et al., 2014). This is also expected of comserve nurses performing their compulsory community service year. In the current study a competency profile was developed which highlighted the fundamental competencies comserve nurses need so as to deliver quality patient care when entering the CPE. Holanda, Marra, and Chunda (2015) accentuate that nurses with the necessary competencies render high-quality services to patients. Competence is a combination of the ‘complex attributes of KSAs’ (Leung et al., 2016, p. 190), which assists nurses in making the correct decisions when performing in particular circumstances. Many studies also add that competency cannot be openly seen when observing an individual’s behaviour but is determined by their performance. Consequently competence can be explained as an individual’s ‘cognitive approach to a task, encompassing the multiple attributes of KSAs’ (Leung et al., 2016, p. 190). Brown and Crookes (2016) also add that the required level of competence expected of newly graduate nurses (comserve nurses) remains unclear. In addition to this, newly graduated nurses feel incompetent in performing a range of clinical procedures (Brown & Crookes, 2016; Adair, Hughes, Davis & Wolcott-Breci, 2014; Dlamini et al., 2014) which should have been developed during their undergraduate programmes in various CPEs (Brown & Crookes, 2016).

In the Americas the ‘Quality and Safety Education for Nurses’ with the assistance of the National Advisory Board tries to address this gap by developing competencies of which some were also revealed in the findings of this study that enhance quality and safety in patient care, which could serve as guidelines in developing curricula for academic programs, transitioning to practice environments and other post-basic programs. These competencies included patient-centred care (holistic care in this study), teamwork and partnerships, enhancement of quality, informatics and security. Finland also identified eight competence areas for nursing students, including ‘professional/ethical values and practice, nursing skills and intervention, communication and interpersonal skills, knowledge and cognitive ability, assessment and improvement of quality in nursing, professional development, leadership, management and teamwork and research utilization’ (Gardulf et al., 2016). In addition to these competencies the current study identified other unique findings of specific KSAs needed by prospective nurses. Knowledge competencies included theoretical knowledge and practical knowledge,
holistic care, cultural diversity and code of conduct, which all are relatively common aspects to be knowledgeable about. However, an additional competency, namely cultural diversity indicated the importance of contextualizing aspects to various settings to enhance quality of patient care, especially in South Africa, which is well-known for its various ethnic groups and their rich cultural diversities. It is therefore not surprising that knowledge on cultural diversity was highlighted to be very important of which prospective conserv care nurses need to possess knowledge, with specific attention to being multi-lingual and acknowledging various cultural diversities.

The high demand for health services by patients with multifaceted needs requires more highly skilled employees (Gardulf et al., 2016; Backhaus et al., 2015). This is especially true for developing countries (i.e. South Africa) where the largest part of the population depends on a public health sector but which is run with staff shortages, high workloads, inadequate resources and inadequate infrastructure (Rabie, Klopper & Coetzee, 2017; Rabie, Coetzee & Klopper, 2016a). According to Backhaus et al. (2015) interpersonal relationships, management and practical skills are important skills for nurses to enable them to deliver quality care. In addition to this, the current study also found that cognitive, administrative and personal skills are also of importance. These skills seem to be rather obvious skills which all nurses should possess, except for business and computer skills in the public health care sector, but when taking into consideration the rapidly growing and more complex health care systems, the addition of these skills is relevant.

An attitude is defined as a ‘lasting belief, feeling and tendency to behave in a certain way towards a specific person, object, idea or issue’ (Hunter, 2012). It is of great importance that nurses should portray a good attitude towards patients so that patients can build a trust relationship, feel comfortable to discuss their private problems and have physical examinations performed on them. Various authors such as Rabie et al. (2016), Turok (2009) and Bradshaw & Steyn (2001) mentioned at an uncaring attitude of some nurses is not purposefully elicited by nurses, but various factors frustrating nurses, as previously mentioned, staff shortages, overcrowding, lack of resources and workloads in especially the public health care sector cause these nurses to act in is manner. This study revealed various attitudes to be important such as being positive, caring, humble, compassionate, passionate, approachable, friendly, empathetic, sensitive and helpful, a life-long learner and going the extra mile, of which all will assist in delivering quality care to patients.
Practical implications
The findings of this study proposed a number of competencies that potential conserve nurses should possess to be capable of delivering quality patient care in the CPE. As was mentioned before, a difference exists between KSAs and competencies in the sense that competencies are broader statements of KSAs needed to perform adequately in a variety of tasks (Mankin, 2009). Competencies are less susceptible to change than KSAs. The implication for HRD is that a learning needs analysis should not be seen as a once-off process but a continuous process of analysis to determine the changes in KSAs on which the competencies are built.

Inputs from different stakeholders are needed when conducting a learning needs analysis. In the current study nurse educators and final-year nursing students represented the NEI as external stakeholder to the CPE. In the context of the larger project of which the current study forms part, it must be borne in mind that the findings of this study still needs to be further integrated with an alternative study to complete the 360-degree learning needs analysis.

Future conserve nurses can use the competence profile as a guide as to what to expect when entering the CPE. Current competencies can be compared with required competencies to determine the need for ETD. This will improve performance, decrease complaints from colleagues and patients, lower disciplinary actions taken against them, decrease re-training and improve the CPE’s image.

Limitations and recommendations
This study was conducted in one province of South Africa; therefore the findings can only be used as a guide for other CPEs. The findings of the current study were only based on perceptions held by nurse educators and final-year nursing students. Future studies might consider the inclusion of patients in the learning needs analysis. Patients are in direct contact with front-line nurses and may therefore provide adequate information that can enhance the learning needs analysis. Another limitation to this study is that it forms part of a larger study in which a 360-degree learning analysis is conducted. The current study only focused on half of the analysis; therefore this competency profile only reports on KSAs needed by prospective conserve nurses from the viewpoint of NEIs. It is recommended that the integration of the two studies be done to complete the 360-degree learning needs analysis. This will enable the HRD to continue with the gap analysis and intervention strategies. The
current study did not consider any nursing curricula or job descriptions in the analysis. Future studies may expand on the findings of the current study by analysing these documents.

**Conclusion**

Quality patient care is one of the main strategic goals of health delivery systems including CPEs. HRD as a function or sub-function of human resource management should be strategically involved with the alignment of ETD initiatives with the strategic goals of organisations (i.e. CPEs). In the current study it was shown that HRD can support the CPE in the identification of learning needs and the development of a competency profile. Since HRD is not an expert in the field of nursing, the importance of involving relevant stakeholders in the learning needs analysis was important. The analysis resulted in the development of a competency profile for prospective comserve nurses.

A competency profile can be used by the HRD in the CPE to identify gaps between what a comserve nurse must be able to do and what they can do. These gaps can then be addressed with specific training interventions. By involving external stakeholders such as NEIs in the process can assist in the preparation of potential comserve nurses before they enter the CPE.
References


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CHAPTER 4

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS
Conclusions, limitations and recommendations

The purpose of this chapter is to draw conclusions from the general and specific objectives, indicate limitations and make recommendations for future research, training and practice.

4.1 Conclusions

The conclusions to this research are discussed in accordance with the objectives of the study.

4.1.1 Article one

Specific objective 1: To conceptualise the concepts learning needs analysis, knowledge, skills, attitudes, community service nurses and quality patient care from the literature

This first objective in this study was to conceptualise learning needs analysis, KSAs, community service nurses and quality patient care by conducting a literature review. Based on literature, a learning needs analysis identifies the need of training in an organisation in order to improve the organisation’s performance levels by analysing employees’ current performance compared to the desired performance levels (Clarke, 2003; Denby, 2010). Wolfson (2016), on the other hand, defines a learning needs analysis as that it involves the recognition of an existing training or learning problem, collection of data, the analysis and interpretation thereof and designing training interventions so as to solve the problem.

A learning needs analysis determines the KSAs individual’s need to be competent in the working environment, which in turn contributes to the organisation’s performance levels. Knowledge, as pointed out by Hunter (2012), refers to the information individuals are aware of and understand how to apply it. Skills refer to an ability that is practised in order to perform a task, while attitudes have to do with the feelings of the individual, which lead to certain behaviours towards something or someone.

Community service nurses (comserve nurses) need certain KSAs to deliver quality patient care. Community service nurses must complete a four-year degree or diploma and a one year community service in a public sector CPE before being able to register at the SANC as a professional nurse. Quality patient care, in the light of this study, refers to delivering safe care to meet patients’ needs, consequently comserve nurses need the necessary knowledge, skills and attitudes (KSAs) that can enable them to do just that.
Specific objective 2: To explore and describe the perceptions held by nurse educators’ regarding KSAs needed by prospective conserve nurses to enable them to deliver quality patient care

In this section, conclusions will be drawn pertaining to perceptions of the nurse educators in NEIs concerning the KSAs needed by prospective conserve nurses and how this objective was reached.

This objective was reached by conducting semi-structured individual interviews while using an interview schedule to ensure that certain questions were asked during the interviews so as to obtain the desired results (Botma et al., 2010). The interviews were recorded while field notes were taken, this assisted the researcher in recalling the content of the interview (Greeff, 2011). A transcriber was used to transcribe the data and thereafter a co-coder was used with a view to ensure that the correct themes were identified which represents the study.

Thematic analysis using a deductive approach to data coding and analysis was done in contrast to the inductive approach. A deductive approach is a top-down approach which is followed when the researcher already has available predetermined codes based on concepts, ideas or topics for interpreting the data (Braun, Clark & Terry, 2014). The data analysis was done using Braun and Clarke’s (2006) thematic analysis comprising six steps. Firstly, familiarising with the data by reading the data. Secondly, generating codes where the codes were predetermined before the thematic data analyses were conducted. The codes are based on code 1: knowledge, code 2: skills and code 3: attitudes. Thirdly, searching themes was done by organising data into themes which assisted in analysing and categorising themes into smaller sub-themes and sub-sub-themes. The themes were reviewed with the assistance of a co-coder to ensure that the themes corresponded with the data. This was step four: reviewing themes. Fifthly, determining and naming themes was done to give meaning to and to conclude the relationship between the themes in an attempt to eliminate so that the themes do not overlap. Lastly, reporting was done by constructing tables which illustrate the code, themes, sub-themes and responses of the participants.

The findings were discussed in detail in chapter two whereas this chapter will set out the conclusion drawn from the findings. The main predetermined themes were (1) knowledge, (2) skills, and (3) attitudes (KSAs). The sub-themes as well as the sub-sub-themes regarding the
KSAs needed by comserve nurses to enable them to deliver quality patient care as identified from the perceptions held by the nurse educators, are indicated below.

**Knowledge**
The first identified sub-theme was (1) *theoretical knowledge* with sub-sub-themes: anatomy and physiology, pharmacology, biochemistry, midwifery, community nursing, patient safety, pathology, sociology, psychiatry, intensive care and ethos of care. The second identified sub-theme (2) *practical knowledge* included: medication administration, procedures and effects, nursing diagnosis, diseases, clinical manifestation and fundamental nursing. Furthermore, patient assessment, patient diagnosis and treatment, patient evaluation, patient referrals, patient needs, ward and hospital functioning, infection control and community profile. The third identified sub-theme was (3) *Holistic care* with the sub-sub-themes physical, spiritual, psychological, social and emotional. *Cultural diversity* (4) was also identified with multilingualism and inclusiveness reported as sub-sub-themes, and lastly the *code of conduct* (5) which included professionalism (image) and policies and procedures.

**Skills**
Skills that were identified are (1) *interpersonal skills*, with identified sub-sub-themes such as conflict management, communication, listening, respect, emotional intelligence, accommodating, advocate for the patient and teamwork. *Cognitive skills* (2) was further identified as reported by the nurse educators, which included problem-solving, ability to prioritise, critical analytical thinking, decision-making, crisis management, innovative thinking and improvise. The identified *management skills* (3) were business skills, time management, leadership and management of a ward. Furthermore *administrative skills* (4) such as record-keeping and report-writing were considered to be important skills. *Practical skills* (5) that were mentioned were insertion of intravenous drip, performance of general nursing procedures, immunizations, administration of medication and injections. Furthermore, comserve nurses also need to possess practical skills in antenatal care and delivering babies, monitoring vital signs, blood-drawing, glucose-testing and patient observation. The last skills identified were (6) *personal skills* which include: creative thinking, independence, emotional stability, coping, integrity, adaptability and confidence. Furthermore patience, acting responsibly and trustworthy, endurance, determination, courageousness, honouring values and acting assertively were also identified.
Attitudes
Lastly, the identified attitudes are positive, caring, humble, compassionate, passion, approachable, friendly, empathetic, sensitive, helpful, life-long learner and going the extra mile.

Specific objective 3: To explore and describe the perceptions held by final-year nursing students concerning the KSAs needed by prospective comserve nurses to enable them to deliver quality patient care

The conclusions drawn from the final-year nursing students’ perceptions concerning the KSAs needed by prospective comserve nurses are discussed in this section. The data was collected, analysed and reported the same way as was done with the second specific objective. The findings were also discussed more in detail in chapter two and the main themes were predetermined and classified into (1) knowledge, (2) skills, and (3) attitudes (KSAs). The findings and conclusion are mentioned below with sub-themes and sub-sub-themes.

Knowledge
Theoretical knowledge (1), with the sub-sub-themes anatomy, pharmacology, microbiology and biochemistry, midwifery, sociology, psychiatry, ethos of care, management and administration and lastly research. Practical knowledge (2) that was reported was medication administration procedures and effects, nursing diagnosis and diseases. Furthermore patient assessment, patient treatment, patient referrals, community profile, follow-up of patients, handling of patients and vital signs were also reported as practical knowledge. Holistic care (3) was reported with the sub-sub-themes physical, spiritual, psychological and emotional care. Cultural diversity (4) was identified with multi-lingualism and acceptance of cultural diversity as sub-sub-themes. Lastly code of conduct (5) with the sub-sub-themes: professionalism (image and attitude), policies and procedures, scope of practice, nurses rights and confidentiality and privacy were reported.

Skills
The skills that were identified are interpersonal skills (1) with the sub-themes conflict management, communication, listening, respect and team. Furthermore, interaction skills, patient relationships, calm and polite were also reported. Cognitive skills (2) were identified with sub-sub-themes such as problem-solving, ability to prioritise, critical analytical thinking,
decision-making, crisis management, innovative thinking and patient observation. *Management skills* (3) included leadership, management of a ward, administration and computer skills. *Practical skills* (4) included the sub-sub-themes are insertion of intravenous drip, administration of an injection, delivering a baby and monitoring vital signs. Furthermore, blood-drawing, cardio pulmonary resuscitation, management of an aggressive patient and bed-wash a patient were also reported. Lastly, *personal skills* (5) included independence, adaptability, patience, acting responsibly and assertively, and being courageous and flexible. Furthermore improvising, resilience, diligence and trustworthiness were also reported.

**Attitudes**

Lastly, attitudes included positive, caring, humble, friendly, empathetic, non-judgemental, life-long learning and going the extra mile.

**Specific objective 4: To make recommendations for future research, training and practice.**

The fourth objective regarding recommendations for future research, training and practice will be discussed in section 4.2. The limitations of this study will be elaborated on in section 4.3.

**4.1.2 Article two**

**Specific objective 1: To conceptualise learning needs analysis, knowledge, skills, attitudes, competency profile, community service nurses and quality patient care from literature**

This first objective in this study was to conceptualise *learning needs analysis, KSAs, competency profile, community service nurses and quality patient care* by conducting a literature review. The performance levels of an organisation can improve by conducting a learning needs analysis to identify the training needs or a learning problem that exists in an organisation (Clarke, 2003; Denby, 2010; Wolfson, 2016). This can be done by analysing current employee performance and comparing it with the desired performance, collecting data, analysing and interpreting it and thereafter designing training interventions (Clarke, 2003; Denby, 2010; Wolfson, 2016).

The learning needs analysis therefore contributes to the performance levels of an organisation because it determines the necessary KSAs employees need to be competent in an organisation.
Knowledge is the facts or information individuals know, skills are practised abilities and attitudes are the different feelings an individual has, which in turn lead to behaviour towards someone or something. As determined in this study, comserve nurses need relevant KSAs to achieve the CPE objective which is to deliver quality patient care. Hence a competency profile was developed to structure the necessary KSAs.

Based on the literature, a competency is the KSAs, values and abilities employees need to apply in such a manner to meet the standard work performance levels of the organisation, and profile is an outline or a structure which is unique and recognisable (Hunter, 2012; Vlok, 2012). Competency profile, as used in this study, refers to the structured unique competencies prospective comserve nurses need so as to deliver quality patient care. The quality patient care, as used in this study, refers to delivering safe care and meeting a patient’s needs. Comserve nurses are referred as nurses who have completed a four-year degree or diploma and thereafter need to do community service in the public sector CPE for a year before being able to register at the South African Nursing Council as a professional nurse.

Specific objective 2: To develop a competency profile for prospective comserve nurses while integrating the perceptions held by nurse educators and final-year nursing students

This objective was reached through the findings in objectives two and three of chapter two, in which a thematic analysis was used, as discussed above. The similar themes, sub-themes and sub-sub-themes and unique sub-sub-themes of both the groups were then used to develop a competency profile. Therefore, in conclusion, the following competency profile for comserve nurses to be able to deliver quality patient care includes the following KSAs:

**Knowledge**

The knowledge includes theoretical, practical and holistic care, cultural diversity and code of conduct. Theoretical knowledge, such as facts, standards or figures, is essential for developing skills (Hatlevik, 2012). The different kinds of theoretical knowledge reported are anatomy, pharmacology, biochemistry, midwifery, sociology, psychiatry, ethos of care, physiology, community nursing, patient safety, pathology, intensive care, microbiology, management and administration and research.
Practical knowledge refers to knowing how to apply the theoretical knowledge gained in order to perform a task (Ehrenberg & Häggblom, 2006). This practical knowledge included medication administration procedures and effects, nursing diagnosis, diseases, patient assessment, patient treatment and patient referrals. Furthermore, community profile, clinical manifestations, fundamental nursing, patient diagnosis, patient evaluation, patient needs, ward and hospital functioning, infection control, follow-up on patients, handling of patients and vital signs.

Holistic care which conserve nurses must provide does not only include physical care but also spiritual, psychological, emotional and social care.

Cultural diversity which was identified included being multi-lingual, inclusive and accepting of cultural diversity.

Lastly, knowledge concerning the code of conduct that was identified was professionalism (image & attitude), policies and procedures, scope of practice, nurses’ rights, confidentiality and privacy.

Skills
Skills are abilities that are practiced in order to perform a task; thus referring to what an individual can do (Hunter, 2012). The skills that were identified were interpersonal, cognitive, management, administration, practical, and personal skills.

Interpersonal skills are social skills which relate to interacting with and influencing other individuals (Mumford, Campoin & Morgenson 2007). The interpersonal skills that were identified were conflict management, communication, listening, respect, team work and emotional intelligence. Furthermore to accommodate and to advocate for a patient were reported, and interaction skills, patient relationships, being calm and polite were also reported. Bergh and Theron (2009) state that to perform in tasks that need a mental requirement, an individual needs mental operations, which are cognitive skills. This includes problem-solving, ability to prioritise, critical analytical thinking, decision-making, crisis management, innovative thinking, improvising and patient observation.
Management skills that were identified from the participants’ feedback were leadership skills, able to manage a ward, business skills, time management, administration and computer skills, with administrative skills being able to do record-keeping and report-writing.

Practical skills which were identified were the insertions of intravenous drips, administration of an injection, delivering a baby, monitoring vital signs, blood-drawing and performing general nursing procedures. Furthermore, conserve nurses must be able to perform immunizations, administration of medication, antenatal care, glucose testing and patient observation. Furthermore, cardio pulmonary resuscitation, management of an aggressive patient and the ability to bed-wash a patient were additionally reported.

Personal skills which were identified by both groups of participants with regard to what conserve nurses need so as to enable them to deliver quality patient care are independence, adaptability, demonstrating patience, and being assertive, responsible, trustworthy and courageous. Furthermore, creative thinking, emotional stability, coping, integrity, confidence, endurance and determination were also reported. Lastly, some of the personal skills identified were honouring values, being flexible, being able to improvise, being diligent and resilient.

Attitudes
Attitudes that were identified were positive, caring, humble, friendly and empathetic. Furthermore, being a life-long learner, going the extra mile, being compassionate, having passion, and being approachable, sensitive, helpful and non-judgemental all formed part of the reported attitudes.

Specific objective 3: To make recommendations for future research, training and practice.
The third objective regarding recommendations for future research, training and practice are subsequently discussed in section 4.2. The limitations of this study will be elaborated on in section 4.3.

4.2. Recommendations
Based on the results of the study, the following recommendations for future research, training and practice can be made.
4.2.1. Recommendations for future research

The competencies based on KSAs identified in phase two of the study were all based on perceptions held by the participants. Future studies should consider using a broader variety of stakeholders and sources to identify the competencies and underlying KSAs needed by comserve nurses to enable them to deliver quality patient care. Although this is recommended, it should be borne in mind that an analysis of learning needs produces vast amounts of data that may become overwhelming. Proper planning should go into any learning needs analysis process to ensure that data sources are reliable and that the choice of stakeholders is appropriate for the data being collected.

The study can also be repeated in other provinces to determine how the competencies identified there compare with those identified in the current study. Since South Africa is a very diverse country comprising many different cultures, it will be interesting to see whether the results are similar in different provinces.

It is recommended that the 360-degree learning needs analysis be followed to obtain views from different perspectives pertaining to the leaning needs.

4.2.2. Recommendations for training and practice

The learning needs analysis resulted in the identification of KSAs that prospective comserve nurses need to deliver quality patient care. By comparing the current KSAs with desired future KSAs exposes gaps that need to be addressed with a variety of ETD initiatives. Competencies, on the other hand, are broader descriptions of what a comserve nurse needs be able to do. It is therefore less likely to be affected by changes in the environment than KSAs. Learning needs analyses need to be addressed on a continual basis so as to keep up with changes in the environment. When new KSAs are identified, these should be included under the relevant competencies.

HRD must be involved in the strategic processes of organisations in order to align ETD with organisational strategy. This will ensure that organisations such as CPEs reach their strategic goals. When HRD is not involved with the strategic processes of the CPE it may happen that the organisation moves forward in one direction and ETD in another without reaching important strategic goals.
4.3. Limitations of the study

This study was conducted in one province of South African; thus the findings cannot be generalised to other provinces. It can however serve as a guide for other CPEs to conduct similar studies. The findings of the current study only relied on the perceptions held by the participants – no confirmatory documents were used in the process. As part of a larger study, the findings of the current study were not yet integrated with the larger project. This causes a delay in the determination of gaps between the CPE and NEI, which can be targeted with a variety of ETD interventions.
References


Ms M Dinkelman
20 The Lofts
Steve Biko street
POTCHEFSTROOM
2531

ETHICAL CLEARANCE

This letter serves to confirm that the research project of Monica Dinkelman, with the title “Exploring a perceived competency profile for conserved nurses in South Africa” has undergone ethical review. The proposal was presented at a Faculty Research Meeting and accepted. The Faculty Research Meeting assigned the project number EMS15/02/25-01/02/01. This acceptance deems the proposed research as being of minimal risk, granted that all requirements of anonymity, confidentiality and informed consent are met. This letter should form part of your dissertation manuscript submitted for examination purposes.

Yours sincerely

[Signature]

Louise Jansen van Rensburg
Administrative officer: WorkWell Research Unit

Original date: Louise Jansen van Rensburg(11900497) C:\Users\11900497\Documents\Workwell\Documents\NwSto geaekaalig met nommer.docn
8 September 2014
APPENDIX B

LETTERS REQUESTING APPROVAL TO CONDUCT STUDY AT TWO NURSING COLLEGES: DIRECTOR POLICY, PLANNING, RESEARCH, MONITORING AND EVALUATION-NORTH WEST PROVINCIAL DEPARTMENT OF HEALTH
27 March 2015

Dr. F. R. M. Reichel
Department of Health
North West Province
South Africa

Dear Dr. F. R. M. Reichel

REQUESTING PERMISSION TO COLLECT DATA: 22122249 MONICA DINKELMANN

I am currently enrolled for my master’s degree in Human Resource Management at the Potchefstroom campus of the North-West University (NWU). The general objective of my study is to identify the knowledge, skills and attitudes (KSA’s) needed by nurses when they enter the clinical practice environment and in order to improve quality patient care. Ethical clearance (project number EMS15/02/25-01/02/01) has been granted by the WorkWell Research Unit situated in the Economic and Management Sciences Faculty of the NWU Potchefstroom campus. Attached please find the ethical clearance letter.

In this study I will collect data from various Nursing Education Institutions (NEI’s) in South Africa. Data will be collected by conducting semi-structured individual interviews on both nursing educators and final-year nursing students whom are willing to participate. The identity of the NEI will be protected and all data collected from it will be kept confidential and anonymous in order to protect the educators and students.
In order to continue my study I kindly request permission and support to collect data relevant to the study at the Excelsius Nursing College situated in Klerksdorp and the Mmacon Nursing College situated in Mafikeng.

For any other queries, please contact Ms. M. Dinkelmann (072 732 5776), Mr. G. H. Rabie (018-299 1395) or Dr T. Rabie (018-299 1719).

Your positive consideration with regard to this request will be welcomed.

Yours sincerely

[Signature]

MS M. DINKELMANN
Assistant: M.A. candidate

[Signature]

MR. G. H. Rabie
Supervisor

Date: 29 March 2016

Dinkelmann M (22952394)@Unisa Mail: Dinkelmann@unisa.ac.za

MS M Dinkelmann - Permission to collect data for study

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APPENDIX C

LETTERS REQUESTING APPROVAL TO CONDUCT THE STUDY AT FOUR NURSING EDUCATION INSTITUTIONS IN A PROVINCE OF SOUTH AFRICA
27 March 2015

Dear Prof. M. J Viljoen

REQUESTING PERMISSION TO COLLECT DATA: 22122249 MONICA DINKELMANN

I am currently enrolled for my master’s degree in Human Resource Management at the Potchefstroom campus of the North-West University (NWU). The general objective of my study is to identify the knowledge, skills and attitudes (KSA’s) needed by conserve nurses when they enter the clinical practice environment and in order to improve quality patient care. Ethical clearance (project number EMS15/02/25-01/02/01) has been granted by the WorkWell Research Unit situated in the Economic and Management Sciences Faculty of the NWU Potchefstroom campus. Attached please find the ethical clearance letter.

In this study I will collect data form various Nursing Education Institutions (NEI's) in South Africa. Data will be collected by conducting semi-structured individual interviews on both nursing educators and final-year nursing students whom are willing to participate. The identity of the NEI will be protected and all data collected from it will be kept confidential and anonymous in order to protect the educators and students.
27 March 2016

Dr. A. Rakudu
North-West University
Mafikeng Campus
Mmabatho
North West Province
South Africa

Dear Dr. A. Rakudu

REQUESTING PERMISSION TO COLLECT DATA: 22122249 MONICA DINKELMANN

I am currently enrolled for my master’s degree in Human Resource Management at the Potchefstroom campus of the North-West University (NWU). The general objective of my study is to identify the knowledge, skills and attitudes (KSA’s) needed by conserved nurses when they enter the clinical practice environment and in order to improve quality patient care. Ethical clearance (project number EMS15/02/25-01/02/01) has been granted by the WorkWell Research Unit situated in the Economic and Management Sciences Faculty of the NWU Potchefstroom campus. Attached please find the ethical clearance letter.

In this study I will collect data from various Nursing Education Institutions (NEI’s) in South Africa. Data will be collected by conducting semi-structured individual interviews on both nursing educators and final-year nursing students whom are willing to participate. The identity of the NEI will be protected and all data collected from it will be kept confidential and anonymous in order to protect the educators and students.
In order to continue my study I kindly request permission and support to collect data relevant to the study at the School of Nursing Science situated on the Mafikeng campus of the NWU.

For any other queries, please contact Ms. M. Dinkelmann (072 732 5776), Mr. G. H. Rabie (018-299 1395) or Dr T. Rabie (018-299 1719).

Your positive consideration with regard to this request will be welcomed.

Yours sincerely

MS M. DINKELMANN
Assistant, M.A. candidate

MR. G. H. Rabie
Supervisor

Original date: (22/12/2014) C:sers\M0977095\Desktop\M0977095\DINKELMANN Permission to collect data.doc
27 March 2015
Mrs. P. R. Muthupi  
Excelsius Nursing College  
Klerksdorp  
North West Province  
South Africa  

11 June 2015

Dear Mrs. P. R. Muthupi

REQUESTING PERMISSION TO COLLECT DATA: 22122249 MONICA DINKELMANN

I am currently enrolled for my master’s degree in Human Resource Management at the Potchefstroom campus of the North-West University (NWU). The general objective of my study is to identify the knowledge, skills and attitudes (KSA’s) needed by conserve nurses when they enter the clinical practice environment and in order to improve quality patient care. Ethical clearance (project number EMS15/02/25-01/02/01) has been granted by the WorkWell Research Unit situated in the Economic and Management Sciences Faculty of the NWU Potchefstroom campus. Approval was also obtained from the North West Department of Health. Attached please find the ethical clearance letter and approval letter.

In this study I will collect data from various Nursing Education Institutions (NEI’s) in South Africa. Data will be collected by conducting semi-structured individual interviews on both nursing educators and final-year nursing students whom are willing to participate. The identity of the NEI will be protected and all data collected from it will be kept confidential and anonymous in order to protect the educators and students.
In order to continue my study I kindly request permission and support to collect data relevant to the study at the Excelsius Nursing College situated in Klerksdorp.

For any other queries, please contact Ms. M. Dinkelmann (072 732 5776), Mr. G. H. Rabie (018-299 1395) or Dr. T. Rabie (018-299 1719).

Your positive consideration with regard to this request will be welcomed.

Yours sincerely

MS M. DINKELMANN
Assistant: M.A. candidate

MR. G. H. Rabie
Supervisor

Myke 2014
Ms. M. Montshica
Mmacon Nursing College
North West Province
South Africa

11 June 2015

Dear Ms. M. Montshica

REQUESTING PERMISSION TO COLLECT DATA: 22122249 MONICA DINKELMANN

I am currently enrolled for my master’s degree in Human Resource Management at the Potchefstroom campus of the North-West University (NWU). The general objective of my study is to identify the knowledge, skills and attitudes (KSA’s) needed by conserve nurses when they enter the clinical practice environment and in order to improve quality patient care. Ethical clearance (project number EMS15/02/25-01/02/01) has been granted by the WorkWell Research Unit situated in the Economic and Management Sciences Faculty of the NWU Potchefstroom campus. Approval was also obtained from the North West Department of Health. Attached please find the ethical clearance letter and approval letter.

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In order to continue my study I kindly request permission and support to collect data relevant to the study at the Mmacon Nursing College situated in Mafikeng.

For any other queries, please contact Ms. M. Dinkelmann (072 732 5776), Mr. G. H. Rabie (018-299 1395) or Dr T. Rabie (018-299 1719).

Your positive consideration with regard to this request will be welcomed.

Yours sincerely

[Signature]

MS M DINKELMANN
Assistant: M.A. candidate

[Signature]

MR. G. H. Rabie
Supervisor
APPENDIX D
APPROVAL TO CONDUCT STUDY AT TWO NURSING COLLEGES FROM
DIRECTOR POLICY, PLANNING, RESEARCH, MONITORING AND
EVALUATION – NORTH WEST PROVINCIAL DEPARTMENT OF HEALTH
POLICY, PLANNING, RESEARCH, MONITORING AND EVALUATION

Name of researcher: Ms M Dinkelmann
North West University

Physical Address
(Work/Institution)
North West University
Polokwane Regional Camp
Hoffman Street, Polokwane, 2528

Subject: Research Approval Letter - Exploring a perceived competency profile for conserved nurses in South Africa.

This letter serves to inform the Researcher that permission to undertake the above mentioned study has been granted by the North West Department of Health. The Researcher is expected to arrange in advance with the chosen facilities, and issue this letter as proof that permission has been granted by the Provincial office.

This letter of permission should be signed and a copy returned to the department. By signing, the Researcher agrees, binds him/herself and undertakes to furnish the Department with an electronic copy of the final research report. Alternatively, the Researcher can also provide the Department with electronic summary highlighting recommendations that will assist the department in its planning to improve some of its services where possible. Through this the Researcher will not only contribute to the academic body of knowledge but also contribute towards the bettering of health care services and thus the overall health of citizens in the North West Province.

Kindest regards

Dr. FRM Reichel
Director: PPRM&E

Researcher

10/06/2015
Date

10/06/2015
Date

Healthy Living for All
APPENDIX E
APPROVAL LETTERS TO CONDUCT STUDY FROM TWO SCHOOLS OF NURSING SCIENCES OF ONE UNIVERSITY IN A PROVINCE OF SOUTH AFRICA
Ms. M. Dinkelman
20 The Lofts
Steve Biko Street
POTCHEFSTROOM
2531

Dear Ms. M. Dinkelman

PERMISSION GRANTED TO COLLECT DATA

This letter serves to confirm that permission has been granted by the Executive Management Committee of the School of Nursing Sciences for data collecting.

Yours sincerely

[Signature]

Mrs. E. Bomman
Acting Director

Original date: 18 June 2015
MEMO

To: Ms M.Dinkelmann (Human Resource Management at the Potchefstroom campus)
From: Dr M A Rakhudu (HOD: DNS)
Date: 22/06/2015
Re: Permission to collect data on “Exploring a perceived competency profile for conserve nurses in South Africa”

1. The abovementioned matter bears reference.

2. The purpose of this submission is to report that permission is granted to collect data from members of Department of Nursing Sciences (DNS) at Mafikeng campus. Kindly produce this letter as a proof that DNS has granted approval for data collection.

3. Arrangements in advance with Staff members shall be facilitated by the researcher. DNS expects the student to share the outcome of the research results with us.

Kindest regards

Dr Mahlasea Rakhudu
Programme Coordinator
Department of Nursing Sciences
Mafikeng Campus
North-West University
Tel: 2718 389 2530
Fax: 2718 389 2582 / 2052
Humidi.rakhudu@nwu.ac.za
www.nwu.ac.za
APPENDIX F
INFORMATION LETTER AND INFORMED CONSENT FORMS: INTERVIEWS
WITH NURSE EDUCATORS AND FINAL-YEAR NURSING STUDENTS
EXPLORING A PERCEIVED COMPETENCY PROFILE FOR COMSERVE NURSES IN SOUTH AFRICA.

1. **INTRODUCTION**
   
   You are kindly invited to participate in this research study. The information in this letter will assist you to understand this study, before deciding if you want to participate or not. If you have any queries, please feel free to ask the researcher.

2. **PURPOSE OF THE STUDY**

   The general objective of this research study is to determine the knowledge, skills and attitudes (KSAs) needed by comserve nurses when they enter the clinical practice environment. The KSAs will be based on nurse educators and final-year nursing students’ perceptions concerning the competencies needed by prospective comserve nurses to deliver quality patient care in the clinical practice environment. These KSAs will serve as a basis to develop a perceived competency profile for prospective comserve nurses based on the perceptions of the nurse educators and final-year nursing students.

3. **PROCEDURE**

   One of the objectives of this study is to explore and describe nurse educators and final-year nursing students’ perceptions concerning the knowledge, skills and attitudes needed by prospective comserve nurses, when delivering quality patient care. Your participation in a semi-structured individual interview on the concept of knowledge, skills and attitudes needed by comserve nurses is therefore requested. The interview will be conducted in a private room at your own convenience. The researcher will record the interview and field notes will be taken during and after the interview, thereafter the interviews will be transcribed.
4. RISKS AND DISCOMFORT INVOLVED
There are no risks in participating in this interview. You will not be physically, emotionally or financially at risk when participating during this interview. The interview questions will not expose or harm you in any way, however, should any of the questions asked during the interview make you uncomfortable you do not need to answer them. The interview will take approximately 15-40 minutes or shorter per participant.

5. POSSIBLE BENEFITS OF THE RESEARCH STUDY
You will not benefit directly from this study, but the findings of this study may prove beneficial to prospective comserve nurses, nursing education institutions, clinical practice environments and human resource departments of clinical practice environments. The results of this study feed into our need to identify the necessary KSAs comserve nurses need to deliver quality patient care.

6. YOUR RIGHTS AS A PARTICIPANTS
Participation in this interview is voluntary. You can withdraw at any given time for any reason whatsoever, without incurring any penalty against you. In this study all the participants will be treated fairly. Participants have the right to privacy, therefore the recordings and field notes will be confidential and anonymous. The original recordings of the interviews and the transcribed data will be stored behind a double-lock safe in a secure location. The electronic documents will be stored safely, with password protection, which will not be accessible to others and electronic backup copies will be made. After the completion of the study the hard copies will be shredded.

7. ETHICAL APPROVAL
Ethical clearance (project number EMS15/02/25-01/02/01) has been granted by the WorkWell Research Unit situated in the Economic and Management Sciences Faculty of the North-West University. Copies of the approval are available at your request.

8. INFORMATION AND CONTACT PERSON
The contact person is Ms Monica Dinkelmann (018 285 2319) or 22122249@nwu.ac.za

9. COMPENSATION
There is no compensation for the participation in this study. Your participation is voluntary.

10. CONFIDENTIALITY

All the information obtained during this interview will be kept confidential and anonymous.

Please complete the voluntary consent.

Kind regards,

Ms M. Dinkelmann

M.A. candidate
CONSENT FORM
EXPLORING A PERCEIVED COMPETENCY PROFILE FOR COMSERVE NURSES IN SOUTH AFRICA.

Herby I give consent that Ms M Dinkelmann and promoters may use the information generated from the interview for research purposes and I understand that the results will be treated according to research-related ethics and regulations.

I confirm that the interviewer to whom I give consent explained to me the:

- purpose of the study;
- procedure;
- risks and discomfort involved,
- possible benefits of the research study,
- your rights as a participant
- ethical approval
- compensation and,
- confidentiality

I have also received, read and understood the written information regarding the study. I am aware that all information will be treated and processed anonymously and will be confidential. I agree that I am participating willingly. I therefore give informed voluntary consent to participate in the study and know that I can stop the interview at any given time without any penalties.

Please complete the following section
Participant’s name and surname:

Participant’s signature:

Date:
**Answer sheet for nurse educators.**

<table>
<thead>
<tr>
<th>Participant code</th>
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<td>Klerksdorp</td>
<td>Mafikeng</td>
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<td>Economic activity</td>
<td>In service</td>
<td>Not economically active (students, housewife/-husband, ill or disability)</td>
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<td>Institution: / Campus:</td>
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<td>Where did you obtain your qualification?</td>
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<td>Do you have international experience?</td>
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<td>If yes, how many years?</td>
<td>Which country?</td>
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<td>Are you employed full-time or do you also do practical work? How many hours a week?</td>
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<td>Do you have an additional qualification in nursing education?</td>
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### Answer sheet for final-year nursing students

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<th>Interviewer’s name</th>
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<td>Language</td>
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<td>Highest level of qualification (NQF level)</td>
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<tr>
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<td>Not economically active (students, housewife/-husband, ill or disability)</td>
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<tr>
<td>Institution: / Campus:</td>
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### What are your nursing specialities?


<table>
<thead>
<tr>
<th>Do you give practical or theoretical assistance to students?</th>
<th>Practical</th>
<th>Theoretical</th>
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138
The general objective of this research study is to determine the knowledge, skills and attitudes (KSAs) needed by comserve nurses when entering the clinical practice environment. The KSAs will be based on nurse educators and final-year nursing students’ perceptions concerning the competencies needed by prospective comserve nurses to enable them to deliver quality patient care in the clinical practice environment. These KSAs will serve as a basis on which to develop a perceived competency profile for prospective comserve nurses based on the perceptions held by nurse educators and final-year nursing students.

Brief explanation of domains:

- **Quality patient care:**
  According to Campbell, Roland and Buetow (2000), quality patient care can be defined as whether individuals have access to health care personnel, health resources and care which applies to their specific needs and whether the care received is effective and of good quality.

- **Comserve nurses:**
  After successful completion of the four-year BCur degree or diploma in Nursing Science, newly qualified nurses are obligated to work through their community service year before they can be registered as a professional nurse at the South African Nursing Council (Ndaki, 2004). These nurses are referred to as comserve nurses.

- **Knowledge:**
  Knowledge is an ‘acquaintance with or understanding facts, actions and ideas’ (Robbins, Judge, Odendaal & Roodt, 2009). In this study knowledge can be seen as the theoretical and practical knowledge comserve nurses receive to enable them to deliver quality patient care.

- **Skills:**
  Skills are referred to as the ‘ability to do something well, due to training, development and experience’ (Robbins, Judge, Odendaal & Roodt, 2009).
• **Attitudes:**
  Attitudes are referred to as ‘the way that one behaves towards someone or something and which shows how you think and feel’.

• **Competence:**
  According to the South African Nursing Act, (No. 33 of 2005), competence is ‘a level of performance demonstrating the effective application of knowledge, skills, judgement and personal attributes required to practice safely and ethically in a designated role and setting’.

  ‘Competence is the combination of knowledge, psychomotor, communication and decision-making skills that enable an individual to perform a specific task to a defined level of proficiency’ (SANC, 2005).
NURSE EDUCATORS

INTERVIEW SCHEDULE

1. Introduce and welcome, thank the participant.
2. Explain the research (purpose and objectives) to participant.
3. Explain how the findings will be used.
4. Explain the interview procedure
   a. Tape recorder
   b. Field notes
   c. Time (approximately 15-40 minutes)
5. Role of participant
   a. To describe your view, and to help the researcher to interpret and understand it.

Questions:

1. What does quality patient care mean to you?
2. Based on your own experiences, what do you think the challenges are that conserve nurses are faced with when attempting to deliver quality patient care?
3. What do you think must be done by NEIs to overcome these challenges when attempting to deliver quality patient care?
4. 
   a. Do you think the problems which clinical practice environments experience with regard to quality patient care is due to a lack of KSAs? Why and why not?
   b. Which of these three factors: knowledge, skills or attitudes (KSAs) do you think is the biggest problem? Prioritise them from 1-3 and elaborate.
5. Do you think the training that nursing students receive at NEIs is adequate in assisting them in developing the necessary KSAs to deliver quality patient care? Elaborate.
6. 
   a. Do you think the nursing curriculum is presented by the NEI in such a manner that the focus is on the KSAs which nursing students need to effectively deliver quality patient care? Elaborate.
   b. What should the NEI focus on more with regard to knowledge, skills and attitudes?
c. What should the NEI focus on less with regard to the knowledge, skills and attitudes?

d. What does the NEI currently focus on with regard to the knowledge, skills and attitudes?

7. In your opinion, what knowledge does a prospective comserve nurse need to be able to deliver quality patient care?

8. In your opinion, which skills does a prospective comserve nurse need to be able to deliver quality patient care?

9. In your opinion, which attitudes does a prospective comserve nurse need to be able to deliver quality patient care?
EXPLORING A PERCEIVED COMPETENCY PROFILE FOR COMSERVE NURSES IN SOUTH AFRICA

The general objective of this research study is to determine the knowledge, skills and attitudes (KSAs) needed by comserve nurses when they enter the clinical practice environment. The KSAs will be based on nurse educators and final-year nursing students’ perceptions concerning the competencies needed by prospective comserve nurses to deliver quality patient care in the clinical practice environment. These KSAs will serve as a basis for developing a perceived competency profile for prospective comserve nurses based on perceptions held by the nurse educators and final-year nursing students.

Brief explanation of domains:

- **Quality patient care:** According to Campbell, Roland and Buetow (2000), quality patient care can be defined as whether individuals have access to health care personnel, health resources and care applicable to their specific needs and whether the care received is effective and of good quality.

- **Comserve nurses:** After successful completion of the four-year BCur degree or diploma in Nursing Science, newly qualified nurses are obligated to work through their compulsory community service year before they can be registered as a professional nurse at the South African Nursing Council (Ndaki, 2004). These nurses are referred to as comserve nurses.

- **Knowledge:** Knowledge is an ‘acquaintance with or understanding facts, actions and ideas’ (Robbins, Judge, Odendaal & Roodt, 2009). In this study knowledge can be seen as the theoretical and practical knowledge comserve nurses receive to deliver quality patient care.
• **Skills:**
Skills are referred to as the ‘ability to do something well, due to training, development and experience’ (Robbins, Judge, Odendaal & Roodt, 2009).

• **Attitudes:**
Attitudes are referred to as ‘the way that one behave towards someone or something and which shows how you think and feel’.

• **Competence:**
According to the South African Nursing Act, (No. 33 of 2005) competence is ‘a level of performance demonstrating the effective application of knowledge, skills, judgement and personal attributes required to practice safely and ethically in a designated role and setting’.

‘Competence the combination of knowledge, psychomotor, communication and decision-making skills that enable an individual to perform a specific task to a defined level of proficiency’ (SANC, 2005).
FINAL-YEAR NURSING STUDENTS

INTERVIEW SCHEDULE
1. Introduce and welcome, thank the participant.
2. Explain the research (purpose and objectives) to participant.
3. Explain how the findings will be used.
4. Explain the interview procedure
   a. Tape recorder
   b. Field notes
   c. Time (approximately 15-40 minutes)
5. Role of participant
   a. Expert in the interview, want to describe your view, help the researcher to interpret and understand it.

Questions:
1. What does quality patient care mean to you?
2. Based on your own experiences, what do you think the challenges are that comserve nurses are faced with when attempting to deliver quality patient care?
3. What do you think must be done by NEIs to overcome these challenges to deliver quality patient care?
4. a. Do you think that the problems which clinical practice environments experience with regard to quality patient care is due to a lack of KSAs? Why and why not?
   b. Which of these three knowledge, skills or attitudes (KSAs) do you think is the biggest problem? Prioritise them from 1-3 and elaborate.
5. Do you think the training that nursing students’ receive at NEIs is adequate in assisting them in developing the necessary KSAs to deliver quality patient care? Elaborate.
6. a. Do you think that the nursing curriculum is presented by the NEI in such a way that the focus is on the KSAs which nursing students’ need to effectively deliver quality patient care? Elaborate.
   b. What should the NEI focus more on with regard to knowledge, skills and attitudes?
c. What should the NEI focus less on, with regard to the knowledge, skills and attitudes?

d. What does the NEI currently focus on, with regard to the knowledge, skills and attitudes?

7. In your opinion what knowledge does a prospective comserve nurse need in order to deliver quality patient care?

8. In your opinion which skills does a prospective comserve nurse need to deliver quality patient care?

9. In your opinion which attitudes does a prospective comserve nurse need to deliver quality patient care?
<table>
<thead>
<tr>
<th>Line nr</th>
<th>INTERVIEW</th>
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<tbody>
<tr>
<td>1</td>
<td>So you said it would be fine if I speak Afrikaans?</td>
</tr>
<tr>
<td>2</td>
<td>No, it does not matter. Okay what does quality patient care mean to you?</td>
</tr>
<tr>
<td>3</td>
<td>Okay, I think the patient must be treated holistically, physically, emotionally, physiologically, and socially. You must see the patient as a total human being, as part of a family and part of the community, and when the patient leaves the ward he must really feel that he was well cared for.</td>
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<tr>
<td>4</td>
<td>Based on your own experiences what do you think are the challenges, which community service nurse are faced with in order to deliver quality patient care?</td>
</tr>
<tr>
<td>5</td>
<td>Okay, I think the biggest problem is the high patient load that they have in the municipal clinics, in the government hospitals. They have a shortage of staff, so there is not enough staff for all the patients, and often there is a lack of resources. There is not enough medications, equipment and linen. I think that is really a problem.</td>
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<tr>
<td>6</td>
<td>What do you think must be done by the nursing education institutions to overcome these challenges to deliver quality patient care?</td>
</tr>
<tr>
<td>7</td>
<td>Okay, it is very difficult because the nursing institutions do not really have any control over what is going on,</td>
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especially in the provincial hospitals, where we have this shortage of staff and shortage of resources. What they can do, I think is to make sure that the education is in line with the needs of the practical facilities, like either working community nursing must ensure that my whole curriculum, theoretically and practical really prepares my students from what is expected from them in practice and that is what we have been doing up to now. Every year we see what is the need in practice and then we try and adjust within our current curriculum see that our outcome-, see that the students reach-, really equip them. So I think for all the disciplines, general nursing, psychiatric, community, midwifery, that we must really ensure that our students are equipped to handle the thing that they need to need in the provincial hospitals, but also in the private hospitals, because sometimes the students will get private hospitals, so they really need to able to handle the whole scope of expectations when they are qualified.

Researcher Since there is a lack of resources, would you say it is important or we can give a subject that will help them to work with the available resources? Or is this already happening?

Interviewee Yes, I think they try their best. In community nursing we do it because often we really need to care for a patient in his home setting, you don’t have all the equipment and resources that you do have in the hospital, so you need to see what do you have, make use of what you have and sometimes you need to take your own things with. Most of the time you have your bag with all you things, to wash your hands to do your wounds to put in a catheter, whatever you need to do. So that can be good, but that can also be integrated maybe in the curriculum, but that will not really make up for that lack of resources. So it can be a good thing to teach them how to actually provide patient with the minimum resources. How to really think on their feet, and to show initiative. That can be good, but that can be integrated in the curriculum.
Researcher  33  When there is no resources?

Interviewee  34  Yes, that they must really think and what they can do if there is no resources. What can they do with what they have, to deliver safe patient care. Like if there is no antiseptic soap then they can use the soap that they have and still wash with the correct procedures, things like that. So there is different ways to do the same thing correctly, even with limited resources. It cannot be an excuse for not having resources, but it can help if they are equipped to still provide safe patient care with limited resources.

Researcher  39  Especially if the community service nursing in rural areas?

Interviewee  40  Yes especially in clinics and when they go out with the primary healthcare re-engineering teams, then they really have limited resources. You see what they can do, we will speak about it later, part of the curriculum they can equip them for the realities. Things like what they are going to face in practice. Our students already work in the practical facilities so they know the realities but the kind of refresher course, that they can may be have in the last six months of their final year. I think there is a question about that. I thought about something like that for all the different disciplines, we can just maybe for a week or two each discipline, just have time to really help to get up to date with the new protocols, the newest policies that is going on, and to show them may be, this is the different places where you can be placed, this is what you can expect and this is how we can equip you to handle that.

Researcher  49  I heard that they only do midwifery in the last year, fourth year. So do you think it will have an impact if they forget about the things that they have learned in the first and second year?

Interviewee  51  I think with the midwife-, some of the modules start in the third year but I think most of the practical, I am not responsible for midwifery, but what I saw with my own training is that your third, especially your fourth year,
they concentrate on midwifery, things like ICU, but I really would have like if maybe the last six months of my
fourth year just may be to have a bit of a block, like maybe one month that they have one week for each
discipline and just like a crash course just to make to make sure, like for instance for community nursing, like
2012 we had a new immunization schedule, it was revised there were new things in 2014. The same happened,
there are new things regarding family planning. Every now and then there are new things that come out and now
they learned out is up to their second year, may be some of the things in the first semester in their third. At the end
of their fourth year, there are a lot of things that have changed and new policies and protocols and now they go into
their fifth year comserve year, and they don’t know about that. So I will actually recommend, even if it is only
a month that each discipline have like a change to give them a refresher on that specific subject to see what are
the new things, what must they know about, what must they go and read about. If they know that they are going
to work in a clinic, see this is the new vaccine manual; this is the new policy regarding family planning. We have a
new booklet from 2012 and 2014, so the students that is now fourth years, they use the 2014 book. There is a lot of
things that I think, just before they enter their commserve year, I would like to equip them a bit better, and tell
them this is the newest things that I would just like you to sharpen yourself up with.

**Researcher**

Do you think that the problems which clinical practice environments experience with regard to quality patient
care, is due to a lack of knowledge, skills and attitude? Why? Why not?

**Interviewee**

I think partly it can be. I will not say that it is the knowledge skills and attitudes only of the comserve nurses, it
can be-, there are different things, it can be the knowledge, skills and attitude of the nurses after their training, but
I think there is a lot of other things as well. It is just that the people are sometimes so overworked, so over
burdened, they try their best, they are really burned out. They have a lot of patient. So I don’t think it is only-, but
what I actually think is maybe a problem there, there is not a lot of support and mentorship. Like in the
comserve year I would like that each comserve nurse has like a mentor that works with her and help her to get
that final round off. They are now really thrown into the deep water. They are supposed to know everything,
do everything on their own, they take all the responsibility cause there is not enough hands, so the ideal will be
that comserve year, that they work with a mentor, that whole year, wherever they are and that they can in a safe
environment really practice the knowledge, skills and attitudes. I think it is there but they don’t have the time
really to develop it. They don’t have time to blossom, because they need to go on and handle every thing and take
the responsibility. The one moment they are a student, and no suddenly they are the comserve nurse and they
need to do everything cause there is no one else to do it in some of the places.

Researcher

Would you say there is a lack of role models?

Interviewee

Yes I think so and mostly because there is a shortage of staff. The staff that is there don’t see their way open to
stay there, because the circumstances is not ideal. They rather go out of nursing or they go to the private sector,
where they have a better set up, because the clinics and hospitals-, not a lot of nurses really with a family and
everything can go on with that stress and that workload that have there currently.

Researcher

Which of these three, knowledge, skills or attitudes, do you think is the biggest problem? Prioritize them
from one to three and elaborate.

Interviewee

Okay, that is quiet difficult that will differ from student to student. I think in our curriculum we really to try to
ensure that they have the necessary knowledge and necessary skills and their attitudes is often a personal thing.
We can teach you how to behave, how to communicate, how to be caring, how to be patient, but that also is
something that comes with maturity and experience. It is difficult to say, that will depend from student to student,
I think the nursing, we as a nursing education institution try to give the student all of those things, often by being
a role model, by your attitude toward the patient, towards your colleagues to be a role model in that way. I think-
I cannot really answer you on that one, because that will differ from student to student to see which one of those
are actually lacking. We try to give them all, but maybe attitudes is the one we cannot really improve, we can test
your knowledge, theoretical and practical, we can test your skills. Your attitude when you have like a scenario and
you have to do the consultation with the mother, in a way we can test your attitudes, but that is not really to say
that, that is the way you will behave in practice.

Researcher  Would you say it will work if you take a psychometric test done in Matric? If you want to become a nurse and
then have a psychometric test to see if you will be able to have the right attitude for nursing.

Interviewee They are already doing it. It is part of our selection criteria. Dr Scrubies will be able to tell you more about this.

They already have a test where they look at things like attitude and your caring ability.

Researcher I also saw that a lot of the first year students start suffering from depression cause they can’t cope. Will it also be
possible to have a psychology test on all the students at the end of your first year to see whether they are coping
or not. If they then pick up that the student is not coping, maybe to make it compulsory for them to go and see a
psychologist, so if they get to their community service year then it is not such a big deal being thrown in at the deep end.

Interviewee It could work but one must also just make sure that it does not become an ordinary excuse to say “o I am not
coping”. Maybe one can work that into the curriculum, as we all know that the students are placed under
tremendous strain with the physical and emotional side of the curriculum. Maybe it can act as a type of breather
for the students as some of them get exposed to terminal patients, HIV patients, patient dying and not dying in a
nice way. They are really traumatized by what they see from a very young age and no one really helps them with
that and they get dreams and they get stressed, and then they have this workload, they need to work weekends,
holidays where the other students can relax and recharge their batteries. So actually I would like to see that all the
students get the support on an on-going bases, compulsory. They must have this throughout all four years and it is
not something that some students get, it must be something like either research on resilience. Teach them how to
strengthen their resilience, as nurses’ needs resilience. It can be like a module to teach you how to use your
strengths to be more resilient while caring for older people, and that can be used for nurses in general. There is a lot
of research and a lot of knowledge that can be used to equip the students, but our curriculum is so full, and we work
against time so we don’t really give attention to these things. I think it can be good to do it like that, but I always
try and make stuff positive, don’t make turn it into something negative, like some cope and others don’t. I would
rather say empower all of them from the beginning and do it every year so by the time that they finish their
training, they have the necessary skills and knowledge and are empowered to handle the things that they are going
to face. Not only on a knowledge and skills base but also on an attitude and personal strength to handle the things
they need to handle.

Researcher: Would you think it would improve when they do their community service year?

Interviewee: I really think so, cause at least they will have something that they can use to cope. They will know that this and this
and this I have used through my four years and it worked and if I cannot cope what can I do and where can I go.
They must always know where they can go. There will be some students that will benefit from seeing a
psychologist and that they must have those things to go on to be referred to wherever and know that I can go or refer my fellow colleague to these people to help them.

Researcher

Do you think the training that nursing students receive at the nursing education institutions is adequate in assisting them in developing the necessary knowledge skills and attitudes, to deliver quality patient care?

Interviewee

I think the nursing education institutions really try their best according to the curriculum that they need to adhere to and their own practical knowledge and skills and practical experience to equip the students very well, but what I do feel is even if you had the best training, that any nursing education institution can give you, that your year, your conserve year is actually the year that you need to be helped or empowered to really to put everything in placed. Actually every time when you start with a new employer, say for instance now that I am finished, when we qualified we went immediately to private sector or government hospitals, we didn't have a conserve year in the eighties. So I had excellent training but that first three months was actually like an orientation, where I really just had to make sure how things work in the hospital, where do they put their things. Wherever you go and work, I went to the nursing college at the 1 Military hospital, so I had to make sure how everything works there, where I trained in Potchefstroom. Although they are equipped I would like to say that every employer that employs a young nurse, need to realize that they will need to give them a good orientation and have someone to mentor them for at least three months, three to six months. Then they will really be sure that that nurse will be able to function well in their facility. So the conserve year is one way by doing it if they can't equip them and mentor them and actually expose them to a variety of practical experiences to round them off. But even after their conserve year, if they go there and they work at Mediclinic or Mooimed or they work in Pretoria at Unitas, they rely on the
training the students had, and that is good we give them excellent training. But remember it is still a young profession, so they need mentorship for about three months and then they will be able to really blossom in that environment. But what happens in reality, the moment you have your qualifications, they see that you can do everything, they throw you in the deep water and you just need to swim and survive. I think maybe that is what the problem is. When we were younger, there were more staff, you were a bit more protected, because there was always a more senior professional nurse, that you did your part but if you were not sure or you need to find something out, you could go and say sister, I saw this and this and this, I did this and this and this, what do you recommend? I think I must do this, do you agree? There was someone as a backup. Like a mentor to help you. I am not sure that our students have that now. I would like to see that in their conserve year, but also when they go into practice that all new young professionals have at least like a three month orientation a bit of a mentor just to make sure that they are on their professional way.

Researcher 160 Like a three months of shadowing a sister?

Interviewee 161 Yes that will be excellent, but you know they have their qualifications, but it will just be…that will really help to improve quality care. That is my personal opinion. Just to have that bit of a backup. Our students really from a very young age take a lot of responsibility, but for quality care it will always be good just to have that mentoring and shadowing until they are really, they found their feet in their new environment.

Researcher 165 Do you think the nursing curriculum is presented by the nursing education institution in such a way that the focus is on knowledge, skills and attitude, which nursing students need to effectively deliver quality patient care?

Interviewee 167 Yes, I really think so because the educators all have a lot of practical experience in their field, so they know what is
expected. They go to the practice, we have very good communication with the practice, we visit the practice as far
as possible for us, and we really try to equip our students to be able to do it. With us we have the clinical
accompanies, they are all full time in practice, so we get all that knowledge and skills in. So I think it will depend
from discipline to discipline. I think in community nursing we really try to equip them to be able to work in the
government facilities and also in private practice.

Researcher
173  But it is just only the subject that would-, like the psychologist would be the only one?

Interviewee
174  Yes that would be really good thing, and that would be something that you can continue. One would have to find
space of it may be in the new curriculum. Each university have a lot of things that are compulsory. Maybe the
nursing council can think about something like that, to really equip the students from their first year and then we can
include how to work with limited resources, how to-, what can you do, how can you motivate for more resources or
use the ones you have to empower yourself. When you have a staff shortage and you have to many patients, what
can you do. So it is something, may be a subject that needs to be developed to equip them, to handle the realities
maybe of the provincial hospitals and the private hospitals with limited resources, limited staff, but not always with
limited one just to cope. Often the students complete their training and they leave nursing, because they cannot cope
with the demands of nursing. It is physical hard work, it is emotionally exhausting. The patients are sometimes very
difficult. You get aggressiveness. You get abuse from both sides. Sometimes it is the patients abusing the nurses and
also the management in a lot of the facilities really makes it so difficult for the nurses, that they just don’t feel like
working there anymore. The hours, the shifts that they work.

Researcher
186  So a subject for coping and for limited resources and staff?
Interviewee 187  Yes, you can say something like that.

Researcher 188  Like a code black?

Interviewee 189  Yes, maybe they must really have like a thing where everyone sits together and say.-I think the main aim of this
190  subject must be is: “How can we ensure that our nurses stay in nursing that they are resilient and that keep on going,
191  stay in the profession, cope with the demands and don’t leave the profession” They are not able to cope because of
192  limited resources, limited staff and those kind of things, or the pressure that they are experiencing. Something like
193  that.

Researcher 194  What should the nursing education institution focus more on with regards to knowledge, skills and attitudes?

Interviewee 195  I would say, there is only one thing. What I try to do is, I try to stay up to date with new developments in my field.
196  Like community nursing, look at the new handbooks and new research that is done. Then I look at what the nursing
197  council expects from that subject discipline and I go an look at what are the needs in practice in the government
198  practice and in private practice. Within my curriculum, I try to include the theoretical knowledge and the practical
199  skills that will equip my students. Like now with the current curriculum, I had to stay within the broad outcomes, but
200  I could streamline a bit when I revised the study guides. Now with the new curriculum, they have changed it a lot.
201  They took out community nursing as a separate qualification, but there is still certain modules. So now I need to go
202  and look, with those limited modules, what can I include to still equip them. So I would say in each discipline I will
203  look at my knowledge, skills and attitudes, taking the curriculum into account, taking the needs from the practice
204  into account and them put that into my curriculum. That is something that I revise every year. Every year when I
205  revise I my study guides, I see if there is new publications and I read about the subjects we cover and then I bring
206  that new knowledge into the curriculum and into the study guides.
Do you think that most of the lecturers do that in this institution?

I am not sure, cause I think a lot of them wait for the new curriculum, before they do a lot of changes. Some of them do. Like with anatomy they had to revise, because the anatomy physiology is now combined. So some of the tutors do that, most of us need to revise our study guides every year. So I think when they do that, I am sure. I actually only have knowledge about my subject community nursing, but I expect or I think the other do it. We cannot change too much because we need to stay within the current curriculum, so you cannot change your broad learning outcome, but you can cover the same content but you can bring in the new handbook. I don’t like to use a handbook from 1996 when I have one from 2014. Even if the curriculum didn’t change. So the same things, if I need to teach you about say for instance the immunization of the baby, I am going to use the 2014 vaccination manual and not the 2012. Even if it takes me a whole weekend to revise my study guide, I bring in those new things. That will actually be a good recommendation that every year they need to stay updated with the new publications that came out in their field, new research that came up. New government policies, protocols. I think most of us do it like in community nursing and in midwifery we often have new things. I think with the general nursing, those things don’t change that often, but with certain subjects it changes.

What should the nursing education institution focus less on with regards to knowledge, skills and attitudes?

Okay, I would say-, it is actually very difficult because you need to have a balance of knowledge skills and attitude. What I think we mustn’t just let students learn knowledge like a parrot, from a handbook what they are going to forget. I would say there are certain things, they need to learn out of their heads. Certain facts that they need to know. We must also concentrate more by practically applying the knowledge, like having a scenario. Like if I teach
you in community nursing, like the first year must know what they can do so that milk cannot get contaminated. So 
there are like 15 facts that they can learn out of their head just from the handbook like that. But I would rather like to 
give them a scenario and tell them okay, these farm workers have their own cows, they need to milk them. They 
milk the cow for their own use but it is dirty, it is flies, it is feces all around. Now you need to give health education 
to these farm workers how they must clean it, milk the cows, treat the milk so that the milk that they use in their 
homes are safe. So I would say we must really, the knowledge we have, we must really apply to practical scenarios. 
Practical application, so we need the knowledge that they need to learn out of their heads, but we cannot just say it 
like a parrot word for word and they don’t know how to apply it on practical things. So practical application of 
knowledge, I think that needs to get a great emphasis.

Researcher

What does the nursing education institution currently focus on with regards to knowledge, skills and attitudes?

Interviewee

I think we focus a lot on knowledge and skills, because for each discipline and each year group there are certain 
thetical things you need to know. Also with the practical modules we give you a practical test. There are certain 
knowledge regarding immunization, family planning, you need to know. We test a lot of skills. I think we focus a lot 
on that. Maybe we need to look more at the attitudes, but now I must say a subject in psychiatric nursing, maybe 
they do it there. We try, the way we work with our older people, with our mother and babies to give a role, to be a 
role model. Especially with the staff that go with them to the practical, but maybe the attitudes can get a bit more 
attention. I think we focus a bit more on knowledge and skills maybe. Because those are the things that we actually 
test.
In your opinion what knowledge does a prospective community service nurse need in order to deliver quality patient care?

Okay, that actually needs a lot of knowledge. May be she must really know what is quality care and what is expected of her to deliver quality care, and I think that quality care has to do with all three of these. It has to do with your knowledge, with your skills and your attitude and seeing each patient as a unique human being and treat them holistically, his body, his mind, his soul, his social environment. So I think she must look holistically at the patient and what I always feel is that, I trained now in four disciplines, general nursing, midwifery, community nursing, psychiatric nursing, but with the new qualification it is only going to be general nursing and midwifery. The other subjects will be covered but they don’t get the qualification. But what I have seen in my life, say for instance if I now work in psychiatric nursing after my training, I need to ensure that I am up to date with the newest knowledge developments of psychiatric nursing. I will not necessarily be up to date with the newest thing in midwifery now, but at least they must take responsibility and that has to do with that orientation as well. So for instance I accept the post at Vista private clinic, that is a psychiatric clinic, then it is my responsibility to make sure, firstly I know what is, going on here how their things work, orientate myself and also then sharpen myself up on the new DSM thing, if it is now the 3rd, 4th, 5th whatever, so it is your responsibility. The knowledge, skills and attitudes that has to do with the specific field you are now working in. It is like lifelong learning to stay up to date with the newest developments in that field. That is quite a challenge, cause we have four qualifications and you are not just like a person that is a psychologist, that is the only thing you do. We need to be a midwife; we need to be psychiatric nurse, a community nurse and a general nurse. It is actually four different jobs. A lot of things overlap, but each thing has its own when speciality field, and you have the bar they expect you to know exactly what you are doing.
Researcher 263 In your opinion which skills does a prospective community service nurse need to deliver quality patient care?

Interviewee 264 The skills? Okay the skill, you are different skill for each subject discipline there are certain skills you need to have, so you need to have your practical skills, that has to do with your like give an injection or to give an immunization, to hand out medication. In community nursing you need to know how to care for an older person, how to immunize a baby. You need to have your practical skills, but you also need your interpersonal skills, like your communication really being able to listen to your patient, hear what they are saying and to communicate with them, but also to have a bit of a professional distance between you and your patients, because the work can be emotionally so exhausting, so you need to have actually that people skills as well and life skills. You actually need a lot of life skills as we said to cope to be resilient, those kind of things.

Researcher 272 In your opinion which attitudes does a prospective community service nurse need to deliver quality patient care?

Interviewee 273 Okay, there is a lot of things, I would say the attitudes firstly, you must have a positive attitude, you must have perseverance, and really to be caring and patient and loving and friendly. Those kinds of things. You must really be open to learn, don’t think I know everything because I am qualified, and realize that you will be a lifelong learner, those kinds of things. Really to be responsible and trustworthy so even if no one is there to see what you do, always make sure that you work safe, protect yourself, protect your patients, do the work as it should be done, even if there are a lack of resources and staff and everything that you must live with your conscience.

Researcher 279 Okay, thank you.

Interviewee 280 Okay.
Excerpt interview of a final-year nursing student.

Name of Audio: SIP01
Date of Audio: 6/11/2015
Transcriber: Julia Martinelli
Length: 18:05

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important work gets done faster. About delegation skills. Conflict management. I think also communication skills with people older than them, and also with people in other positions within the multitude team.

Researcher 16 Do you think you will have good role models when working in your community service year?

Interviewee 17 I hope there will be.

Researcher 18 The lecturers that were here were they good role models for you?

Interviewee 19 Some of them were good role models, but not all of them.

Researcher 20 Can you think of any other challenges that will wait for you next year?

Interviewee 21 I think the biggest challenge will be to have the responsibility as a registered nurse. Then you aren’t a student anymore, and you can’t hide behind someone else’s work, you are now working under yourself and the responsibility is on you as a person. No one else will take responsibility for you.

Researcher 24 Do you think you are ready to be a community service nurse next year?

Interviewee 25 I think so, but I am sure the moment you step in there, you get yourself in gear. No one is ever ready to just start a new job. So it is difficult for everyone to start in a new practice. I don’t feel ready at the moment but I am sure within a week after I started work, I will be ready to continue.

Researcher 28 What do you think must be done by nursing education institutions to overcome these challenges to deliver quality patient care?

Interviewee 30 We work a lot, so I really do not think that they can really do anything extra at this stage. They are really bringing everything to the party; you just have to work on yourself to get yourself ready for next year. We have worked 4000 practical hours. You can’t be more prepared through the university. You have worked as a nurse and some of the current
nurses have allowed you to help them to run the ward. So I don’t think the university can do more, you just need to emotionally prepare yourself.

Researcher I have heard that pharmacology has a lot of unnecessary things. Would you say that it needs to be separate from the pharmaceutical students, so that it can only focus on the nursing part?

Interviewee I would agree to that. They go in depth on some of the stuff, but that won’t help us in the practice. I would rather like to learn about a broader range of medication, as that will be more beneficial to me. So to learn about more medication but not as in depth. We have learned about very limited medication but have looked at it in depth.

Researcher Would you say that you would be able to cope where you are going next year, as there is a lot of hospitals and clinics with limited resources, did your training prepare you to be able to work with limited resources? Like for instance if there is no antiseptic products, then you know what to use to clean the wound.

Interviewee I won’t say that we learn that as part of your subjects. The university also teaches you the latest and greatest methods and products that is on the market, but you will learn to use salt and water as part of your 4000 hours that you have worked. You learn to improvise, but the university does not help us to know how to make use of limited resources.

Researcher Do you think it would have helped a lot of you had a subject like that?

Interviewee Yes, even if it is only a one-day course, which you can attend to learn on a wound use salt and water and things like that. That would be really beneficial and we will be better prepared.

Researcher Especially if you are stuck nowhere.

Interviewee Yes.

Researcher Do you think that the problems that clinical practice environments experience with regards to quality patient care is due to a lack of knowledge, skills and attitudes?
Interviewee 53 Yes absolutely. I feel that most nurses do not have the knowledge. I think if the nurses had more knowledge and better attitudes towards the patient then things will go much better than at the moment.

Researcher 55 Which of these three, knowledge, skills or attitudes do you think is the biggest problem? Priorotise them from one to three.

Interviewee 57 Firstly knowledge.

Researcher 58 So is that the biggest problem?

Interviewee 59 Okay let me rephrase, attitude. I think if more people had an attitude that they really want to be there and make a difference, then they should have had more knowledge and more skills. Skill is something that you can learn in the practice but if you don’t have the knowledge and you don’t have the attitude to do it, then you wouldn’t want to do anything.

Researcher 63 So would you say that your attitude will influence your knowledge and skill, cause if you have the right attitude then you would want to learn more?

Interviewee 65 Yes definitely.

Researcher 66 Have you come across people that is doing nursing just for the sake of being a nurse and that their studies have cost them a lot of money?

Interviewee 68 Yes there are plenty of those people out there.

Researcher 69 Do you think the training that nursing students receive at the nursing education institution is adequate in assisting them in the developing the necessary knowledge, skills and attitudes to deliver quality patient care?

Interviewee 71 Yes. They teach us to be very professional. I don’t know if it is like this at all the nursing colleges but here we are very
professional and everything is based on research. I am sure that we are taught here is enough for the practice.

Researcher 73 Would you say that there is too much practical or too little?
Interviewee 74 No I think it is enough.
Researcher 75 And theory?
Interviewee 76 In some subjects I would have loved to have more theory, like psychiatry. In our third year we had more, but is it difficult if the lecturer does not present it properly. We struggled to learn in our third year as it was presented in a way that was difficult. But in psychiatry I would have loved to have more theory.

Researcher 79 Your credentials differ; I think you have 60% theory and 40% practical. Would you say that it should rather be even like 50-50?
Interviewee 81 No I think it is fine the way it is. We don’t have that much experience. So if you have to put in a drip then you are under such pressure not to mess it up as points are deducted. So if we had more practical and failed the practical most of us will fail our year. If you’re practical is going to count more than more students will fail. The reason being that one really stress a lot when you have your practical exams.

Researcher 85 I have heard that you are a much bigger group. Would you say that it would be better if you had individual attenuation from the lecturers when you had to do your practical.
Interviewee 87 Yes. A lot of lecturers went out of their way to give individual attenuation. There was really such lecturer’s that was really nice. I think if we are a group of 15, then I think we all would have done brilliant nurses, as we would have received that individual attenuation. I think the group of next year is even worse as they are even more in a group, I don’t know how they will cope.

Researcher 91 I know that some of the colleges work in blocks. Will you say that it will work better if you also worked in blocks? Like if
one part of the class do theory and the other practice and then you change?

Interviewee 93 I think that would work better. For instance on a Tuesday and Thursday we had to work and on a Wednesday and Friday you had tests to do. So I think it would have worked much better as it is really difficult to work everything in.

Researcher 95 Do you think that the nursing curriculum is presented by the nursing education institution in such a way that is focus is on the knowledge, skills and attitudes which nursing students need to effectively deliver quality patient care?

Interviewee 97 Yes definitely.

Researcher 98 Why do you say that?

Interviewee 99 We had plenty of difficult exams, as they have plenty of experience and we had to apply practical scenarios to our exams in order for them to know that we know how to apply stuff in the practice. So I would really say that is it is enough.

Researcher 101 The curriculum will change in 2019; I think they will change it to 50-50. So that is why I am asking whether the curriculum that is used at the moment is right like the 60-40.

Interviewee 103 It is perfect at the moment. All that they can add is to have those blocks that would work really well.

Researcher 104 What should the nursing education institution focus more on with regard to knowledge, skills and attitudes? Do they have to have more knowledge or what skills do they need to focus on more?

Interviewee 106 I would say-- I don’t actually know it is a bit difficult. I would say that they should have done more practical, but in the sense that lecturers could have been more present at the practice. Like in situations where the other nurses couldn’t help us. To teach us more interesting things instead of just the basics.

Researcher 109 So you would like the lecturers to go with to the practice?

Interviewee 110 Yes more than what they are doing at the moment. We are too many for a lecturer to be with every group. That also made
111 it difficult.

Researcher 112 I know that in your first year you are exposed to very traumatic things. Will you say that there should be a short course or
113 a semester subject just to show you how to cope with all of these things?

Interviewee 114 Yes, definitely. You are being thrown into the grown-up world. There is no introduction. We started working
115 immediately, and we were challenged immediately. There is no one here to comfort you to tell you it is going to be okay.
116 It is only your parents that are actually there to help you. I really think they should give some form a physiology subject
117 for everyone to be better prepared to what you will experience and then they can decide whether they want to continue.

Researcher 118 Would you say that if they implement a subject like that, that they must make it compulsory for every student to see the
119 psychologist at the end of the year just to ensure that all of you are coping? Do you think the attitudes will change in your
120 community service nurse year?

Interviewee 121 I definitely think so.

Researcher 122 What should the nursing education institution focus less on with regards to the knowledge, skills and attitudes? On what
123 do they focus too much like theory or practical?

Interviewee 124 I think they focus too much on stuff that is irrelevant. I can’t think of an example at the moment. Communication was
125 always a problem for us as they could not communicate properly with us.

Researcher 126 So you would say that all theory is still important but for example historical stuff, would you say that they should focus
127 less on that as it is not important?

Interviewee 128 Yes absolutely.

Researcher 129 What does the nursing education institution currently focus on with regards to knowledge, skills and attitudes? Do they
I think at present the focus is on skills. They want to focus on you to have the ability to can work in the practice as we are going into practice next year. I think it is definitely skills and knowledge.

In your opinion what knowledge does a prospective community service nurse need in order to deliver quality patient care?

It depends in which department you will be working. Say for instance they place me in casualty, then I need that knowledge to handle an emergency situation. I need to know what needs to be done firstly and what can wait for later. I have to be able to think on my feet. It depends on where you are placed, but you have to have some experience in that field or you must at least be happy to go and work in that specific area. Do I answer the questions correctly?

You can give me more information on the knowledge that nurses need to have.

Let’s look at casualty; you need the knowledge how much adrenaline you can administer for which patient. If the patient is overweight, then you can administer more adrenaline than what you would for a skinny person. You should also know when you could administer adrenaline. You should know that if the patient is allergic to penicillin, then you can’t give them certain antibiotics. So you need to know your medicine very well.

In your opinion which skills does a prospective community service nurse need to deliver quality patient care?

Skill-, well I don’t know if it falls under that but you need people skills. You must be willing to work with people, if don’t have that then you should have studied something different. You should be able to put a drip in if you want to be a community nurse. If you work in maternity, then you should have experience to know how to deliver a baby, as there is no one there to help you, you are on your own.

So you’re basic nursing skills. In your opinion which attitudes does a prospective community service nurse need to deliver quality patient care?
Interviewee 150 You have to have a positive attitude if you are going to work. You have to have an attitude to help people and you want to
151 help patient to get well and you want to show love to patients. You must have the ability to help the patient to stay calm
152 and feel at peace so that patient can see that you really want to be there and you really want to help them.

Researcher 153 Can you think of anything else, like attitudes?

Interviewee 154 I think you have to have a good attitude towards you colleague. A bad attitude makes it unpleasant for everyone around
155 you. You have to have a positive attitude towards your colleagues. I can’t think of any other examples.

Researcher 156 Thank you very much.
APPENDIX J
SAJIP GUIDELINES
ORA: Qualitative Research full structure

Title: The article’s full title should contain a maximum of 95 characters (including spaces).

Abstract: The abstract, written in English, should be no longer than 250 words and must be written in the past tense. The abstract should give a succinct account of the objectives, methods, results and significance of the matter. The structured abstract for a Qualitative Research article should consist of seven paragraphs labelled Orientation, Research purpose, Motivation for the study, Research approach/design and method, Main findings, Practical/managerial implications and Contribution/value-add.

Introduction: Provide the following, each under their own heading.

- Orientation
- Research purpose and objectives
- Literature review

Research design: Provide the following, each under their own heading and subheading.

- Research approach
- Research strategy
- Research method
  - Research setting
  - Entée and establishing researcher roles
  - Research participants and sampling methods
  - Data collection methods
  - Data recording
  - Strategies employed to ensure data quality and integrity
  - Data analysis
  - Reporting style

Results: The reporting of the results must be clearly linked to the research objectives and research hypotheses. Tables may be used or models (diagrams/figures) may be drafted to indicate key components of the results of the study.

Discussion: Provide the following, each under their own heading.

- Outline of the results
- Practical implications
- Limitations and recommendations

Conclusion: Provide a brief conclusion that summarises the results and their meaning or significance in relation to each objective of the study.
Acknowledgements: Those who contributed to the work but do not meet our authorship criteria should be listed in the Acknowledgments with a description of the contribution. Authors are responsible for ensuring that anyone named in the Acknowledgments agrees to be named. Also provide the following, each under their own heading:

- Competing interests: This section should list specific competing interests associated with any of the authors. If authors declare that no competing interests exist, the article will include a statement to this effect: *The authors declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.* Read our policy on competing interests.

- Author contributions: All authors must meet the criteria for authorship as outlined in the authorship policy and author contribution statement policies.

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- Disclaimer: A statement that the views expressed in the submitted article are his or her own and not an official position of the institution or funder.

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File format

The document uploaded during Step 2 of the submission process:

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- **Rich Text Format (RTF):** Users of other word processing packages should save or convert their files to RTF before uploading. Many free tools are available that will make this process easier.

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Include page numbers and line numbers in the manuscript file.

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Line spacing

1.5

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