

**PEER SUPPORT GUIDELINES FOR NURSE
EDUCATORS DURING CURRICULUM
INNOVATION IN LESOTHO**

by
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DECLARATION

I hereby declare that the work submitted in this thesis, titled, "*Peer support guidelines for nurse educators during curriculum innovation in Lesotho*", is a result of my own independent investigation. Where assistance and support were sought, these were acknowledged appropriately.

I further declare that this work has not been submitted by me for a degree or qualification to any other university or faculty. I hereby cede copyright of this product in favour of the University of the Free State.



M Shawa

June 2020

DEDICATION

This study is dedicated to my two sons, Edward and Japhet, who were my source of strength and encouragement when the going got very tough for me.

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ABSTRACT

Background: The curriculum for the education of nurses and midwives in Lesotho was transformed through the adoption of competency-based education. Competency-based education promotes the capabilities of the students. Transforming the curriculum challenged educators' skills, necessitating new sets of facilitation and assessment skills to enable appropriate enactment of the student-centred curriculum. Such major changes imposed by the curriculum innovation required commensurate professional development and ongoing support for the educators. The absence of ongoing supportive strategies during a curriculum innovation naturally led to unstructured support among educators. However, unstructured peer support is threatened by chaotic implementation and a possible curriculum drift. Therefore, there is a need for structured peer support through the provision of practice guidelines.

Purpose: This study sought to develop guidelines to enhance peer support among nurse educators during a curriculum innovation in Lesotho.

Methods: A qualitative approach with multiple data collection methods was used to develop peer support guidelines according to the World Health Organization's *Handbook for Guideline Development*. The research was undertaken in three phases. Phase I described the existing peer support strategies through an integrative review. Phase II described the experiences of nurse educators related to unstructured peer support during the implementation of midwifery curriculum innovation through an exploratory descriptive qualitative study. Phase III integrated the findings from phases I and II to develop guidelines for peer support during a curriculum innovation in Lesotho. An international expert panel validated the guidelines through two iterative Delphi rounds.

Results: Phase I of the study described the existing peer support strategies through an integrative review. Six themes emerged, namely types of peer support strategies, characteristics of peer supporters, characteristics of an effective peer support strategy, outcomes of effective peer support strategies, challenges of implementing peer support strategies and lessons learnt from the peer support strategies. Phase II of the study described experiences of educators regarding peer support during midwifery curriculum innovation and revealed five themes, namely motivation for educators to participate in peer support, attributes of educators that influence the extent of interaction and uptake of support, unstructured peer support strategies, consequences of peer support among educators and model performance inspires engagement with the new curriculum. The results from the two phases were triangulated and informed the development of the practice guidelines to enhance peer support among nurse educators during curriculum innovation. Five priority areas and seven recommendations were developed. The priority areas were peer supporters, peer support strategies, content/support needs, outcomes of peer support, and monitoring and evaluation of the peer support strategy. External reviewers validated the developed practice guidelines using AGREE II tool and attained an agreement of between 80 and 100% across the items on the tool.

Conclusion: Transforming curricula for nursing and midwifery education is inevitable globally. Curriculum changes challenge the capabilities of the implementers and necessitate planned ongoing professional development and support of the implementers of the new curriculum. Such ongoing support strategies may be costly for low- and middle-income countries, such as Lesotho, and could benefit from structured peer support. The absence of such supportive strategies may compromise the fidelity of the implementation of the curriculum change. This study proposes peer support as an affordable intervention to enhance the implementation of a new curriculum, especially in low- and middle-income countries. The effectiveness of such intervention requires the commitment of institutional leaders, experienced and committed peer support providers, a clear modus operandi, tailor-made activities, appropriate resources, and monitoring and evaluation mechanisms. The proposed guidelines may enhance peer support during curriculum innovation.

Keywords: curriculum innovation, peer support, peer support strategy, nurse educator, nursing education, guidelines, implementation, professional development, enhance, competency-based education

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LIST OF ABBREVIATIONS AND ACRONYMS

AGREE II	Appraisal of Guidelines for Research and Evaluation II
AHRQ	Agency for Healthcare Research and Quality
AJHPE	African Journal of Health Professions Education
BoS	Bureau of Statistics
CASP	Critical Appraisal Skills Programme
CBC	Competency-based curriculum
CBE	Competency-based education
CHAL NTI	Christian Health Association of Lesotho Nurses Training Institutions
CINAHL	Cumulative Index of Nursing and Allied Health Literature
EMBASE	Excerpt Medica dataBASE
ERIC	Education Resources Information Centre
HRSEC	Health Sciences Research and Ethics Committee
IJANS	International Journal of Africa Nursing Sciences
IJEMST	International Journal of Education in Mathematics, Science and Technology
IJNS	International Journal of Nursing Studies
IPE	Interprofessional education
JHNEBP	Johns Hopkins Nursing Evidence-Based Practice
LIC	Low-income countries
LMIC	Low- and middle-income countries
M&E	Monitoring and evaluation
MoH	Ministry of Health
NEPI	Nursing Education Partnership Initiative
OSCE	Objective structured clinical examination
PHC	Primary health care
PICOT	Population intervention control outcome timeframe
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analysis
PSS	Peer support strategy
UFS	University of the Free State
USA	United States of America
WHO	World Health Organization

CONCEPTUAL AND OPERATIONAL DEFINITIONS OF TERMS

Curriculum innovation: This refers to ideas or practices that are considered new and different from those that exist in the formal prescribed curriculum, although not actually cutting edge (Halpin *et al.*, 2004). In this thesis, 'curriculum innovation' is viewed as the complete transformation of the curriculum with the introduction of new pedagogical approaches different from those in the former curriculum.

Guidelines: According to the World Health Organization (WHO, 2014) guidelines refer to any document that contains a set of evidence-based recommendations for clinical practice or public health policy. In this thesis, guidelines refer to a document containing evidence-based recommendations intended to give direction on peer support among educators during a curriculum innovation and will also be referred to as practice guidelines.

Nurse educator: Raymond *et al.* (2017) define 'nurse educator' as an individual who is involved in teaching nursing students in the classroom, laboratory or clinical setting. In this thesis, 'nurse educator' refers to individuals who are involved in the education of student nurses in nursing and midwifery programmes in Lesotho.

Peer support: Peer support is the provision of emotional, appraisal and informational assistance and encouragement by someone who is experienced in and knowledgeable about the specific behaviour or situation to enhance behaviour change in peers (Dennis, 2003). In this thesis, 'peer support' refers to the supportive assistance that colleagues who are knowledgeable about or experienced in curriculum innovation provide to their peers who are less knowledgeable during implementation.

Practice Guidelines: According to the Institute of Medicine cited in Sox (2017) practice guidelines are defined as ‘statements that include recommendations intended to optimize patient care, that are informed by systematic review of evidence and assessment of the benefits and harms of alternative care options’. In this thesis, practice guidelines refers to a set of formulated evidence-based recommendations that describe peer support interventions and processes to assist nurse educators during a curriculum innovation.

Professional development: Refers to professional development as the ‘learning that results in change to teacher knowledge and practices, and improvements in student learning outcomes’ (Darling-Hammond, Hyler, & Gardner, 2017, p.2). In the thesis professional development refers to all the planned learning opportunities and activities that educators undertake to improve their competencies to support student learning.

Recommendations: These are evidence-based statements that inform the intended end-user of the guidelines about the appropriate interventions or decisions to take in specific situations to achieve the best health outcomes possible (WHO, 2014). Recommendations are a component of the guidelines. In this thesis, recommendations refer to evidence-based statements formulated to assist educators during peer support interactions during implementation of a curriculum innovation. The recommendations in this thesis will also be referred to as guidelines recommendations.

PREAMBLE

The format of this thesis is in accordance with the recommendations for the PhD through interrelated publishable articles, as presented within the Faculty of Health Sciences of the University of the Free State, South Africa. As opposed to the monograph format, this thesis consists of a collection of publishable articles in conjunction with the introductory and summary chapters.

The thesis consists of six chapters. Chapter 1 is an introductory chapter, describing the overall purpose and methods of the study. Chapters 2 to 4 present the interrelated publishable manuscripts, which have been aligned to the guidelines of the targeted journals. Chapter 5 presents the complete guidelines, while the final chapter draws the focus on the conclusion, recommendations and limitations of the study. The researcher adhered to all the research processes as applied in a traditional thesis, which included planning, preparing and conducting the research by applying the same rigorous processes.

The researcher thoroughly described all the methodological processes of developing the guidelines for peer support in Chapter 1. A summarised version of the entire methodology aligned with the specific journal requirements is presented in the manuscripts. Given that the thesis format included interrelated publishable articles, a considerable amount of repetition of key issues and concepts will be observed throughout the document.

The manuscripts are articulated according to the format of the targeted journals; therefore, a variation in the styles will be observed. However, the referencing style of the American Psychology Association, sixth edition, was adopted for chapters 1, 5 and 6. From chapters 2 to 4, each chapter presents a unique reference list and style based on the targeted journal guidelines. Each manuscript includes an addendum of the author guidelines for the potential journal. A comprehensive reference list for the literature used is presented at the end of the thesis.

PUBLISHABLE MANUSCRIPTS FROM THE STUDY

Shawa, M. & Botma, Y. (2020a). Peer support strategies that enhance the implementation of an innovation among professionals: An integrative review. Target journal: *International Journal of Nursing Studies*. (Not yet submitted)

Shawa, M. & Botma, Y. (2020b). Peer support during the implementation of a new curriculum: The experiences of nurse educators in Lesotho. Target journal: *International Journal of Africa Nursing Sciences*. (Not yet submitted)

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CONFERENCE PRESENTATION

Shawa, M. & Botma, Y. (2019, June). Experiences of nurse educators related to peer support during midwifery curricular innovation in Lesotho. Paper presented at the SAAHE Conference, University of the Free State, Bloemfontein.

CHAPTER 1

Overview of the study

1.1 INTRODUCTION

The introductory chapter presents an overview of the entire thesis. The chapter begins with the description of the background, the context of the study and the problem statement, and then proceeds to explain the aim and objectives of the study. The research paradigm, theoretical framework and research design used in the research project are further outlined in this chapter.

1.2 BACKGROUND

Reforms in the education of health professionals is inevitable in the face of the Third and Fourth Industrial Revolutions, globalisation, technological advancements and changing healthcare needs of populations (Xu, David, & Kim, 2018). Since the turn of the 20th Century, there has been three generations of reforms in the education of professionals. The first generation was the science-based curriculum, the second generation was focused on problem-based learning, while the third generation is a systems-based curriculum (Frenk *et al.*, 2010). The systems-based generation of reforms is competency-driven, guiding students from memorisation to transformative learning that empowers them to be critical thinkers (Clark, Raffray, Hendricks, & Gagnon, 2016). The global independent Commission on Education for Health Professionals for the 21st Century proposes transformation directed towards the adoption of competency-based instructional designs to equip graduates with relevant competencies to address the health needs of populations (Frenk *et al.*, 2010). Similarly, the World Health Organization (WHO) (2013), in its guidelines for transforming and scaling up health professionals' education and training, recommends alignment of the

competencies of health professionals with the disease/healthcare needs profiles of specific communities through curriculum reforms. As the low-and-middle-income countries (LMICs) respond to the transformational calls, they ought to take stock of the healthcare needs of communities to be able to contextualise curriculum.

Most LMICs, although faced with a heavy burden of disease, experience a shortage of health professions workforce and operational resources for healthcare services (Portela, Fehn, Ungerer, & Poz, 2017). Nurses are the bulk of care providers in LMICs. Such a state of affairs necessitates transformation in nursing education curriculum to equip graduate nurses with relevant competencies that will enable them to practise safely and address the healthcare needs of populations (WHO, 2013). Graduate nurses working in LMICs such as Lesotho may be the only healthcare providers that some populations encounter when seeking healthcare services. In such situations, graduate nurses need to apply critical thinking, clinical reasoning and problem-solving skills in the provision of care to their clients, necessitating curriculum change to incorporate these essential skills (Tanner, 2006). However, curriculum change may pose different challenges to the implementers and necessitates strategies to provide ongoing support.

Curriculum change poses challenges ranging from adapting teaching and assessment approaches to acquiring different resources and sustaining change. Curriculum drift is the major threat to curriculum transformation (Wilson, Rudy, Elam, Pfeifle, & Straus, 2012). Curriculum drift is an insidious process in which the implementation of a curriculum transformation reverts to its pre-innovative ancestor driven by poorly supported implementation processes (Wilson *et al.*, 2012). Various factors can lead to curriculum drift, which may include operational practicality not tested, external influences, loss of key supporters or champions of innovation, and replacement by more traditionally oriented educators (Wilson *et al.*, 2012). Other reasons supporting a curriculum drift include lack of ownership of the curriculum by the educators, poor communication and inadequate faculty development (Wilson *et al.*, 2012). Challenges with curriculum change may also emanate from memorisation and the repetitive nature of learning, which might be deeply ingrained among older educators (Botma & Nyoni,

2015). The rote learning and repetition approach to facilitation is not aligned to student-centred learning, which is key in a competency-driven curriculum. Ensuring sustainability in the implementation of a transformed curriculum requires innovative and supporting interventions, such as peer support.

Peer support is an interpersonal relationship in which two or more people assist each other to deal with a similar challenging situation (Sunderland & Mishkin, 2013). This supportive relationship involves providing assistance and encouragement to enhance behaviour change based on the principles of shared respect, shared responsibility and mutual agreement (Dennis, 2003). Peer support is widely used to aid individuals dealing with chronic conditions such as cancer or mental health conditions. However, peer support can also be used among professionals facing difficulties during a change process. There are various forms of peer support relationships among professionals, which may include, but are not limited to, peer mentoring, peer coaching, peer counselling and support groups (Kram & Isabel, 1985). Peer support promotes interaction and sharing of experiences and becomes a learning opportunity for both parties as it provides an opportunity for structured conversation (Monk & Purnell, 2014).

1.3 CONTEXT OF THE STUDY

Lesotho is a mountainous kingdom in sub-Saharan Africa classified under low-income countries with a population of approximately two million (Bureau of Statistics [BoS], 2016). This small kingdom has a geographical terrain that often makes accessibility to healthcare services a challenge. The Kingdom experiences a heavy burden of communicable and non-communicable diseases (Ministry of Health [MoH], 2013). The delivery of healthcare in Lesotho follows the primary healthcare (PHC) system, with nurses forming the bulk of the workforce (MoH, 2013). There are six nursing education institutions that train nurses and midwives, four of which belong to the Christian Health Association of Lesotho Nurses Training Institutions (CHAL NTI) consortium and two national institutions (MoH, 2013). The graduate nurses from these institutions are deployed in all healthcare settings where they are often the only professional care

providers. Such a situation requires the newly qualified nurses to apply critical thinking, clinical reasoning and problem-solving skills in the provision of care to populations as outlined in Tanner's Clinical Judgement Model (Tanner, 2006), for which they might not be adequately prepared and may struggle to transition into practice (Makhakhe & Khalanyane, 2013), necessitating curriculum change. Curriculum transformation was a political decision that was articulated through the strategic plan of the Ministry of Health to strengthen the training of nurses in Lesotho and enhance their competence (MoH, 2013).

Until the 2014–2015 academic year, the training of nurses and midwives in Lesotho was content-based, guided by behaviourism as a learning theory, with the majority of placements being hospital-based. The teacher-centred strategies were used and targeted at transmitting knowledge to students and completing the prescribed theory. Students were mainly passive participants who listened to the lectures and took notes from PowerPoint presentations. Clinical learning was routine-oriented, with clinical nurses occasionally guiding the students. Summative assessment of students in the content-based curriculum consisted of various written papers and two clinical procedures, which varied from student to student. For example, one student would be assessed on taking a patient's weight and administering an injection, while the next may perform a bed bath and suturing of a wound. These assessments determined whether or not the student had attained the 'competence' to graduate as a nurse ready to provide care to populations. The graduates from the content-driven curriculum often struggled to adapt to clinical settings, where they have to provide care with minimal or non-existent planned transitioning programmes for newly qualified nurses (Makhakhe & Khalanyane, 2013). Nurses require critical competencies to enable them to function independently and safely in addressing changing healthcare needs of populations, hence the need for competency-based education (Botma, 2014a).

Lesotho adopted competency-based education (CBE) to underpin the design and delivery of nursing education. The CBE approach promotes developmental attainment of competencies and abilities by the students who actively participate and drive their own learning (Frank *et al.*, 2010). The core components of CBE are outcome competencies, sequenced progression, tailored learning experiences, competency-focused instruction and programmatic assessment (Melle *et al.*, 2019). Similarly, the CBE adopted for nursing education in Lesotho applied the six elements of curriculum development as outlined by Harden (2013), namely learning outcomes, content, educational strategies, learning opportunities, educational environment and assessment. Clark *et al.* (2016) emphasise that CBE focuses on equipping students with specific professional competencies through curriculum transformation. Professional competencies guide the design of a competency-based curriculum (CBC).

The CBC designed for nursing education in Lesotho was underpinned by four educational principles, namely constructivism, constructive alignment, scaffolding and authenticity (Biggs, 2003; Biggs, 1996). Such principles promote student-centeredness and the use of evidence-based strategies to enable students to make meaning of the learning material (Botma & Nyoni, 2015). The educators in the CBC required a new set of skills that were aligned to CBE to ensure the fidelity of curriculum implementation (Melle *et al.*, 2019). Botma (2014b) reiterates that a paradigm shift from behaviourism to constructivism requires a new set of skills among nurse educators to implement CBC successfully. In the same vein, Dawes *et al.* (2005) argue that the CBC approach requires nurse educators to engage with current evidence-based practices in nursing education and practice, hence the need for ongoing professional development. Table 1.1 summarises the differences in the approaches to teaching between the old content-based and the new CBC implemented in Lesotho.

TABLE 1.1: Difference between the content-based and competency-based curriculum

Element of curriculum	Traditional content-based curriculum	Competency-based curriculum
Learning outcomes	<ul style="list-style-type: none"> • Oriented towards knowledge attainment with no specific learning outcome 	<ul style="list-style-type: none"> • Oriented towards competency attainment of specific learning outcomes
Content	<ul style="list-style-type: none"> • Content not focused on specific competency • Some content not contextualised • 'Correct' content to be reproduced • Dependent on textbooks 	<ul style="list-style-type: none"> • Integrated content and aligned with specific competencies • Content with scientific basis and associated best practice • Scaffolding of content • Constructively aligned with the learning outcomes and assessment • Content promotes critical thinking • Dependent on study guides and vast source of up-to-date resources
Educational approaches	<ul style="list-style-type: none"> • Teacher-centred strategies • Behaviourist approach to learning • Didactic teaching and learning • Knowledge transmission and rote learning • Students are passive participants 	<ul style="list-style-type: none"> • Student-centred strategies • Constructivist approach to learning • Innovative learning/facilitation approaches • Knowledge construction and meaning making • Students are active participants
Educational environment	<ul style="list-style-type: none"> • Classroom • Hospital setting • Limited exposure to PHC centres 	<ul style="list-style-type: none"> • Authentic learning environments • Classroom • Simulation laboratory • Community • PHC facilities • Hospital setting
Learning opportunities	<ul style="list-style-type: none"> • Demonstration of clinical procedures • Hospital-based learning experiences • Unpredictable teachable moments from nurses in clinical areas 	<ul style="list-style-type: none"> • Experiential learning opportunities • Simulation of authentic learning experiences • Standardised patients • Community and PHC facilities • Work-integrated learning
Assessment	<ul style="list-style-type: none"> • Paper-based examinations • Two bedside clinical procedures • No uniformity in assessment of clinical skills with every student assessed on different procedures. 	<ul style="list-style-type: none"> • Integrated assessment of competence • Observation of performance in objective structured clinical examination • All students assessed on the same stations

Source: Author-generated

The fidelity of CBC implementation requires nursing education institutions to develop and support educators. The educators need to develop an understanding of the paradigm shift, which focuses on competence attainment among the students and the application of new teaching approaches (Dath & Iobst, 2010). The Government of Lesotho, through the Nursing Education Partnership Initiative (NEPI), invested resources on curriculum transformation and professional development to enable nursing education institutions to deliver the CBC appropriately. The resources mobilised included the cost for engaging a consultant for the development of the CBC, purchasing of computers, high-tech mannequins, establishing simulation laboratories, strengthening libraries and capacitating nurse educators from all the nursing education institutions in the CBC (Middleton *et al.*, 2014). Preparations and investments such as these are essential for successful implementation of the CBC and averting curriculum drift. The professional development activities resulted in differences in understanding of the principles and processes for CBC implementation among educators, thereby setting the stage for ongoing support (Botma & Nyoni, 2015).

Although Lesotho had transformed the prescribed curriculum for nurse and midwifery education, there was no deliberate plan for ongoing professional development and support of nurse educators throughout the transition period. Extensive ongoing support is critical during curriculum change to educate and encourage educators to adapt to their new roles (Dath & Iobst, 2010). In the case of Lesotho, the early adopters who had acquired a better understanding of CBE principles provided unstructured support to their colleagues during Phase 1 implementation of the curriculum reform in the midwifery programme. Peer support can benefit nurse educators to enact the curriculum reform as planned. However, effective peer support among nurse educators during curriculum innovation requires structure and guidance to enhance interactions, hence the need to develop guidelines for peer support. Figure 1.1 illustrates the phases of implementing the new CBC in Lesotho.

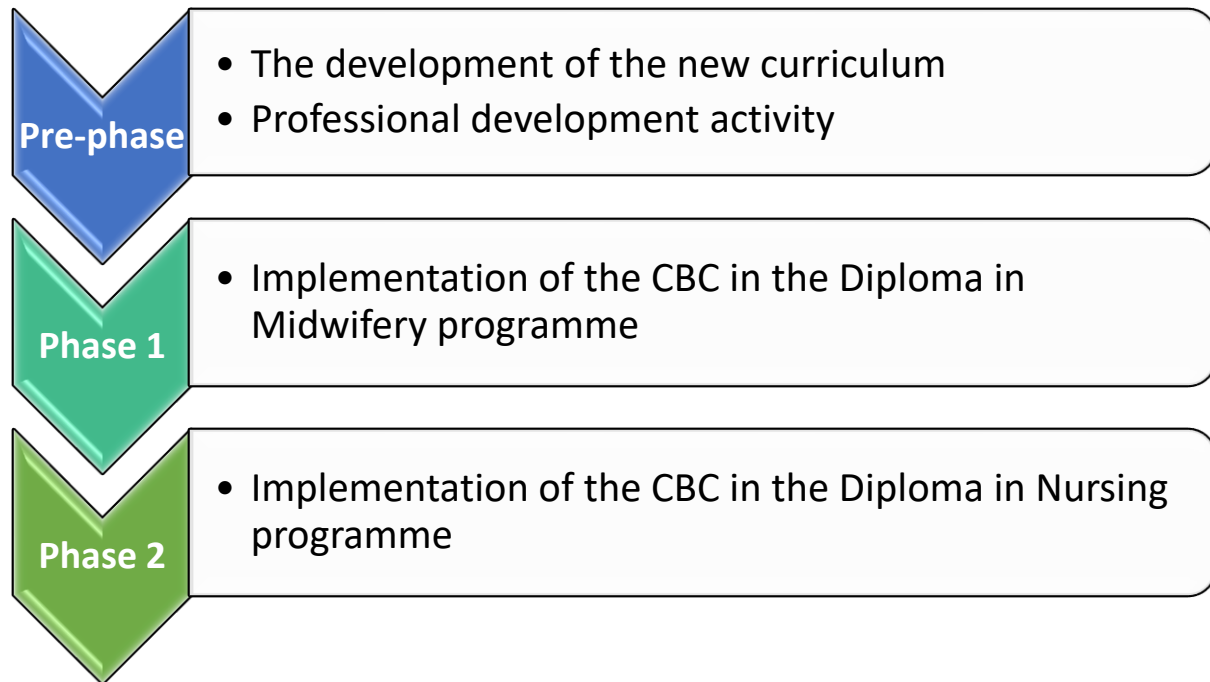


FIGURE 1.1: *Phases of implementation of the new CBC in Lesotho (Source: Author-generated)*

Pre-phase: The pre-phase saw the conducting of a needs assessment in preparation for the designing and development of the CBC. A new curriculum and some teaching materials were designed underpinned by the tenets of constructivism, constructive alignment, scaffolding and authenticity. Professional development for nurse educators from the six nursing education institutions in Lesotho was conducted. Teaching resources were acquired for all nursing education institutions. The key players in this phase were the consultant, who is a curriculum specialist, and the nursing and midwifery education task team consisting of the educator representatives from different nursing education institutions, clinical practice and the regulatory body. NEPI funded the processes.

Phase 1: In the 2014–2015 academic year, the CBC for the midwifery programme was rolled out in five institutions. Some teaching materials were still being developed. Educators had different understandings regarding the implementation of the CBC. There was a change in the teaching and assessment approaches. One of the nursing

education institutions had multiple early adopters who readily implemented the new curriculum with less challenges, while educators from most of the other institutions were sceptical and resisted the new curriculum. The early adopters became the drivers of the new curriculum and naturally began providing support to their colleagues. Unstructured peer support emerged among the 18 midwifery educators in different nursing education institutions in Lesotho.

Phase 2: In the 2017–2018 academic year, the CBC was introduced in the Diploma in Nursing, a three-year programme in one institution in Lesotho, although the other four institutions were still hesitant. A second institution introduced the CBC for the Diploma in Nursing in the 2018–2019 academic year, while the other three institutions continued using the old content-based curriculum. The scepticism that prevailed during the implementation of the Diploma in Midwifery CBC was also observed among the nurse educators in the Diploma in Nursing programme. As opposed to the Diploma in Midwifery programme, the Diploma in Nursing programme had more than 60 educators involved in the education of nurses across the five nursing education institutions in Lesotho. These educators had different understandings of and readiness for the implementation of the CBC, although there was no planned ongoing professional development and support in place. This discrepancy can be a recipe for poor implementation of the new curriculum.

1.4 PROBLEM STATEMENT

The transformation from the content-based curriculum to the CBC for nurse training in Lesotho requires a paradigm shift from behaviourism to constructivism with a focus on competence attainment among students. However, there was no deliberate plan or strategy in place for ongoing support of the implementers of the new curriculum. Phase 1 implementation of the CBC in the midwifery programme revealed that nurse educators had different understandings of the principles underpinning the CBC, while others were sceptical about its practicality. The uncertainty was verbalised during meetings among nurse educators from different nursing education institutions in Lesotho. Anecdotal

evidence from activities during the Phase 1 implementation in the midwifery programme indicated that the educators who were able to implement the CBC appropriately provided unstructured support to their colleagues whenever there was a need. Ad hoc meetings were conducted whenever there was a challenge related to the implementation of the new curriculum. This approach enabled the educators to support one another and sustain the change process during Phase 1 of the implementation of the CBC. However, unstructured peer support would be a challenge during the Phase 2 implementation for the nursing programme, which has more than 60 facilitators compared to a smaller group of 18 in the midwifery programme.

The peer support activities among midwifery educators were unstructured because there were no frameworks or guidelines to enhance the interaction of peers during the implementation of the new curriculum. Unstructured peer support might be unsustainable and pose challenges such as chaotic implementation, lack of accountability and poor motivation to participate in the long term (McLean, Cilliers, & Wyk, 2008). Such challenges may be averted or reduced with the availability of well-designed, structured peer support and professional development (Dath & Iobst, 2010). Furthermore, guidelines consisting of evidence-based recommendations may provide directions and enhance peer support interactions among educators. However, no existing guidelines for peer support among professionals during a curriculum innovation or any change process were found. In the absence of guidelines for peer support or planned professional development and ongoing support, the research question which arose was: What guidelines can be developed to enhance peer support among nurse educators during a curriculum innovation in Lesotho?

1.5 AIM OF THE STUDY

The aim of this study was to develop guidelines to enhance peer support among nurse educators during curriculum innovation in Lesotho.

1.6 RESEARCH OBJECTIVES

The objectives of this study were to:

- describe existing peer support strategies that enhance the implementation of an innovation or new programme among professionals through an integrative review;
- describe the experiences of educators regarding peer support during midwifery CBC implementation in Lesotho through an exploratory descriptive qualitative study;
- develop guidelines to enhance peer support among educators during the implementation of the CBC in Lesotho using the WHO (2014) *Handbook for Guideline Development* as a framework; and
- validate the developed peer support guidelines using a Delphi survey.

1.7 THE RESEARCH PARADIGM

The research paradigm describes the researcher's worldviews, understanding and interpretation of reality based on the set of common beliefs shared by scientists (Rehman & Alharthi, 2016). Every researcher holds different views concerning the nature of reality, which influences their choice of strategies used in an inquiry. Therefore, it is important for researchers to declare their research paradigm so that the research community may appreciate and make appropriate meaning of the research findings. In this study, the researcher adopted interpretivism as an overarching research paradigm for the development of guidelines for peer support.

Interpretivist paradigm

The interpretivist paradigm postulates that individuals socially construct reality as they interact with the world around them (Kivunja & Kuyini, 2017; Scotland, 2012). The researcher assumed that implementing a curriculum innovation was an individual experience among educators. Some educators may face challenges to enact the new

curriculum appropriately and could benefit from peer support. As a social intervention/interaction, peer support may enable curriculum implementers to develop appropriate understanding and enactment of the new curriculum. Interpretivism enabled the researcher to develop an understanding of the phenomenon of peer support as experienced by the educators involved in the curriculum innovation in Lesotho and to guide the development of guidelines that may influence peer support among educators. In the subsequent paragraphs, the epistemological, ontological and methodological assumptions related to interpretivism are discussed and it is demonstrated how they were applied in this study.

Ontology describes the belief system related to the nature of reality to which the researcher ascribes (Kivunja & Kuyini, 2017). Scotland (2012) states that every paradigm holds a different ontological view that guides researchers in understanding and making meaning of the data they gathered. Researchers ascribing to the interpretivist paradigm assume that reality is diverse and humans view the same situation differently. The researcher in this study adopted the relativist ontology that believes in multiple realities that can be explored and meaning reconstructed as the researcher interacted with the participants (see Kivunja & Kuyini, 2017).

Epistemology refers to how the researcher acquires and explains knowledge about reality to other scientists (Kivunja & Kuyini, 2017). A subjective epistemology was adopted for this study. The subjective epistemology enabled the researcher to construct knowledge socially through interaction with the participants (see Kivunja & Kuyini, 2017). The researcher engaged in independent thinking and cognitive processes to make meaning of the data gathered through personal interactions with the participants and existing literature on the subject. The researcher engaged actively in various interactive processes with the participants in the quest to collect data regarding the phenomenon under study (see Kivunja & Kuyini, 2017).

Methodology relates to the systematic processes that the researcher employs to gather the appropriate data that will help answer a research question (Kivunja & Kiyuni, 2017). The researcher applied a naturalistic methodology in this study and it guided data collection from participants within their institutions, which was the natural settings (see Kivunja & Kuyini, 2017). Qualitative approaches were used to collect and analyse the data (see Scotland, 2012).

1.8 THE THEORETICAL FRAMEWORK

This study adopted the WHO *Handbook for Guideline Development* and the Appraisal of Guidelines for Research and Evaluation (AGREE) II tool as the underpinning theoretical frameworks. The two sources guided the systematic development and validation of the guidelines. The WHO handbook provided a roadmap for the development of the guidelines, while the AGREE II tool guided the evaluation of the quality of the guidelines (Brouwers *et al.*, 2010; Grove, Gray, & Sutherland, 2016; WHO, 2014). According to the WHO (2014) handbook, the process of guideline development includes, among others, identification of priority question and outcomes, retrieval of evidence, assessment and synthesis of evidence, formulation of recommendations and the validation of recommendations. In addition to the WHO *Handbook for Guideline Development*, the AGREE II tool also alludes to stakeholder involvement in the process of guideline development. These activities were grouped and undertaken in three different phases, which are explained in subsequent sections. Table 1.2 illustrates the summary of steps undertaken in the process of developing the peer support guidelines using the WHO *Handbook for Guideline Development* and the AGREE II tool.

1.9 RESEARCH DESIGN

A primarily qualitative research design using multiple data collection methods was utilised. Three interrelated studies were conducted in three phases, which culminated in the development of the practice guidelines for peer support. In Phase I of this study, data were gathered through an integrative review, while Phase II data were generated through an exploratory descriptive qualitative study. Evidence from the two phases was triangulated to inform the development of guidelines in Phase III of the study. The developed guidelines were validated through a Delphi survey. Figure 1.2 presents the methodological process for the guideline development and the outcomes of the three studies.

TABLE 1.2: Phases and framework components in the peer support guideline development

Phase of study	Framework component(s)	Design	Population used	Data collection method	Output
Phase I	Formulating key questions and conducting literature review	Integrative review	Published articles	Data extraction and synthesis	Existing peer support strategies (Article 1)
Phase II	Stakeholder involvement	Exploratory qualitative design	Nurse educators in Lesotho	Semi-structured interviews	Experiences of nurse educators of peer support (Article 2)
Phase III	Formulation of guidelines	<i>WHO Handbook for Guideline Development</i>	Guidelines development task team	Discussion and consensus	Draft peer support guidelines (Article 3)
	Validation of guidelines	Delphi survey	Experts in nursing education	Iterative process using AGREE II tool	Finalised peer support guidelines (Article 3)

Source: Author-generated

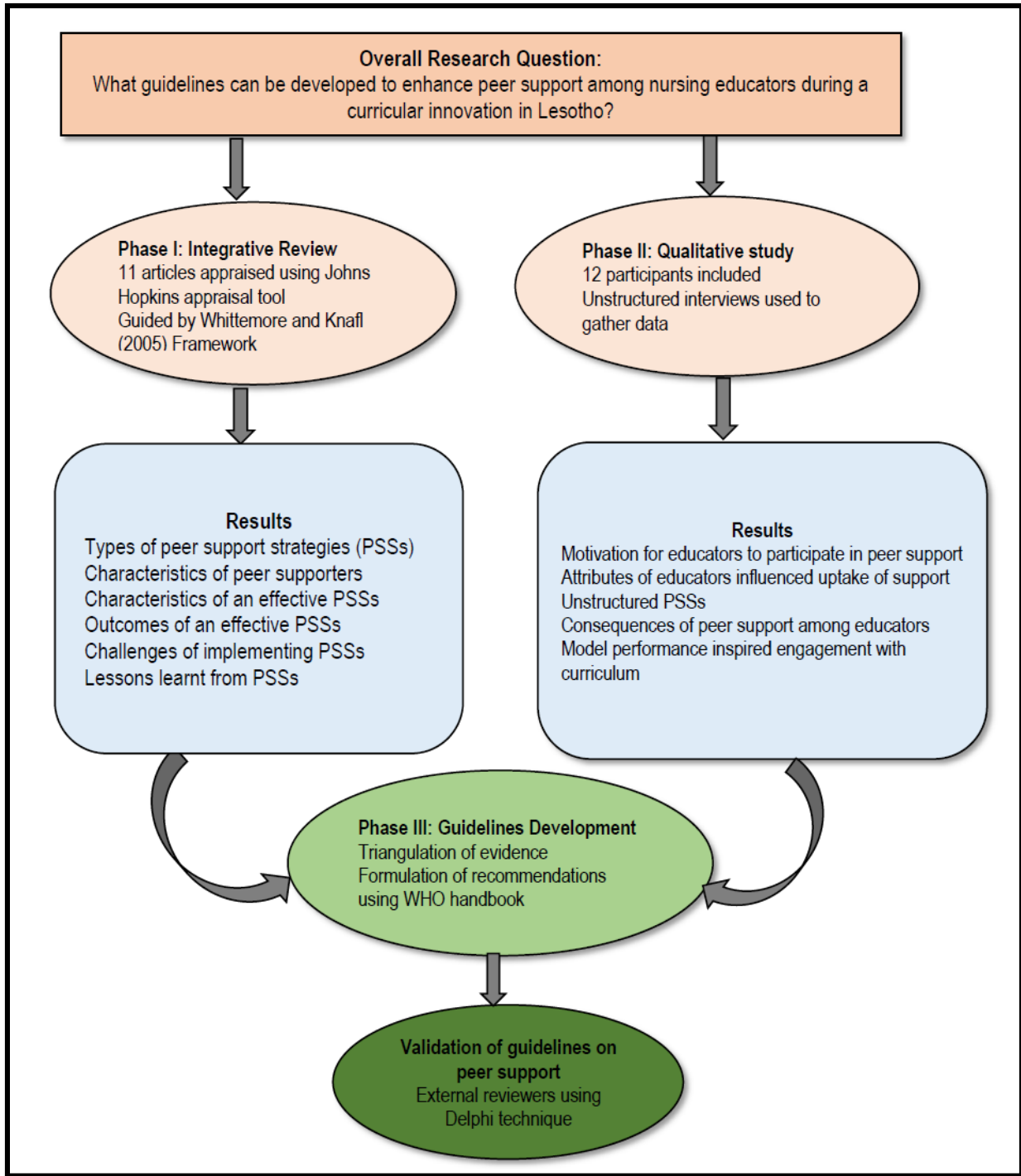


FIGURE 1.2: *Methodological process for the guideline development (Source: Author-generated)*

The next section describes in detail each phase of this study.

1.10 PHASE I: AN INTEGRATIVE REVIEW OF EXISTING PEER SUPPORT STRATEGIES

The first phase of the study focused on describing the existing peer support strategies that enhance the implementation of innovations among professionals through an integrative review.

1.10.1 Purpose of Phase I: Describing existing peer support strategies

The purpose was to synthesise and describe the existing peer support strategies that enhance the implementation of innovations or new programmes among professionals through an integrative review. Phase I addressed the first research objective and was aligned with the steps in the WHO *Handbook for Guideline Development*.

1.10.2 Research design for describing existing peer support strategies

An integrative review was undertaken to describe the existing peer support strategies that enhance the implementation of innovations among professionals. The integrative review combines diverse methodologies to generate a comprehensive understanding of a phenomenon (Whittemore & Knafl, 2005). This rigorous scientific process enables the evaluation and synthesis of evidence to inform the development of policies and guidelines (Souza, Silva, & Carvalho, 2010). The researcher intended to generate evidence from a broad range of methodologies to contribute to the development of peer support guidelines. The researcher in the current integrative review adopted the Whittemore and Knafl (2005) framework in the interlinked stages, as shown in Figure 1.3.

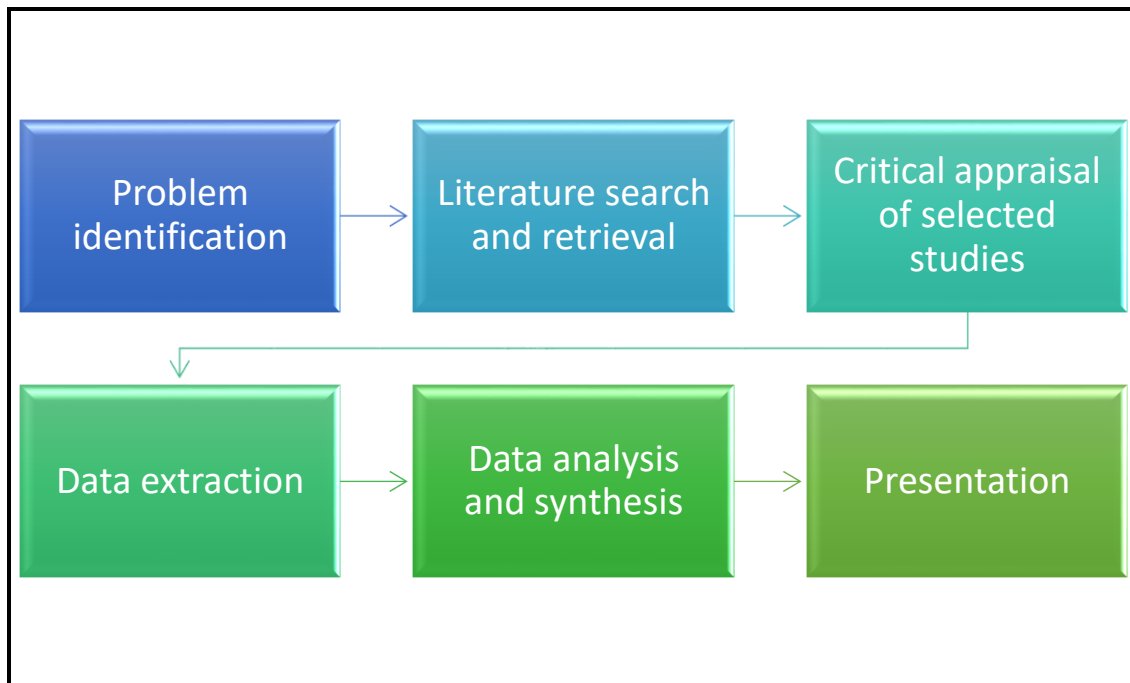


FIGURE 1.3: *The integrative review process (Source: Author-generated)*

The discussion in the next section expands on each of the stages and how they were applied in this study. The methodological rigour applied during the integrative review will also be discussed.

1.10.2.1 Problem identification

Problem identification was conducted through a ‘quick and dirty’ to gain insight into the existing literature on peer support, refine the focused research question, determine the inclusion and exclusion criteria and develop the initial search string search.

a. The ‘quick and dirty’ search

A ‘quick and dirty’ search was conducted without any language or time restrictions using the Google Scholar search engine to scope literature on peer support. The following search terms were used: peer OR colleague, AND support, OR mentor, OR guide, AND

educators, OR healthcare professionals, OR professionals, AND curriculum change, OR change, OR innovation, AND guidelines.

The 'quick and dirty' search generated 30 300 hits from 1986 to 2016 from various databases and study designs, including systematic reviews and quantitative, qualitative and case study designs. The findings from the 'quick and dirty' search were used to refine the focused research question and the initial search string used during the integrative review.

b. Refining the research question

The focused research question that was used in this integrative review was refined in line with the results from the 'quick and dirty' search. The refined research question was: What peer support strategies enhance the implementation of innovations/new programmes among professionals from the first of January 2000 to November 2016?

The year 2000 was used as the starting point, because the researcher assumed that it was the time when there was a marked increase in electronic publications.

The population, intervention, comparator, outcome, and timeframe (PICOT) elements were identified as follows:

- P:** Professionals
- I:** Peer support strategy
- C:** Not applicable
- O:** Enhance implementation of innovation
- T:** Since January 2000

c. The inclusion and exclusion criteria

This integrative review included or excluded published theoretical and empirical literature from different methodologies (see Whitemore & Knafl, 2005) that reported on peer support based on the predetermined criteria. Refer to Table 1.3, which outlines the criteria.

TABLE 1.3: Literature inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> • Reflect a peer support strategy • Report on an innovation or new programme • Outcomes reflective of enhanced implementation • Professionals involved in the innovation • Published full articles in English • Published between 2000 and 2016 	<ul style="list-style-type: none"> • Reflect on any other strategies • Report no innovation • Report no outcome of implementation • Involved peer support among non-professionals and students engaged in professional studies • Unpublished literature • Published in any other language • Published before 2000

Source: Author-generated

d. The search strategy

The search for literature was guided by the key terms and their synonyms derived from the research question. A search string was developed with the Boolean operators 'AND' and 'OR' to combine or supplement keywords and focus the search (Polit & Beck, 2017). The initial search string included the following terms: peer or colleague or cohort or friend or fellow; AND support* mentor* or counsel* or guide* or advisor; AND innovation or 'new program' or 'new curriculum' or 'new practice' or 'new behaviour' or 'intervention' or 'change'; AND 'professionals' or 'healthcare professionals'.

1.10.2.2 Literature search and retrieval

The literature search was conducted with the assistance of the librarian from the University of the Free State (UFS) based on the generated search string described earlier. Various electronic databases were searched and generated 369 abstracts and titles. An additional four articles were identified through ancestral search, bringing the number to 373. Performing an ancestral search earlier in the processes enables a further search of the added sources at a later stage. A record of the generated abstracts, the initial and every refined search string, results and databases was stored in an electronic folder on a computer to keep an audit trail of the integrative review.

The researcher evaluated abstracts and titles for possible duplicates and eliminated four abstracts. The remaining 369 abstracts were evaluated against the research question and the inclusion criteria, upon which 264 abstracts were excluded. The remaining 105 abstracts were included in the subsequent step of the literature search. The full citations of the 105 abstracts and titles that met the inclusion criteria were compiled and sent to the university librarian, requesting for the retrieval of the full articles. Five reviewers individually evaluated the retrieved full articles against the inclusion criteria and eliminated 94 articles. Any discrepancies relating to the articles' inclusion during the evaluation phase were discussed and resolved among reviewers through Skype or Zoom meetings and consensus was reached. Most of the articles excluded were either pilot studies, merely describing peer support without any innovation, or studies related to peer support among students and patients living with chronic conditions such as diabetes mellitus, breast cancer and mental health illnesses. Eleven articles were included in the subsequent stage of appraisal.

1.10.2.3 Critical appraisal of selected studies

Four of the preceding five reviewers critically appraised articles independently using various validated appraisal tools based on the methodologies of the articles. The methodologies included the quantitative method (n = 2), qualitative method (n = 1), case study (n = 3) and non-empirical research (n = 5). The reviewers evaluated the methodological integrity of each full-length article using the Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) Research Evidence Appraisal Tool, the Critical Appraisal Skills Programme (CASP) and the Centre for Evidence-Based Management Tool (Addenda A, B, C). No reports were excluded based on the critical appraisal.

a. Quality of evidence

The studies that were included in this integrative review were assessed for their quality by comparing their relevance to the research question and the JHNEBP Research Evidence Rating Scale (Addendum D). This scale classifies reports into three quality levels, namely high quality, good quality and low quality. Based on the JHNEBP Research Evidence Rating Scale, two articles were classified as of high quality, while the other nine were of good quality. No report was excluded based on this quality rating system. The reviewers reached consensus on the ratings of the evidence through discussion.

1.10.2.4 Data extraction

The researcher, research promoter and two research collaborators extracted data from the included articles using a data extraction tool (Addendum E). The data extraction table was developed based on the research question and piloted by the researcher and the promoter on one article before the exercise. The aim of the data extraction table was to facilitate the summarising, organisation and comparison of findings (see Souza *et al.*, 2010). A package of full articles and the data extraction table was sent to each research collaborators who participated in the data extraction, which took place over a

period of 12 weeks. The researcher compiled and recorded all the extracted data received from all the research collaborators. Any inconsistencies that were identified were discussed and resolved through Skype or Zoom meetings.

1.10.2.5 *Data analysis and synthesis*

The extracted data were consolidated into groups according to their similarities in terms of meaning and/or description. Using an iterative process, the extracted data were compared item by item, grouped together and assigned meaningful statements, upon which conclusions were drawn. Themes emerged from the synthesised data.

1.10.2.6 *Presentation*

The results of the integrative review were presented in a descriptive narrative form based on the themes that emerged from the extracted data. The themes described the existing peer support strategies that enhanced implementation of innovations.

1.11 METHODOLOGICAL RIGOUR

The rigour of this integrative review was ensured, as described by Whitemore and Knafli (2005), to ensure repeatability of the study and credibility of the findings. The following strategies were applied during the review process:

- Using well-defined and systematic literature search strategies
- Using reliable and valid data coding procedures
- Keeping an audit trail of the search strings, revisions, and inclusion and exclusion throughout the process
- Using standardised critical appraisal tools
- Piloting the data extraction tool
- Collaborating with other researchers during the review and extraction of data.

The next section describes Phase II of the study.

1.12 PHASE II: AN EXPLORATORY QUALITATIVE STUDY OF THE EXPERIENCES OF NURSE EDUCATORS RELATED TO PEER SUPPORT

The second phase of the study described the experiences of nurse educators relating to peer support during the implementation of the CBC in Lesotho.

1.12.1 Purpose of Phase II: Exploring the experiences of nurse educators related to peer support during CBC implementation

The purpose of the second phase was to explore and describe the experiences of nurse educators related to peer support during the implementation of the CBC in Lesotho through an exploratory descriptive qualitative study design. Phase II addressed the second research objective and was aligned with the step of involving stakeholders outlined in the WHO *Handbook for Guideline Development* and the AGREE II tool.

1.12.2 Research design for describing the experiences of nurse educators related to peer support

An exploratory descriptive qualitative design was conducted to describe the experiences of nurse educators related to peer support during CBC implementation in Lesotho. The design enabled the researcher to investigate and develop in-depth understanding of the lived experiences of nurse educators related to peer support during the implementation of a curriculum innovation (see Polit & Beck, 2017). This section details the study population, unit of analysis and inclusion criteria, sampling and sample, pilot study, data collection technique and process, data analysis and the rigour of the qualitative study.

1.12.2.1 Study population

The population in this phase of the study was the nurse educators who participated in the implementation of the CBC in the midwifery programme in five nursing education institutions in Lesotho. The total population of nurse educators in the midwifery programme was 18.

1.12.2.2 Unit of analysis and inclusion criteria

The individual participants were the unit of analysis, who provided thick descriptions of their lived experiences related to peer support during the curriculum innovation in Lesotho (see Botma, Greeff, Mulaudzi & Wright, 2010). The inclusion criteria applied to enhance the unit of analysis were nurse educators who:

- worked in nursing education institutions in Lesotho;
- were involved in the midwifery programme in any of the nursing education institutions in Lesotho;
- participated in the implementation of the CBC;
- were engaged in the unstructured peer support activities during CBC implementation; and
- were willing to participate in the study.

1.12.2.3 Sampling and sample

A convenient sampling technique was utilised to select a sample of 12 participants who had met the pre-determined inclusion criteria. Data saturation was reached after 10 interviews, but all the 12 participants were interviewed.

1.12.2.4 *The explorative (pilot) study*

The researcher, also the interviewer, tested the central research question by interviewing two midwifery educators. The central question was “What were your experiences regarding collaborative support activities during the implementation of the new curriculum in the midwifery programme?” The research promoter reviewed the interviewing techniques of the transcribed semi-structured individual interviews to determine the competence of the interviewer. The semi-structured interview enabled the researcher to obtain in-depth information and gave the participants freedom to share their experiences in unstructured order (Polit & Beck, 2017). Open-ended questions and probing questions were mostly used during the interviews. No leading questions were asked. The data from the pre-test were included in the data analysis, as no adjustments had been made to the tool. The participants in the explorative study were informed beforehand about the possibility of including their data in analysis of the main study.

1.12.2.5 *Data collection technique and process*

The researcher conducted semi-structured individual interviews to explore the experiences of participants related to peer support during the implementation of a curriculum innovation in Lesotho.

The researcher communicated with the individual heads of each of the five nursing education institutions via email to request for permission and propose dates for data collection. Scheduled appointments with individual participants were made telephonically and agreed dates were set. On the scheduled dates, the researcher visited the individual nursing education institutions to collect data. At each institution, a private and quiet room was arranged in which to conduct the interviews. The prospective participants were identified and provided with information brochures and consent forms (Addenda G and H). Each participant gave written consent to be interviewed and to have the interview audio-recorded. Following the introductory formalities, the researcher commenced the data collection. The central question was

“What were your experiences regarding collaborative support activities during the implementation of the new curriculum in the midwifery programme?” See Addendum F. During interview, open-ended and probing questions were used to further interrogate information. All the interviews were conducted in English, with a few interjections of Sesotho comments by the interviewees. The interviews were recorded using a Huawei P8 Lite™ Smartphone, which had the calling functions disabled to eliminate disruptions during the interviews.

Data collected from each participant were transferred to a password-protected computer, where they were stored in specially named folders according to the different nursing education institutions. Only the researcher and the promoter had access to the recorded data.

1.12.2.6 Data analysis

The researcher transcribed all the audio recordings verbatim soon after the interviews and stored these on the password-protected computer. The few Sesotho comments were translated into English and confirmed by a professional Sesotho translator. Conducting and transcribing the interviews enabled the researcher to familiarise with the data (see Grove *et al.*, 2016). Inductive open coding was done manually by three independent experienced co-coders.

The data analysis was conducted using an iterative process. The process involved reading through the printed transcripts to develop a general impression about the data. The next step entailed reading and extracting significant statements or passages, which were recorded on a data sheet (Addendum J). The coders then formulated meanings for each of the significant statements. The meanings were then organised into clusters, which were assigned codes related to peer support experiences. The similar codes were grouped into clusters. Themes were then assigned to the clusters of similar codes.

The findings from this qualitative study were triangulated with the integrative review results to inform guideline development. Triangulation enabled the researcher to compare and contrast data from the two preceding phases and establish a better understanding of the phenomenon of peer support (See De Vos, 2012).

1.12.2.7 Rigour of the qualitative study

The integrity of the qualitative study was ensured through trustworthiness criteria promulgated by Lincoln and Guba (1986), which include credibility, confirmability, dependability, transferability and authenticity. The researcher clearly described the purpose of the research, methodology, decisions made and their justifications. The application of the criteria of trustworthiness is presented here:

- **Credibility and authenticity:** The researcher is well known to the small community of participants and had a prolonged time of interaction, which enhanced the establishment of rapport and the building of trust (see Cope, 2014; Lincoln & Guba, 1986). The individual interviews took between 30 and 90 minutes. Each interview was audio recorded and transcribed verbatim (See Polit & Beck, 2017). A sample of the transcript has been attached as Addenda J. Detailed descriptions of participants' experiences were also provided. The data gathered were triangulated with findings from the integrative review. The researcher adequately described the interpretation process and provided verbatim quotations from the data.
- **Confirmability and dependability:** The researcher ensured that data were collected and analysed through an impartial process and minimised the adulteration of the participants' accounts (see Cope, 2014; Lincoln & Guba, 1986). An audit trail of the data collection and analysis processes is available for inspection. Example of transcripts with coding may be viewed in Addenda I and J.

- **Transferability:** This was ensured through the provision of a thick description of the data (see Cope, 2014; Lincoln & Guba, 1986). The researcher provided adequate information about the participants and the research context.

The next section describes Phase III of the study.

1.13 PHASE III: DEVELOPMENT OF PRACTICE GUIDELINES FOR PEER SUPPORT AMONG NURSE EDUCATORS

The section describes the third phase of the study, which was the development of the peer support guidelines. This phase of the study integrated the findings from phases I and II to develop guidelines for peer support among educators during the implementation of curriculum innovation in Lesotho.

1.13.1 Purpose of Phase III: Development of practice guidelines

The aim of this phase was to develop guidelines that would enhance peer support among nurse educators during a curriculum innovation in Lesotho using the WHO *Handbook for Guideline Development* (2014) as a guiding framework. The major processes highlighted in the WHO *Handbook for Guideline Development* included formulation of priority questions and outcomes, evidence retrieval and synthesis, assessment of evidence, formulation of recommendations, planning for implementation, dissemination, impact evaluation and updating of the guidelines. The formulated priority question was ‘what guidelines can be developed to enhance peer support among nurse educators during curriculum innovation?’ Evidence was retrieved and synthesised through an integrative review. The evidence was assessed for quality using the JHNEBP tools. A qualitative study was undertaken to explore experiences of nurse educators’ experiences as stakeholders in peer support. WHO supports utilization of qualitative evidence to inform guideline development (Lewin & Glenton, 2018). The evidence from the integrative review and qualitative study was triangulated and used to identify priority areas and formulate recommendations.

This phase addressed the third and fourth research objectives, which were to:

- develop guidelines to enhance peer support among educators during the implementation of the CBC in Lesotho using the WHO (2014) *Handbook for Guideline Development*, and
- validate the developed peer support guidelines using a Delphi survey.

1.13.2 Developing the guidelines

The findings from Phases I and II were triangulated and used to inform the formulation of the guideline recommendations, guided by the WHO *Handbook for Guideline Development*. The Handbook clearly outlines the rigorous processes and steps taken when developing evidence-based guidelines used globally. The researcher opted to use the WHO *Handbook for Guideline Development* based on the assumption that the developed peer support guidelines could be used among educators in similar contexts in LMICs. The subsequent discussion presents the processes that were applied to develop the peer support guidelines.

1.13.2.1 Need for the guidelines

The need for the guidelines development was identified and articulated in the problem statement of the overarching study, which emanated from the absence of ongoing professional development and support for nurse educators during a curriculum transformation in Lesotho, resulting in unstructured peer support.

1.13.2.2 Purpose and target population

The guidelines were developed to inform and enhance peer support among educators during curriculum innovation in Lesotho. The target population and end users of the guidelines will be all the key players in peer support during change implementation and institutional leaders.

1.13.2.3 Scope of the guidelines

The scope of the guidelines was informed by synthesised evidence from the existing peer support strategies in Phase I and the explorative qualitative evidence of the experiences of nurse educators during curriculum innovation from Phase II. The priority areas included in the guidelines were outlined.

1.13.2.4 Evidence of existing peer support strategies

The existing peer support strategies that enhanced the implementation of an innovation were described and gleaned from Phase I of the study. The WHO (2014) *Handbook for Guideline Development* stipulates a systematic literature review as the basis for developing recommendations.

1.13.2.5 Evidence of experiences of stakeholders/stakeholder involvement

The lived experiences relating to peer support among nurse educator were described and gleaned from Phase II of the study and triangulated with the existing peer support strategies from phase I to inform the formulation of the guidelines. The process of triangulation entailed comparing and contrasting the results of the integrative review and qualitative study to enable the researcher gain a better understanding and establish a validated conclusion on peer support (see De Vos, 2012).

1.13.2.6 Quality of evidence used

The quality of the evidence used to formulate the guidelines was evaluated using a standardised tool, the JHNEBP Research Evidence Rating Scale.

1.13.2.7 *Formulating draft recommendations*

A small guidelines development task team was established consisting of a methodology and curriculum specialist, a senior lecturer experienced in mentoring and engaged in professional development activities and the researcher. The task team formulated the draft recommendations based on the integrated evidence and according to the WHO *Handbook for Guideline Development*. Each recommendation drafted was discussed among the team members and consensus was reached. The quality of each recommendation was evaluated against the standards stipulated in the WHO *Handbook for Guideline Development* and the evidence from Phases I and II.

1.13.3 *Validation of the guidelines*

Validation of guidelines was conducted to improve the quality of proposed guidelines for peer support through a Delphi survey. External reviewers validated the draft guidelines using the AGREE II tool (Addendum K) through two cycles of an iterative Delphi survey. The recommendations from the external reviewers were incorporated to consolidate the guidelines.

1.13.3.1 *Participants in the Delphi survey*

The participants in the validation of the guidelines were purposively selected experts in nursing/health professions education drawn from Botswana (n = 3), Kenya (n = 1), Pakistan (n = 1) and South Africa (n = 3). The participants included in the Delphi survey were knowledgeable about peer support, had effective communication skills, capacity and willingness to participate. All the participants had expertise in health professions education. Three of the participants were professors while the remaining had doctorate qualifications.

1.13.3.2 Validation process

The researcher sent electronic invitations to the identified potential external reviewers to participate in the Delphi survey. The invitation included an information brochure about the validation process (Addendum L). The package of the draft guidelines and the AGREE II tool and timelines was sent to all reviewers who accepted the invitation and were willing to participate in the Delphi survey. The reviewers completed and sent the AGREE II tool to the researcher, who analysed the responses and incorporated comments and recommendations. The researcher communicated the findings from the first round of validation to the reviewers and requested them to participate in the second round of the Delphi survey. The reviewers received packages for the second round of the Delphi survey. The comments of the external reviewers were incorporated and the guidelines were finalised.

1.14 ETHICAL CONSIDERATIONS OF THE ENTIRE STUDY

The Health Sciences Research Ethics Committee of the UFS (HSREC 28/2017) and the Lesotho Ministry of Health Research and Ethics Committee (ID 91-2017) approved the research proposal (Addenda M and N). Institutional permission was obtained from the nursing education institutions (Addendum O) before data collection, and the individual participants gave informed written consent. Data were stored using password-protected folders on a computer, which were only accessed by the researcher and the promoter. The framework for ethical educational research guided this study (Burgess & Cilliers, 2017). This framework is underpinned by certain principles, which are presented in the subsequent section.

1.14.1 Educational value

Burgess and Cilliers (2017) recommend that research should have important educational, research or social application. The guidelines developed during this study have the potential to enhance peer support among educators and promote the appropriate implementation of the curriculum innovation. Appropriately enacted curricula will have a positive impact on students as they acquire competencies and abilities to practise safely and independently. Furthermore, the nurses trained in these programmes may be more appropriately skilled and thereby improve the quality of healthcare provided.

1.14.2 Scientific validity

The principle of scientific validity alludes to the selection of an appropriate, rigorous study design and methods to enable reliable and efficient execution of the research study and answering the research question (Burgess & Cilliers, 2017). The researcher utilised primarily qualitative methods underpinned by the interpretivist paradigm, which applied the naturalistic methodology (see Kivunja & Kuyini, 2017). The interpretivist paradigm was applied as described in detail in section 1.7. Data were generated through an integrative review and semi-structured interviews with participants in their natural settings and inductive analyses were applied.

The researcher was competent to conduct the study and had support from her research promoter, who is an expert with vast experience in research and nursing education. When faced with limitations, the researcher consulted the research promoter and other research experts and critical readers.

1.14.3 Ethical oversight

The principle of ethical oversight emphasises the importance of ensuring an independent review of scientific and ethical merits of a study (Burgess & Cilliers, 2017). Ethical approval for the study was granted by the Health Sciences Research Ethics Committee of the UFS and the Lesotho Ministry of Health (MoH) Research and Ethics Committee. However, the initial data collection strategy for the nurse educators was changed from focus group discussions to semi-structured interviews in an exploratory descriptive qualitative study. The change in data collection strategy was due to logistic challenges of bringing all participants together at a central place at the same time.

Fair selection of participants: This implies that participants in the study are equitably selected based on the inclusion criteria and research objectives (Burgess & Cilliers, 2017). The researcher established inclusion criteria for participants and literature included in this study. All participants who met the inclusion criteria were given an equal chance to participate in the study. The researcher ensured that the research process did not interfere with teaching and learning in pursuit of gaining knowledge.

Favourable risk: This stipulates that the researcher needs to assess for any potential risks and benefits of the research for all stakeholders (Burgess & Cilliers, 2017). This research study posed minimum risks associated with psychological discomfort of reliving some uncomfortable experiences among the participants. Debriefing sessions were provided for each of the participants upon conclusion of their interview session.

Voluntary informed participation: This requires from the researcher to ensure that the participants are provided with information to enable them to make a voluntary decision to participate in the study (Burgess & Cilliers, 2017). Mechanisms to eliminate power differentials should be in place. The researcher provided all participants with an information brochure about the study and their right to refuse to participate without risking any penalty, as shown in Addenda G and H. Those who were willing to participate gave written consent.

Respect of recruited participants: This implies that procedures to protect the privacy of the individuals and the data should be in place (Burgess & Cilliers, 2017). The researcher ensured that the participants' confidentiality was maintained by removing identifying information from the data. All the data collected were stored on a password-protected computer and backed-up files on a Google drive and only the researcher and the promoter had access to these files.

1.14.4 Provision of appropriate educational interventions or any other benefits of social value after research

The framework stipulates that participants should benefit from their involvement in the study as well as the post-study interventions, or provided with justification for the lack of benefits (Burgess & Cilliers, 2017). All participants in this study were informed that there were no direct benefits. However, they were informed that the developed guidelines would enhance peer support and their ability to administer the curriculum innovation appropriately.

1.14.5 Collaborative partnerships

This element of the framework emphasises the need for the researcher to develop collaborative partnerships within the educational environment and communities, the involvement of partners in planning and conducting research, and respecting the diversity in values, culture, traditions and social practice (Burgess & Cilliers, 2017). Although there were limited opportunities for collaborative partnership in this study, the researcher engaged the primary stakeholders and the external reviewers during the development of the guidelines.

1.15 LAYOUT OF THE THESIS

The thesis is presented in six chapters, with an overview preceding each chapter. The first chapter presented the overview of the entire thesis. Chapters 2 to 4 are presented in the form of individual articles for each phase of the study. Each of these chapters is preceded by an introduction, information about the intended journal and a list of associated addenda. Chapter 5 presents the practice guidelines for peer support, while Chapter 6 discusses the conclusions and recommendations. Chapters 2 to 4 contain individual reference lists based on the specific journal requirements, while Chapters 1, 5 and 6 were written according to the APA sixth edition referencing style.

1.16 CONCLUSION

Chapter 1 described the overview of the entire study, which was aimed at developing guidelines to enhance peer support among nurse educators during curriculum innovation in Lesotho. The chapter highlighted the strategy used to develop the practice guidelines. The next chapter describes the integrative review on existing peer support strategies that enhance the implementation of an innovation.

CHAPTER 2

Peer support strategies that enhance the implementation of innovation among professionals: An integrative review

2.1 INTRODUCTION

Peer support has been utilised in different settings to enhance the implementation of new programmes or innovations among professionals. Studies have attempted to describe the characteristics and outcomes of effective peer support strategies. This chapter presents an integrative review aimed at synthesising and describing existing evidence of peer support among professionals during the implementation of an innovation.

2.2 MANUSCRIPT DETAILS

Title:	Peer support strategies that enhance the implementation of innovation among professionals: An integrative review
Authors:	Shawa, M. and Botma, Y.
Target journal:	<i>International Journal of Nursing Studies</i>
Journal details:	Double-blinded peer-reviewed Listed in accredited list of journals by the Department of Higher Education and Training, South Africa Impact factor 3.570
Status:	To be submitted

2.2.1 Journal information

The *International Journal of Nursing Studies (IJNS)* provides a forum for original research and scholarship on healthcare delivery, organisation, management, workforce, policy and research methods relevant to nursing, midwifery and other health related professions. The *IJNS* aims to support evidence-informed policy and practice by publishing research, systematic and other scholarly reviews, critical discussions and commentary of the highest standard (International Journal of Nursing Studies, 2020).

2.2.2 Contribution record

The researcher conceptualised the study, collected data and drafted the manuscript. The study promoter provided guidance during the conceptualisation of the study and was engaged in the data analysis and critical reading of the manuscript.

2.2.3 Associated addenda

- Addendum A: Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool
- Addendum B: Critical Appraisal Skills Programme
- Addendum C: Centre for Evidence-Based Management Tool
- Addendum D: Johns Hopkins Nursing Evidence-Based Practice Research Evidence Rating Scale
- Addendum E: Data extraction table
- Addendum P: Author guidelines for the *International Journal of Nursing Studies*

2.3 MANUSCRIPT 1

PEER SUPPORT STRATEGIES THAT ENHANCE THE IMPLEMENTATION OF INNOVATION AMONG PROFESSIONALS: AN INTEGRATIVE REVIEW

ABSTRACT

Background: Change is inevitable in the face of globalisation and technological advancements. Such changes have also permeated different professional disciplines, affecting the way in which services are provided. One such discipline is health professions education, which has to review or transform the curriculum to meet changing needs and demands. However, educational changes are not always accompanied by matching preparation or support for the curriculum implementers, who may naturally start seeking support from peers. **Objectives:** The objective of this study was to describe existing peer support strategies that enhance the implementation of innovations among professionals. **Methods:** This study utilised the integrative review as the methodology. A search of the Cochrane Database of Systematic Reviews, Agency for Healthcare Research and Quality, Cumulative Index of Nursing and Allied Health Literature, PsycINFO, EMBASE, Medline, EBSCOhost, ERIC, Academic Search Complete, Scopus, ScienceDirect and Google Scholar was conducted using the following keywords and their synonyms: peer, support, innovation and professionals, which were derived from the focused research question. The search was limited to English articles published between 2000 and 2016, and 11 reports were included in this review. **Results:** Six themes emerged from the review, namely types of peer support strategies, characteristics of peer supporters, characteristics of an effective peer support strategy, outcomes of effective peer support strategies, challenges of implementing peer support strategies and lessons learned from the peer support strategies. **Conclusion:** Peer support strategies that enhance the implementation of innovation among professionals exist and can be contextualised and applied during educational innovations such as curriculum change. Effective peer support can enhance

the self-efficacy and improves confidence among educators. However, there are critical elements that are essential for an effective peer support strategy during an innovation among professionals.

What is already known about the topic?

- Peer support improves the self-efficacy of the supported individuals.
- The knowledge and experience of the peer support provider enhance the effectiveness of the support interaction.

What this article adds

- This review demonstrates that peer support can be contextualised and used to enhance change such as curriculum innovation.
- The commitment of institutional leadership to the peer support strategy is important in enhancing the effectiveness of peer support.
- When utilized effectively, peer support strategies can translate into improved student support and competency attainment.

Key words: peer support, innovation, change, implementation, strategies, professionals, integrative review.

Introduction

Globalisation and advancements in technology are occurring rapidly, bringing along changes and innovations. These global developments influence the needs of societies and fuel reforms in curricula used in the preparation of graduates for various disciplines. The changing societal needs make it obligatory that professionals acquire new sets of competencies to enable them to provide relevant quality services (Feller, 2018). These expectations imposed by advancements in technology and globalisation make it imperative for the professionals to engage in lifelong learning activities that will enable them to implement the associated changes and innovations appropriately.

Change and innovation are interlinked concepts that are often used interchangeably, although they are not necessarily the same thing. On the one hand, change refers to the alterations or adjustments that can be introduced in an organisation's existing practices or processes to improve services (Bucciarelli, 2015). Change can take different forms, ranging from minimum alterations in the components of a unit to the total overhaul of the entire system, often referred to as incremental innovation (Ringberg, Reihlen & Ryden, 2019; Shahin, Barati, Dabestani & Khalili, 2017). Minor changes in a unit are easier to adopt, as opposed to major changes that might affect the entire system. On the other hand, innovation involves the introduction of an idea or practice that was not known before by the individual, although not new globally, also known as radical innovation (Ringberg *et al.*, 2019; Shahin *et al.*, 2017). Radical innovations are usually transformative and demand a new set of knowledge, behaviours or skills never practised before and are always associated with change, although the same is not true with change (Bucciarelli, 2015). Change and innovation influence the set of competencies required by professionals in different fields and put them at the centre stage of accountability in providing services and addressing various emerging needs (Rose *et al.*, 2015; Rosenberg, 2018).

Inevitably, change and innovation are important processes for any progressive organisation and among professionals. Change and innovation contribute to growth, renewal, transformation and improvement in any organisation or profession (Shahin *et al.*, 2017). However, change and innovation are often not embraced uniformly among the individual implementers. At the time of implementing an innovation, individuals are usually at different levels of readiness to adopt the change. Some can adopt change as soon as it is introduced; others are late adopters, while still others may resist. Rogers in 2003 (as cited in Sahin, 2006) highlighted five different categories of adopters with the associated mind-set, namely innovators, who are usually the risk takers; early adopters, who are open to change; the early majority, who are usually cautious and safe; the late majority, who are often sceptical; and laggards, who are traditionalists and very suspicious. These variations in the adoption rate might also exist among professionals and can be attributed to lack of awareness and knowledge of the change, lack of the

necessary skills and ability to implement the change, lack of support for sustaining the change among the implementers and fear of taking risks and leaving the familiar ground to venture into the unknown without any assured support (Mathews & Linski, 2016). The introduction of change and innovation might create knowledge or skills gap among implementers, which needs to be addressed. Awareness of the existing or impending knowledge and skills gap among the targeted implementers may invoke fear of possible failure and incapacity to perform the required change, thereby creating a sense of insecurity and contributing to delays in adoption (Ferguson, Caverzagie, Nousiainen, & Snell, 2017).

Proper implementation of the change and innovation requires careful consideration and management of the various adoption rates among different implementers. Specific areas of the change process or innovation may require different strategies, such as capacitation on knowledge and skills, and the provision of various forms of support. The knowledge or skills gap becomes a critical aspect among professionals and requires well-planned interventions to capacitate those involved in the change process (Ferguson *et al.*, 2017). Implementing an innovation is not a once-off event, but an ongoing process involving individuals in an organisation, and therefore requires planned support strategies.

Two of the resources on which organisations can capitalise are the innovators and early adopters (Rogers, 1983). Depending on the rate of accepting the change process among individuals, the innovators and early adopters can be role models and provide support to the late majority. The change process can create the need for the acquisition of relevant competencies and increasing self-efficacy. Therefore, innovators and early adopters become a support resource for their colleagues. Lack of appropriate competence impacts on individuals' performance and self-efficacy and might prompt them to seek support from early adopters. Human beings have the predisposition of working around situations perceived to be obstacles by learning from peers they consider as highly knowledgeable and skilled or role models (Bandura, 1989). As the

early adopters become more comfortable with the change, they are likely to encourage the late adopters and provide peer support.

Peer support has been used for many decades to promote transition during behaviour adjustments among peers experiencing similar health problems. Although there are various definitions of peer support, Dennis (2003), in a concept analysis, describes peer support as an interactive relationship that involves the provision of assistance and encouragement by individuals considered as equal and have themselves experienced a similar life transition and have grown from it. Therefore, one can conclude that peer support is based on the assumption that individuals can share their lived experiences and use these to support a colleague to adapt to a similar situation. Similarly, experienced or knowledgeable professionals faced with innovation or change in practice can share with and support other colleagues during the change process. Peer support may be a useful strategy that can enhance the implementation of an innovation among professionals. The support strategy can be the 'oil that lubricates the change machinery' and enable it to move smoothly until all team members are able to sustain the innovation or change. Peers can support one another through role modelling and providing information and emotional support during the change process, which might increase the self-efficacy of their peers (Bandura, 1989). Dennis (2003) highlights three attributes of peer support as informational, appraisal and emotional support, which can be provided to peers.

Peer support promotes interaction and sharing of experiences and becomes a learning opportunity for both the provider and the recipient of the support. Successful mentoring relationships promote interactions that are trustworthy and honest and encourage openness in sharing experiences and learning needs (Bang, 2013; Bryant *et al.*, 2015). Although there is a plethora of literature on peer support concerning students and clients undergoing different health or lifestyle changes, there is limited evidence of such support among professionals implementing innovations, particularly in higher education institutions.

The research problem for the current study originated from the challenges experienced by nurse educators in nursing education institutions during the implementation of a curriculum innovation in the absence of planned support strategies in a sub-Saharan African country. The country adopted competency-based education aligned with current trends in health professional education advocating for transformation from traditional information transmission to competency-oriented, student-focused approaches (Frenk *et al.*, 2010). The introduction of the new curriculum meant a paradigm shift in pedagogical approaches among nurse educators as key drivers of the curriculum implementation. Nurse educators had to embrace innovative teaching approaches, which were later observed to be difficult for most of them (Botma & Nyoni, 2015). Such challenges threaten the fidelity of implementing the new curriculum and require planned professional development and ongoing support for educators. Despite this obvious need for support of the curriculum enactors, institutions had no plans in place for ongoing support. Faced with the predicament of implementing the new curriculum, midwifery educators naturally started supporting one another to enable them to accomplish their obligations of educating their students. The innovators and early adopters of the transformed curriculum took the lead in guiding their colleagues. These unstructured peer support activities resulted in empowerment of the implementers, but had limited accountability due to lack of administrative endorsement as reported in another study by the same researchers. The questions that came to the mind of the researcher were: Can peer support enhance the implementation of an innovation? Are there peer support strategies that enhance the implementation of an innovation? Hence, the research question was formulated: What peer support strategies enhance the implementation of innovation among professionals? The aim of this integrative review was to identify and synthesise existing evidence related to peer support strategies that enhanced the implementation of new programmes or innovation specifically among professionals, based on the Whitemore and Knafel (2005) framework.

Methods

An integrative review was conducted guided by the Whitemore and Knafl (2005) framework which allowed the inclusion of diverse methodologies. The phenomenon of peer support can be considered a mature subject, extenuating the use of an integrative review, and the evidence synthesised thereof will contribute to the development of practice guidelines (Schick-Makaroff *et al.*, 2016; Stetler *et al.*, 1998; Torraco, 2016). The review enabled a comprehensive understanding of the phenomenon of peer support. This integrative review proceeded in a stepwise approach involving literature search, evaluation of abstracts, data appraisal, data extraction and data synthesis (Whitemore & Knafl, 2005). The population, intervention, comparator, outcome, and timeframe (PICOT) elements were identified as follows: (P) professionals, (I) peer support strategy, (C) was not applicable, (O) enhance implementation of innovation (T) between 1 January 2000 and 30 November 2016.

Inclusion and exclusion criteria

The review included studies that reflected a peer support strategy, an innovation or a new programme, outcomes reflective of enhanced implementation, professionals involved in the innovation, and published in English language between 1 January 2000 and 30 November 2016.

The exclusion criteria were studies that did not reflect peer support or reported on other strategies. Studies that did not report on any innovation or the outcome of the implementation were eliminated. The studies that reported peer support among non-professionals, students and pilot studies were excluded. Studies published in other languages or before 2000 were also excluded.

Search for relevant literature

A search for literature related to the research question was conducted on 12 databases accessed through the university library. Databases searched included the Cochrane Database of Systematic Reviews, Agency for Healthcare Research and Quality, Cumulative Index of Nursing and Allied Health Literature (CINAHL), PsycINFO, EMBASE, Medline, EBSCOhost, ERIC, Academic Search Complete, Scopus, ScienceDirect and Google Scholar. The search was conducted to identify abstracts of literature that reflected peer support strategies during an innovation using the synonyms of the search terms identified from the research question. The first search string was developed with the Boolean operators 'AND' and 'OR' to combine or supplement keywords and focus the search (Polit & Beck, 2017). The initial search string included the following terms: 'peer' or 'colleague' or 'cohort' or 'friend' or 'fellow'; AND mentor* or support* or counsel* or guide* or 'advisor'; AND; 'new program' or 'new curriculum' or 'new practice' or 'new behaviour' or 'new intervention' or 'change' or 'innovation'; AND 'professionals' or 'healthcare professionals'. Published literature inclusive of empirical and theoretical research, dissertations, theses, expert opinions, workshops and conference proceedings from January 2000 to November 2016 were included. A record of the initial and every refined search string, results and databases was maintained to keep an audit trail of the integrative review. The literature search generated an output of 373 abstracts and titles.

Evaluation of the generated abstracts

Each of the generated abstracts (n = 373) was evaluated for any duplicates and four abstracts were eliminated. The abstracts were then evaluated for their relevance to the research question and 264 abstracts were excluded, leaving 105 abstracts. The inclusion criteria for this review were abstracts that reflected:

- a peer support strategy;
- an innovation or a new programme;
- outcomes reflective of enhanced implementation;

- professionals involved in the innovation; and
- published between 1 January 2000 and 30 November 2016

Full articles for the 105 abstracts were retrieved through the assistance of the university librarian and evaluated by the reviewers using the pre-determined inclusion criteria. An audit trail was built by keeping a record of all databases searched, abstracts and articles, search string revisions, articles excluded and reasons for exclusion, as shown in the PRISMA flow chart in Figure 1.

Evaluation of literature

Five independent reviewers who included senior lecturers in higher education institutions, experts in curriculum development and mentorship, and experienced researchers were involved in reviewing the 105 articles during the evaluation phase. The reviewers independently evaluated the full articles against the inclusion criteria and excluded 94 articles because they were either pilot projects or related to peer support among non-professionals or students. Articles that did not have any innovation or new programme implemented or were merely describing peer support were also excluded. Any discrepancies relating to the articles' inclusion during the evaluation phase were discussed among the reviewers through Skype or Zoom meetings and consensus was reached. Eleven articles were included for the subsequent phase of critical appraisal.

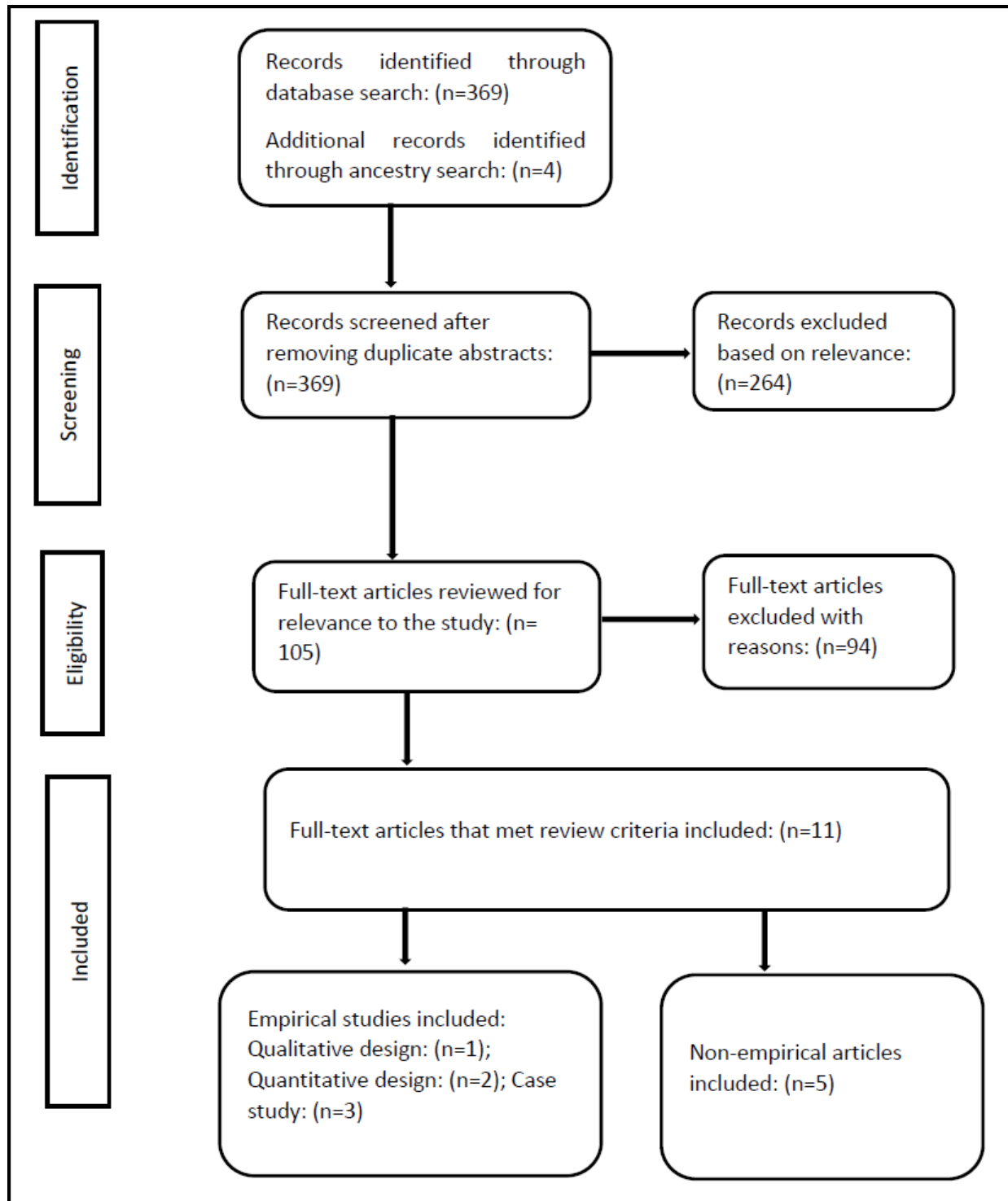


FIGURE 1: PRISMA flow chart: Process of searching and selecting literature (Source: Author-generated based on PRISMA 2009)

Critical appraisal of selected articles

Four out of the preceding five reviewers critically appraised the 11 included articles independently using various validated appraisal tools based on the study design. One reviewer opted out of appraising articles due to other commitments during the same period. The reviewers used the Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) Research Evidence Appraisal Tool to appraise the quantitative research evidence and non-research articles (Addendum A), and the standardised Critical Appraisal Skills Programme (CASP) tool was used for the qualitative designs (Addendum B). The Centre for Evidence-Based Management Tool was used for the case studies (Addendum C). No articles were excluded based on the critical appraisal.

Quality of evidence

This review sought to describe existing peer support strategies that have enhanced the implementation of innovation among professionals. The evidence included in this integrative review focused more on the relevance to peer support than the rigour of the studies (see Schick-Makaroff *et al.*, 2016). The articles that met the inclusion criteria were assessed for their quality by comparing their relevance individually to the focused research question based on the JHNEBP Research Evidence Rating Scale (Addendum D), which classifies articles into three quality levels, namely high quality, good quality and low quality. Based on this rating scale, two articles were classified as of high quality, while the other nine were classified as of good quality. No article was excluded based on this quality rating system. The reviewers reached consensus on the ratings of the evidence through discussion using Skype or Zoom meeting. Table 1 shows the summary of the articles included in the data extraction.

TABLE 1: Summary of articles included in the integrative review

Article author & year	Journal and database	Design	Target population	Innovation	Peer support strategy	Context/ Setting	Strength of evidence	Quality of evidence
Bang (2013)	<i>International Journal of Education in Mathematics, Science and Technology (IJEMST)</i> – ERIC	Case study	Elementary science teachers	Inquiry-based methods of instruction	Hybrid mentoring, using different devices	K-8 elementary teachers in centrally situated schools in Midwest State, USA	Level V	A: High quality
Bennett & Santy (2009)	<i>Nurse Education in Practice</i> – CINAHL	Case study	Academic faculty	Online teaching programme	Online peer observation – dyad	University Department of Health Sciences and Department of Education, UK	Level V	B: Good quality
Bennett, Paina, Ssengooba, Waswa & M'Imunya, (2013)	<i>Education for Health</i> – PsycINFO	Qualitative design	Master's and doctoral trainees in health research	Health-related research capacity building	Dyads progressing into triads	Fogarty International Centre in two universities, Kenya and Uganda	Level III	B: Good quality
Bryant <i>et al.</i> (2015)	<i>Journal of Nursing Scholarship</i> – CINAHL	Non-research (organisational experience)	Pre- and post-doctoral (Nursing)	Developing new gerontological nurse scholars and leaders	Horizontal and vertical mentoring	Hartford Centres of Geriatric Nursing Excellence and affiliating universities, USA	Level V	A: High quality
Fleming <i>et al.</i> (2015)	<i>Academic Medicine</i> – PsycINFO	Quantitative design	Junior faculty (Medicine)	Early career advancement	Group-facilitated mentoring	University Paediatric Department, USA	Level III	B: Good quality
Furimsky, Arts & Lampson (2014)	<i>Applied Clinical Trials</i> – Academic Search Complete	Survey	Healthcare professionals	Clinical research skills for inexperienced staff	Paired peer-to-peer mentoring	Clinical research sites, Canada	Level III	B: Good quality

Article author & year	Journal and database	Design	Target population	Innovation	Peer support strategy	Context/ Setting	Strength of evidence	Quality of evidence
Hall & Zierler (2015)	<i>Journal of Interprofessional Care</i> – CINAHL	Non-research (organisational experience)	Healthcare faculty- Interprofessional education	Implementation of Interprofessional education	Combination of approaches	2 universities and 8 academic health centres, USA	Level V	B: Good quality
Magers (2014)	<i>Worldviews on Evidence-Based Nursing</i> – PsycINFO	Non- research (Practice change intervention)	Healthcare workers (nurses and physicians)	Practice change using evidence-based practice guidelines	Unit-based group mentoring	Long-term acute hospital care, USA	Level V	B: Good quality
Pololi, Knight & Dunn (2004)	<i>Journal for General Internal Medicine (JGIM)</i> – Academic Search Complete	Non-research (organisational experience, writing project)	Faculty (academic medicine)	Scholarly and academic writing skills	Collaborative mentoring, using dyads	Medical school in East Carolina, USA	Level V	B: Good quality
Provident (2006)	<i>American Journal of Occupational Therapy</i> – PsycINFO	Critical case study	Faculty (occupational therapy)	Occupational therapy curriculum reform	Formal group mentoring	Occupational Therapy, University, USA	Level III	B: Good quality
Sexton <i>et al.</i> (2016)	<i>Academic Psychiatry</i> – PsycINFO	Non-research (organisational experience, module revision)	Faculty (psychiatry)	Hands-on renewal of psychiatry modules	Work-based community of practice (“Mod Squad”)	Department of Psychiatry at University of Washington, USA	Level V ¹	B: Good quality

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- ¹ Level I: Experimental study, randomised controlled trials (RCTs), systematic reviews of RCTs
Level II: Quasi-experimental study, systematic reviews of combination of RCTs and quasi-experiments
Level III: Non-experimental, systematic reviews of combination of RCTs, quasi-experimental and non-experimental studies, qualitative studies, or systematic reviews with or without meta-synthesis
Level IV: Opinion of respected authorities, nationally recognised expert committee/consensus panels, clinical practice guidelines
Level V: Experiential and non-research evidence- literature review, quality improvement, programme or financial evaluation, case reports, opinion of nationally recognised experts based on experiential evidence

Data extraction

A data extraction tool was developed and piloted by the first author and reviewed by the second author to eliminate any ambiguous questions. The development of the data extraction tool was guided by the research question to ensure the collection of data relevant to the study (see Souza *et al.*, 2010). Using the data extraction tool (Addendum E), the same four reviewers independently extracted data on major elements regarding peer support from each of the included articles. Data that were extracted encompassed the type of peer support strategy used, the context in which the peer support strategy was used, the innovation that required support, reasons for using the peer support strategy, how the peer support strategy was used, the outcomes of using the peer support strategy, the characteristics of the supporters, the tools used to measure the effectiveness of the peer support strategy, the challenges of implementing the peer support and the limitations of the study. The first author recorded and consolidated the extracted data from the four reviewers in one data extraction table. Any response that was included by only a single reviewer was discussed with the reviewer and resolved through a Zoom or Skype meeting.

Data analysis and synthesis

The extracted data were inductively analysed and synthesised using a stepwise and iterative process, which included data reduction, data display, data comparison and conclusion and verification (Whittemore & Knafl, 2005). Data reduction involved classifying the primary sources into theoretical and empirical evidence and sequentially analysing them. The data extracted from each primary sources was coded, categorised and individually compiled into a data display matrices to enable comparison. Data comparison followed an iterative process across the primary sources guided by the review question and variables related to peer support during implementation of an innovation among professionals. Critical and meaningful elements of peer support during an innovation were identified, categorised and six themes developed. The authors verified the developed themes on peer support against the primary data

sources and the review question, and drew conclusions. The six themes that emerged were:

- Types of peer support strategies
- Characteristics of peer supporters
- Characteristics of an effective peer support strategy
- Outcomes of effective peer support strategies
- Challenges of implementing peer support strategies
- Lessons learned from the peer support strategies.

Results

The results are presented under the identified themes.

Types of peer support strategies

Professionals who engaged in the implementation of new programmes used a variety of peer support strategies. The peer support strategies were grouped into three categories, namely team mentoring, paired mentoring and multiple techniques. Team mentoring strategies used group support approaches and included group-facilitated peer mentoring, unit-based mentoring, collaborative mentoring and work-based community of practice (Fleming *et al.*, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). The second category was paired (buddy) mentoring, which took the form of vertical and horizontal mentoring, dyads that progressed into triads, paired peer-to-peer mentoring and online observation (Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Furimsky *et al.*, 2014). The multiple techniques were the third category and used multiple hybrid approaches to peer support (Bang, 2013; Hall & Zierler, 2015).

Characteristics of peer supporters

The support providers were mainly individuals with high qualifications, holders of high positions, experienced, committed and interested in peer support. The peer supporters possessed high qualifications such as PhDs and/or held positions such as associate professors, programme directors, professional medical editors, physicians and postgraduate alumni (Bryant *et al.*, 2015; Pololi *et al.*, 2004; Provident, 2006). The supporters were experienced in various fields, which included evidence-based practice, interprofessional education and change processes (Hall & Zierler, 2015; Magers, 2014), teaching, research, medical writing and editing, and co-mentoring (Bang, 2013; Furimsky *et al.*, 2014; Pololi *et al.*, 2004). In line with their experience, the support providers were committed to faculty development and interested in the innovation that was being implemented. Such innovations included curriculum design, inter-profession education and evidence-based practice (Hall & Zierler, 2015; Magers, 2014; Provident, 2006; Sexton *et al.*, 2016). Both senior and junior faculty members were engaged in the provision of the support (Bennett *et al.*, 2013; Fleming *et al.*, 2015; Sexton *et al.*, 2016). Other distinguishing characteristics were that support providers were ardent and motivated to give back to their community, and were willing and committed to serve (Bennett & Santy, 2009; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Provident, 2006; Sexton *et al.*, 2016). All the highlighted characteristics are important for an effective peer support strategy.

Characteristics of effective peer support strategies

A variety of factors characterised effective peer support strategies, including organisational and operational systems of the peer support strategy, clear goals and boundaries for the interactions, a supportive administrative system, leadership and responsibility, strategies for sustaining innovation, mentor–mentee communication, monitoring and evaluation (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). The results

showed that an effective peer support strategy requires securing the commitment of institutional leaders. Based on the results, there was a need for capacitation of institutional leaders and establishment of high-level committees to steer the peer support strategy. Contextualising the strategy to institutions and the provision of necessary resources are of paramount importance (Bang, 2013; Bennett *et al.*, 2013; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Provident, 2006). Other factors influenced the effectiveness of peer support strategies, such as utilising interactive supportive strategies, recognising and acknowledging the champions in the support strategy, monitoring compliance, devoting time to activities, reinforcement and redirection, and collaborative decision-making, to highlight but a few (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). These factors are crucial in ensuring the sustainability of peer support within an institution.

An effective peer support strategy requires the establishment of suitable modes of communication and dialogue and maintaining communication between the supporter and the supported, sharing experiences and best practices while ensuring mutual respect (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). The results revealed ongoing feedback among the peers, re-education, the monitoring of progress and reinforcement as essential for an effective peer support strategy (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). Awareness of the need for support among peers was found to be the motivation for voluntary participation, seeking help and co-creating the mentoring scope between the mentor and mentee (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Provident, 2006). All the reports included in the analysis and synthesis highlighted characteristics of an effective peer support strategy.

Outcomes of effective peer support strategies

This theme had four sub-themes, which were sustained innovation, professional and personal growth, a community of practice and scholarship. Peer support led to sustained innovation such as successful utilisation of fundamental curricula, improved patient outcomes and new curriculum design (Hall & Zierler, 2015; Magers, 2014; Provident, 2006; Sexton *et al.*, 2016). Professional and personal growth were other significant outcomes among the peers engaged in the support activity from all the reports. Individuals were able to meet the goals they set for themselves and develop various skills (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). Engaging in the peer support activities also led to a community of practice, as evidenced by increased interconnectedness, professional networking and a collaborative community (Bang, 2013; Bennett *et al.*, 2013; Fleming *et al.*, 2015; Hall & Zierler, 2015; Provident, 2006; Sexton *et al.*, 2016). Scholarship also developed among individuals who participated in peer support activities, as evidenced by scholarly publications, academic writing and growth in research (Bennett *et al.*, 2013; Fleming *et al.*, 2015; Pololi *et al.*, 2004). Effective peer support should sustain an innovation and contribute to the growth of the peers.

Challenges of implementing peer support strategies

The implementation of peer support strategies is not without challenges. Some of the challenges experienced in the course of implementing peer support comprised –

- timing and time limitations (Bang, 2013; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Provident, 2006; Sexton *et al.*, 2016);
- disconnect in relationships (Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Provident, 2006);
- power differences, particularly between junior and senior members of staff or leaders (Bennett *et al.*, 2013; Bryant *et al.*, 2015; Sexton *et al.*, 2016);

- unclear mentoring roles (Bennett *et al.*, 2013; Bryant *et al.*, 2015; Furimsky *et al.*, 2014; Provident, 2006);
- technological limitations, such as system failure and internet connectivity (Bang, 2013); and
- accessing mentoring support (Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014).

These challenges may affect the effectiveness and influence the sustainability of peer support.

Lessons learned from the peer support strategies

The aspects that were assumed to have contributed to the success of peer support were highlighted in this theme. These aspects that made the strategies work included institutional commitment to the peer support strategy, guidelines of interaction, feedback and information sharing, values and elements for successful mentoring and a community of practice (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). Based on the results, other essential variables that contributed to success were the involvement of senior members of staff, alignment of departmental needs and resources, institutional buy-in and approval, a strong mandate from administrators, investment in capacity development and the development of leadership strategies (Bennett *et al.*, 2013; Fleming *et al.*, 2015; Sexton *et al.*, 2016). Establishing clear guidelines and expectations and setting self-determined goals were also essential for a successful peer support strategy (Magers, 2014; Pololi *et al.*, 2004; Provident, 2006). Systematic and consistent sharing of information and regularly evaluated feedback are key in peer support strategies (Bennett & Santy, 2009; Bryant *et al.*, 2015; Furimsky *et al.*, 2014; Provident, 2006; Sexton *et al.*, 2016). The results further underscored the importance of values and other elements in a successful peer support relationship. Some of the values reported were trust, openness to self-disclosure, maintaining confidentiality,

persistence, willingness and skill in giving and receiving feedback, relevant and applicable learning opportunities, content expertise and challenging faculty to think and discuss (Bang, 2013; Bryant *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Provident, 2006). These elements need to be considered when planning a peer support strategy.

Discussion

Peer support can enhance the implementation of change or an innovation such as curriculum innovation in a nursing education institution. The purpose of this integrative review was to synthesise relevant published empirical and theoretical evidence and describe the existing peer support strategies that enhance the implementation of innovations or new programmes among professionals. The review showed that there are peer support strategies that can enhance the implementation of innovation among professionals. Peer support strategies provide opportunities for innovators and early adopters to encourage and enhance the self-efficacy of the late adopters (Rogers, 1983). Self-efficacy is a critical determinant of behaviour change in an individual and can be enhanced through vicarious experience and verbal persuasion from peers in their environment, who may act as role models or support providers during the change process (Bandura, 1989). However, institutions embarking on peer support need to be cognisant of some prerequisites for an effective peer support strategy. This discussion focuses on implications for the three main stakeholders involved during an innovation, namely the institutional leadership, peer support providers and peer support recipients.

Institutional leadership

The sustainability of effective peer support strategies requires institutional and administrative endorsement. The institutional administrators are responsible for the mobilisation and allocation of resources, which include human, material and time resources. This review showed that peer support strategies can be resource-intensive (Gagliardi, Webster, Perrier, Bell & Straus, 2014; Hall & Zierler, 2015) and

administrators need to allocate adequate resources for the activities. The functionality of a structured peer support strategy should be guided by essentials such as guidelines, goals, objectives and administrative structures (Fleming *et al.*, 2015; Magers, 2014; Sexton *et al.*, 2016). The effective implementation of support strategies requires operational guidelines, the provision of resources for the support strategy, monitoring and evaluation of compliance with the support strategy, the provision of feedback and recognition of champions. Monitoring and evaluation is the mainstay for an effective support strategy and the responsibility rests on the institutional leadership. Securing top leadership commitment and the capacitation of institutional leaders were important in sustaining the innovation and peer support strategy (Magers, 2014; Provident, 2006). The administrative endorsement also influences the participation of the peers in the support strategy and its sustainability (McLean, Cilliers, & Wyk, 2008). Although administrative endorsement is important, bureaucratic institutions can also become a hindrance to progress if the administrators are not flexible.

Peer support providers

The integrative review found that most peer support providers were individuals with higher qualifications, experienced and interested in faculty development (Bryant *et al.*, 2015; Fleming *et al.*, 2015; Sexton *et al.*, 2016). The peer support provider should also possess facilitation skills, the capacity to assist colleagues and interest in professional development. Paramount in peer support is knowledge of the support provider related to the innovation and the change process. The peer support providers should be aware that tailor-made strategies geared towards addressing the perceived gaps, are psychologically appealing to the individuals needing support (Knowles, 1980). Contextualised support activities are likely to be appreciated among individuals experiencing challenges in implementing an innovation. Participating in such activities can improve the self-efficacy and confidence of the peers and enhance the execution of their duties (see Bandura, 1989).

Aligned to self-efficacy is the co-creation of the support goals directed towards improving the implementation of the innovation by the peer support provider and the colleague seeking support (Shi, 2017). The support provider should ensure that peer support is guided by relevant goals and appropriate support activities, such as knowledge/information provision and skills capacitation. The support environment should be non-threatening and encourage self-disclosure of abilities or limitations, and promote the sharing of experiences and best practices among peers (see Provident, 2006). Such interactions improve self-efficacy and encourage personal and professional growth (see Bandura, 1989). The peer support provider ought to provide constructive feedback, acknowledge successes, reinforce the areas of weakness and provide alternatives (see Bennett & Santy, 2009; Sexton *et al.*, 2016).

The review showed that clarifying roles, responsibilities, boundaries and the modes of interaction minimises misunderstanding and enhances the interactions (Bryant *et al.*, 2015; Provident, 2006; Sexton *et al.*, 2016). The support provider needs to address these critical aspects of interaction at the onset of the peer support relationship. During the initial stages of the support interactions, the supporter and the supported need to discuss and clarify their roles in the peer support relationship (Provident, 2006). Role clarification is an important remedy to reduce relationship strains. Peer support thrives where there is mutual respect, trust, confidentiality, skill in giving feedback and willingness to assist colleagues (Bryant *et al.*, 2015). The provision of support requires time and personal commitment, and in the absence of these elements, the effectiveness of peer support can be compromised. Peer support providers also need to be committed to time engagement, while balancing their work and personal life.

Peer support recipients

Individuals requiring support must be honest with themselves when carrying out self-assessment to identify their own limitations and support needs. An honest self-assessment of one's ability can bring to the fore the areas of need and enable the support provider to design appropriate support activities. Knowles (1980) postulates that

adults perceive the need to learn when they are unable to function effectively at their current competence level or when they face challenges in their daily lives. Therefore, an honest self-assessment and perception of the competence gap prompt adults to voluntarily seek and participate in support activities. Although voluntary participation in support activities was highlighted as desirable, reports did not address the compliance limitations of such participations among individuals who do not feel compelled to participate. The commitment of the institutional administrators to peer support and the use of guidelines might address such challenges (McLean *et al.*, 2008). Individuals in need of support ought to be interested, willing and committed to participate in the support strategy. The recipients of peer support are encouraged to set self-determined goals, bearing in mind the fact that they need to grow past the peer support. Co-creating support goals with the peer support provider is encouraged (see Bryant *et al.*, 2015).

Approaches to peer support

Various approaches to peer support are used during the implementation of innovations or new programmes. This review found three categories of support strategies, namely team mentoring, paired mentoring and multiple technique mentoring (Bang, 2013; Bennett *et al.*, 2013; Fleming *et al.*, 2015). Despite the differences in the approaches, the purpose of utilising the support strategy was to enhance the capacitation of the professionals and sustain the innovation. None of the peer support strategies was found to be better than the other, as they were all used in different contexts and could not be compared.

The team approaches promote teamwork, interconnectedness and communities of practice and are efficient when dealing with big groups of professionals experiencing similar challenges (Fleming *et al.*, 2015; Hall & Zierler, 2015). The communities of practice that develop promote ongoing collaboration and sustain the change process among professionals. Paired/buddy mentoring involving pairs or triads can be appropriate approaches to use when supporting individuals with unique needs or requiring/providing hands-on support. Buddy mentoring is advantageous because

individuals have personalised support and quickly develop the trust of other members, thereby strengthening peer relationships (Bennett & Santy, 2009; Furimsky *et al.*, 2014).

The different mentoring strategies helped sustain the implementation of the innovation/change with improved outcomes (Fleming *et al.*, 2015; Magers, 2014), professional and personal growth (Bang, 2013; Bennett & Santy, 2009; Hall & Zierler, 2015) and improvement in academic writing (Pololi *et al.*, 2004). Similar strategies might be contextualised and used among professionals in the implementation of new programmes or innovations.

The review also found that a multiple techniques approach using different support media or platforms was used in either team or buddy mentoring. Different techniques can be used to provide peer support, which may be a combination of electronic media such as Zoom, Skype, Webinar, emails on one hand and the face to face approach in the same physical space on the other hand. The electronic approaches are convenient, as the mentors and mentees can be just a button-click away. However, such approaches suffer technological challenges, as reported in the results, which may include system failure and connectivity problems (Bang, 2013). Therefore, individuals engaged in the peer support strategies need to be mindful of these challenges for their prompt identification and remedial. Failure to address these challenges may hinder the peer relationships from thriving and impact negatively on the innovation or the change.

Outcomes and challenges of peer support interactions

Positive outcomes of peer support strategies on the innovation, supporters and the supported were reported in this integrative review. Effective peer support strategies sustain innovation and lead to communities of practice, professional and personal growth and scholarship (Fleming *et al.*, 2015; Pololi *et al.*, 2004). One of the key outcomes of a peer support strategy is improved self-efficacy and confidence of the peers to enable the implementation and sustaining of an innovation or the change

process. However, interactions between peer support providers and the recipients of support are not without challenges.

The challenges include timing and time limitations, such as the lack of time committed to mentoring and poor time keeping (Bang, 2013; Bennett *et al.*, 2013; Sexton *et al.*, 2016). Studies have highlighted a need for a deliberate allocation of protected time for support activities (Bryant *et al.*, 2015; Watson, Raffin-Bouchal, Melnick, & Whyte, 2012) as well as the timely monitoring and evaluation of activities. Other reported challenges are associated with a disconnect in relationships such as difficult personalities, paired peers working in different locations, power difference and tension between junior mentors and senior faculty members (Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Provident, 2006; Sexton *et al.*, 2016). Such strained relationships between the supporter and the supported are real challenges that can compromise the uptake and effectiveness of peer support. Some of the challenges may be ameliorated by institutional commitment to the support strategy (McLean *et al.*, 2008). However, peer support providers need to be aware of these challenges and take necessary corrective measures. Although only one report in the review provided a solution for the challenge related to senior-junior relationships (Sexton *et al.*, 2016), the authors of this review suggest that the support providers need to be aware of the potentially disruptive relationships during the peer support strategy. The authors further recommend that the support providers be equipped with conflict resolution and conflict management skills. When dealing with peers situated in different locations, alternative strategy options such as multiple techniques need to be considered.

The authors of this article argue that although change and innovation are inevitable in any profession, they can be uncomfortable and may not be readily embraced, with the potential of being poorly implemented or not being sustained. The introduction of change or an innovation without any planned ongoing support strategies for the implementers creates uncertainty and discomfort as it challenges their skills set. When the individuals' self-efficacy is challenged, they may naturally seek assistance from their peers leading to unstructured support. Therefore, peer support becomes a strategy that

can cushion peers and sustain the implementation of innovation. However, the sustainability of such unstructured support during an innovation might be compromised, hence the need for guidelines to enhance peer support interactions.

Conclusion, limitations and recommendations

The aim of this integrative review was to describe the existing peer support strategies that have enhanced the implementation of innovations or new programmes among professionals. The review identified and described the different types of support strategies, characteristics of effective peer support strategies and support providers, outcomes, challenges and lessons learnt. The authors argue and conclude that peer support strategies enhance the implementation of innovations. The strategies presented in this report can be contextualised and applied during the implementation of educational innovation such as curriculum change.

One of the limitations of this review was that it found only one study conducted in low- and middle-income countries, while the rest were in high-income countries. The other limitation was that no randomised trials or systematic reviews on peer support were found. Most of the reports included in the review were classified as non-research, which may affect the quality of the evidence synthesised. The language restriction to English was another limitation, which could have omitted relevant reports in other languages.

This review found a gap in evidence on peer support strategies used during the implementation of curriculum innovation. The authors did not find any reports that described guidelines for peer support among professionals. Although unstructured peer support exists among professionals, the sustainability of such support strategy might be compromised due lack of accountability and administrative endorsement. Individuals might not be compelled to seeking or provide the unstructured support when administrative authority is lacking. The guidelines might also give direction in terms of processes and structuring of the support and enhancing the effectiveness of the peer support. Therefore, there is a need to develop guidelines that can enhance peer support

among professionals during an educational innovation such as curriculum transformation.

References list

- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175–1184.
- Bang, E. (2013). Hybrid-mentoring programs for beginning elementary Science teachers. *International Journal of Education in Mathematics, Science, and Technology*, 1(1), 1–15.
- Bennett, S., Paina, L., Ssengooba, F., Waswa, D., & M`Imunya, J.M., (2013). Mentorship in Africa health research training programs: An exploratory study of Fogarty International Center programs in Kenya and Uganda. *Education for Health*, 26(3), 183–187.
- Bennett, S., & Santy, J. (2009). A window on our teaching practice: Enhancing individual online teaching quality through online peer observation and support: A UK case study. *Nurse Education in Practice*, 9(2009), 403–406.
- Botma, Y., & Nyoni, C. (2015). What went wrong? A critical reflection on educator midwives' inability to transfer education knowledge. *Journal of Nursing Education and Practice*, 5(6), 1–8.
- Bryant, A.L., Brody, A., Perez, A., Shillam, C., Edelman, L.S., Bond, S.M., ...Siegel, E., (2015). Development and implementation of peer mentoring program for early career gerontological faculty. *Journal of Nursing Scholarship*, 47(3), 258–266.
- Bucciarelli, L. (2015). A review of innovation and change management: Stage model and power influence. *Universal Journal of Management*, 3(1), 36–42.
- Dennis, C.L. (2003). Peer support within a health care context: A concept analysis. *International Journal of Nursing*, 40(3), 321–332.
- Feller, F. (2018). Transforming nursing education: A call for a conceptual approach. *Nursing Education Perspectives*, 39(2), 105–106.

- Ferguson, P.C., Caverzagie, K.J., Nousiainen, M., & Snell, L. (2017). Changing the culture of medical training: An important step toward the implementation of competency-based medical education. *Medical Teacher*, 39(6), 599–602.
- Fleming, G.M., Simmons, J.H., Xu, M., Gessel, S.B., Brown, R.F., Cutrer, W.B., ... Cooper, W.O. (2015). A facilitated peer mentoring program for junior faculty to promote professional development and peer networking. *Academic Medicine*, 90(6), 819–826.
- Frenk, J., Chen, L., Bhutta, Z.A., Cohen, J., Crisp, N., Evans, T., & Zurayk, H. (2010). Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *The Lancet*, 376(9756), 1923–1958.
- Furimsky, I., Arts, I., & Lampson, S. (2014). Developing a successful peer-to-peer mentoring program. *Applied Clinical Trials*, 22(12), 27–30.
- Gagliardi, A.R., Webster, F., Perrier, L., Bell, M., & Straus, S. (2014). Exploring mentorship as a strategy to build capacity for knowledge translation research and practice: A scoping systematic review. *Implementation Science*, 13(122), 1–10.
- Hall, L.W., & Zierler, B.K. (2015). Interprofessional education and practice guide no. 1: Developing faculty to effectively facilitate interprofessional education. *Journal of Interprofessional Care*, 29(1), 3–7.
- Knowles, M. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Englewood Cliffs, NJ: Cambridge Adult Education.
- Magers, T.L. (2014). An EBP mentor and unit-based EBP team: A strategy for successful implementation of a practice change to reduce catheter-associated urinary tract infections. *Worldviews on Evidence-Based Nursing*, 11(5), 341–343.
- Mathews, B., & Linski, C. (2016). Shifting the paradigm: Re-evaluating resistance to organizational change. *Journal of Organizational Change Management*, 29(6), 963–972.
- McLean, M., Cilliers, F., & Van Wyk, J.M. (2008). Faculty development: Yesterday, today and tomorrow. *Medical Teacher*, 30(6), 555–584.
- Pololi, L., Knight, S., & Dunn, K. (2004). Facilitating scholarly writing in academic medicine: Lessons learned from collaborative peer mentoring program. *Journal of General Internal Medicine*, 2004(19), 64–68.

- Provident, I. (2006). Outcomes of selected cases from the American Occupational Therapy Foundation's Curriculum Mentoring Project. *American Journal of Occupational Therapy*, 60(5), 563–576.
- Ringberg, T., Reihlen, M., & Ryden, P. (2019). The technology-mindset interactions: Leading to incremental, radical, revolutionary innovations. *Industrial Marketing Management*, 79, 102–113.
- Rogers, E. (1983). *Diffusion of innovation*. New York, NY: The Free Press.
- Rose, S., Shah, B.J, Onken, J., DeCross, A.J., Davis, M.H., Jain, R., ... Marks, L.N. (2015). Introducing the Gastroenterologist-accountable Professionalism in Practice (G-APP) pathway: Bridging the G-APP – replacing MOC with a model for lifelong learning and accountability. *Gastroenterology*, 149(6), 1609–1626.
- Rosenberg, M. (2018). Toward more meaningful accountability to the public: Assessing lifelong competence of physicians. *Clinical Journal of the American Society of Nephrology*, 13(1), 167–169.
- Sahin, I. (2006). Detailed review of Rogers' diffusion of innovations theory and educational technology-related studies based on Rogers' theory. *Turkish Online Journal of Educational Technology*, 5(2), 14–23
- Schick-Makaroff, K., MacDonald, M., Plummer, M., Burgess, J., & Neander, W. (2016). What synthesis methodology should I use? A review and analysis of approaches to research synthesis. *AIMS Public Health*, 3(1), 172–251.
- Sexton, J.M., Lord, J.A., Brenner, C.J., Curry, C.E., Stanley, I.S., & Cowley, D.S. (2016). Peer mentoring process for psychiatry curriculum revision: Lessons learned from the "Mod Squad". *Academic Psychiatry*, 40 (3), 436–440.
- Shahin, A., Barati, A., Dabestani, R., & Khalili, A. (2017). Determining factors influencing radical and incremental innovation with a case study in the petrochemical industry. *International Journal of Business Innovation and Research*, 12(1), 62–79.
- Shi, H. (2017). Planning effective educational programmes for adult students. *World Journal of Education*, 7(3), 79–83.
- Souza, M., Silva, M., & Carvalho, R. (2010). Integrative review: What is it? How to do it? *Einstein*, 8(1 Pt 1), 102–106.

- Stetler, C.B., Morsi, D., Rucki, S., Broughton, S., Corrigan, B., Fitzgerald, J., ... Sheridan, E.A. (1998). Utilization-focused integrative reviews in a nursing service. *Applied Nursing Research, 11(4)*, 195–206.
- Torraco, R.J. (2016). Writing integrative reviews: Using the past and present to explore the future. *Human Resource Development Review, 15(4)*, 404–428.
- Watson, L.C., Raffin-Bouchal, S., Melnick, A., & Whyte, D. (2012). Designing and implementing an ambulatory oncology nursing peer preceptorship programme: Using grounded theory research to guide program development. *Nursing research and Practice, 2012(451354)*, 1–15.
- Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing, 52(5)*, 546–553.

CHAPTER 3

Peer support during the implementation of a new curriculum: The experiences of nurse educators in Lesotho

3.1 INTRODUCTION

The implementation of a curriculum innovation that requires new pedagogical approaches can pose challenges even among educators with many years of experience. Without deliberate ongoing support during the change process, educators may feel disempowered and enact the curriculum inappropriately. However, during such challenging times, educators often seek assistance and support from colleagues to enable them to continue to perform their duties. The effectiveness of such kinds of unstructured support can often be compromised. This study explored and described the experiences of nurse educators related to unstructured peer support during the implementation of a midwifery competency-based curriculum.

3.2 MANUSCRIPT DETAILS

Title: Peer support during the implementation of a new curriculum:
The experiences of nurse educators in Lesotho

Authors: Shawa, M. and Botma, Y.

Target journal: *International Journal of Africa Nursing Sciences*

Journal details: Double-blinded peer-reviewed
Listed in accredited list of journals by the Department of Higher Education and Training, South Africa
Impact factor 0.650

Status: To be submitted

3.2.1 Journal information

The *International Journal of Africa Nursing Sciences (IJANS)* is an international scientific journal published by Elsevier. The broad-based journal was founded on two key tenets, namely to publish the most exciting research with respect to the subjects of Nursing and Midwifery in Africa, and to advance the international understanding and development of nursing and midwifery in Africa both as a profession and as an academic discipline (International Journal of Africa Nursing Sciences, 2020).

3.2.2 Contribution record

The researcher conceptualised the study, collected data and drafted the manuscript. The research promoter provided guidance during the conceptualisation of the study and was engaged in the data analysis and critical reading of the manuscript.

3.2.3 Associated addenda

Addendum F:	Unstructured interview central question
Addendum G:	Participants' information brochure
Addendum H:	Consent form
Addendum I:	Interview transcript
Addendum J:	Data coding sheet
Addendum M:	Health Sciences Research Ethics Committee approval
Addendum N:	Lesotho Ministry of Health Research Ethics Committee approval
Addendum O:	Institutional permission
Addendum Q:	Author guidelines for the <i>International Journal of Africa Nursing Sciences</i>

3.3 MANUSCRIPT 2

PEER SUPPORT DURING THE IMPLEMENTATION OF A NEW CURRICULUM: THE EXPERIENCES OF NURSE EDUCATORS IN LESOTHO

ABSTRACT

Educators need to be supported in implementing a new curriculum. The context of this study was the implementation of a competency-based curriculum developed and adopted for various nursing education programmes in Lesotho. However, nurse educators experienced limited professional development opportunities and lack of ongoing support during the implementation of this new curriculum and naturally sought support from their peers. Such unstructured peer support could compromise the quality of curriculum enactment. This study explored the experiences of nurse educators regarding peer support during the implementation of a new curriculum. An exploratory descriptive qualitative research design was applied to 12 conveniently sampled nurse educators from five nursing education institutions in Lesotho. Data were generated through individual semi-structured interviews and analysed using inductive reasoning and thematic analysis. Five themes emerged, namely motivation for educators to participate in peer support, attributes of educators that influence the extent of interaction and uptake of support, unstructured peer support strategies, consequences of peer support among educators and model performance inspires engagement with the new curriculum. Some of the educators benefitted from the unstructured peer support during the implementation of the new curriculum. The successful implementation of curriculum change can be enhanced through institutional commitment to peer support strategies and the development of guidelines for peer support.

Highlights

- Educators need ongoing support during curriculum change.
- The successful implementation of curriculum innovation can be enhanced through peer support.
- Guidelines for peer support can enhance the interactions of educators during curriculum change processes.

Keywords: peer support, experiences, curriculum change, nurse educators, implementation

Introduction

The implementation of a competency-based curriculum (CBC) that demands new pedagogical approaches, without any ongoing support for the educators, threatens the sustainability and fidelity of its enactment (Botma, 2014b; Nyoni & Botma, 2018). The educators as key drivers of curriculum implementation need ongoing support during curriculum change. Ongoing support such as peer support can enhance the implementation of the curriculum change. Peer support, a time-tested collegial collaborative strategy, has been used to socialise, nurture and capacitate individuals in different institutions (Fleming *et al.*, 2015; Sexton *et al.*, 2016). Such a supportive strategy might facilitate transitioning among educators during curriculum reform in academic institutions.

Curriculum reform in nursing education is inevitable amid changing disease patterns, calls for task shifting, advancements in science and technology, and globalisation (Frenk *et al.*, 2010; Horton-Deutsch & Sherwood, 2017; Maier & Aiken, 2016). However, inasmuch as the transformation of curricula is inevitable, educator preparation and ongoing support during such changes might be inadequate, especially in low- and middle-income countries (LMICs). Without ongoing support, educators experienced in the didactic teacher-centred approach might suddenly become vulnerable and feel inadequately prepared for the enactment of a new curriculum (Dole, Bloom & Kowalske,

2016; Ferguson, Caverzagie, Nousiainen & Snell, 2017) that requires novel student-driven, performance-oriented strategies. The challenge of inadequate educator support in LMICs is unique due to the resource constraints experienced (Frenk *et al.*, 2010), unlike in developed countries, where educator support might be a priority. Institutions embarking on curriculum transformation need to deliberately plan for ongoing support of the educators to ensure the fidelity of its implementation. One can argue that peer support can be an affordable strategy to enhance the implementation of curriculum change in resource-limited countries.

The context of the study

Lesotho, a resource-limited developing country in southern Africa, adopted competency-based education for the training of its nurses and midwives in 2012. The espousal of competency-based education was done in an effort to address the changing healthcare needs and the heavy disease burden that the country is experiencing (Ministry of Health [MoH], 2013). A grant was received from the Global Nurse Capacity Building Programme through the Nursing Education Partnership Initiative (NEPI) to design and develop competency-based curricula for nursing and midwifery programmes in the country (Nyoni & Botma, 2019). The CBC replaced the traditional content-driven, teacher-centred curriculum with the student-centred performance-oriented approach (see Frenk *et al.*, 2010) in five out of six nursing education institutions in Lesotho. The principles of constructivism, constructive alignment, scaffolding and authenticity underpin this new curriculum (Botma, 2014b). The transformation was extensive and compelled educators to sharpen or acquire new skills corresponding with the curriculum changes (see Botma, 2014a; Gruba, Moffat, Sondergaard, & Zobel, 2004) to enable them to implement the CBC appropriately.

The implementation of the CBC in Lesotho took place in two phases, beginning with the midwifery programme in 2014. With the inception of the CBC in the midwifery programme, midwifery educators had to apply the new pedagogical approaches that encompassed the tenets underpinning the new curriculum. Although external support

was provided during the curriculum development phase as well as the designing of the learning and teaching material, none was planned for the implementation phase (Nyoni & Botma 2019). Despite recommendations from the rapid assessment conducted prior curriculum development for continuous professional development to support educators during the implementation of the CBC in Lesotho (Botma, 2014a), institutions had planned neither for professional development nor for alternative ongoing support strategies in place.

Professional development and ongoing support for the educators on the new pedagogical approaches are critical factors in ensuring the successful implementation of curriculum transformation (Iwasiw & Goldenberg, 2015; Mortel & Bird, 2010). However, ongoing professional development may be costly for resource-limited countries such as Lesotho. The educators in Lesotho received limited capacitation before the implementation of the CBC, which resulted in variations in their capacity levels to enact the curriculum. Botma and Nyoni (2015) reported that midwifery educators in Lesotho struggled to transfer their learning during capacitating workshops to their educational practice. Being at different capacity levels of implementing the new curriculum, the educators from different nursing education institutions naturally started seeking and providing support to and from one another as peers. Among the educators who had been involved in curriculum development and capacitation activities were some who had grasped the concepts and were able to implement the curriculum as intended. Amid the implementation challenges, two early adopters (who became key informants in this study) were able to take the lead to encourage and support their colleagues.

Successful implementation of the midwifery CBC required educators to support one another as they worked through the new curriculum. In the absence of formal or planned peer support structures in place, the midwifery educators started to support one another informally during the implementation of the new curriculum, with the innovators and early adopters taking the lead. This study describes the experiences of the midwifery educators related to the peer support they provided/received during the implementation of the midwifery CBC. The question that was raised was: What could be

learned from the experiences of the midwifery educators that can be used to support those nurse educators who need to implement the CBC in the Diploma in Nursing programme during the second phase of implementation? The insights gleaned from the reflections on experiences during the implementation of CBC in midwifery and consideration of relevant theory helped to explain and suggest appropriate peer support guidelines.

Methodology

This study used exploratory descriptive qualitative research design to describe the experiences of midwifery educators regarding peer support during the implementation of the new curriculum. The 18 midwifery educators aged between 27 and 68 years, who were involved in the first phase of implementation of the new CBC in five nursing education institutions in Lesotho, comprised the study population. The researcher used convenience sampling to select 12 midwifery educators who were available and willing to participate in this study. Data saturation was reached after interviewing the 10 participants.

Ethical consideration

The Health Sciences Research Ethics Committee of the University of the Free State (HSREC 28/2017) (Addendum M) and the Lesotho Ministry of Health Research and Ethics Committee (ID 91-2017) (Addendum N) approved the research proposal. Institutional permission (Addendum O) was obtained from the nursing education institutions before data collection, and individual participants gave informed written consent (Addenda G and H). The framework for ethical educational research guided this study (Burgess & Cilliers, 2017). The principles underpinning the framework include educational value, scientific validity, ethical oversight, provision of appropriate educational interventions or any other benefits of social value after research and collaborative partnership. Data were stored using a password-protected folder on a computer, which was only accessed by the researcher.

Explorative study

The first author, also the interviewer, tested the central research question by interviewing two midwifery educators. The central interview question was: What were your experiences regarding collaborative support activities during the implementation of the new curriculum in the midwifery programme? See Addendum F. The co-author reviewed the transcribed unstructured individual interviews to evaluate the interviewing techniques and determine the competence of the interviewer. Open-ended questions and probing questions were mostly used during the interviews. No leading questions were asked. The data from the pre-test were included in the data analysis, as no adjustments had been made to the central interview question. The participants in the exploratory study were informed beforehand about the possibility of including their data in the data analysis of the main study.

Data collection

Semi-structured individual interviews were used to gather data from 12 midwifery educators in five nursing education institutions in Lesotho. Two of the 12 educators, who were the primary peer support providers, became the key informants for this study. Permission was sought from the nursing education institutions before data collection. The researcher scheduled individual appointments at the institutions where the participants were employed and requested the use of a private, quiet room in which to conduct the interviews. The participants received full information about the study and gave written consent to be interviewed and that the interview may be audio-recorded.

Data analysis

The first author conducted all interviews in English and transcribed the audio recordings verbatim (Addendum I) as soon as possible after the interviews. The few Sesotho comments were translated into English and confirmed by a professional Sesotho translator. Data from the explorative (pilot) study was included in the data analysis. The paper trail of audio recordings and transcriptions enhanced the trustworthiness of the data. Conducting and transcribing the interviews enabled the interviewer to familiarise herself with the data (see Grove *et al.*, 2016). Three experienced independent coders manually analysed the data using inductive open coding, as described by Creswell (2014). The use of more than one coder enhanced the credibility of the data.

Findings

Various experiences regarding peer support were reflected by the educators. The following five themes emerged from the data analysis:

- Motivation for educators to participate in peer support
- Attributes of educators that influence the extent of interaction and uptake of peer support
- Unstructured peer support strategies
- Consequences of peer support among educators
- Model performance inspires engagement with the new curriculum.

Motivation for educators to participate in peer support

A variety of factors motivated the curriculum enactors in Lesotho to participate in peer support. One of the drivers for peer support was ending of the NEPI funding, which supported the capacitation of educators, and the need to implement the new curriculum. One participant reiterated:²

² Please note: all excerpts from the interviews are reproduced verbatim and unedited.

So when that funding of NEPI ended we sort of naturalised into a system of how do we move on ... So the question is what do we do? NEPI is gone, the consultant is gone, we need to implement ... that's when we unearthed a lot of issues as if that training initially didn't happen. (Participant A1)

The educators further described the discrepancies in their knowledge levels, challenges experienced and the desire to know more about the new curriculum as some of the factors that led to their engagement in peer support activities. Each institution had specific needs that required to be addressed. Another educator explained:

Our understanding and ... progression into the CBC are not the same, based on how we understand. So the meeting that I remember, which was now a workshop, was based on the challenges that we were facing. (Participant C1)

Another participant reflected that participation in support activities was driven by the need for more knowledge, challenges experienced and the educational landscape associated with implementing the new curriculum, and said:

Then after we had done the blueprint and made sure that everyone understood, then we were capacitated on how to develop those OSCE [objective structured clinical examination] stations, developing checklists, developing scenarios, how to run an OSCE setup. We took some sessions capacitating one another as institutions. (Participant A2)

Attributes of educators that influence the extent of interaction and uptake of peer support

Different attributes of the educators influenced the uptake, extent and consistency of the peer support during the implementation of the CBC. One participant, in expressing their experiences, commented:

[T]here was willingness, I think we were all keen to know, we all wanted to know what this CBC was all about, you know when something is portrayed like it's a monster, it's something that is not doable. (Participant A3)

Participants lamented the limited application of new knowledge among supported educators. The limited sense of accountability and 'nonchalant' attitude of educators further influenced the uptake of peer support. Another participant stated:

But with the other institutions we found that even if we share our experiences, how we get things like videos ... you find that they are expecting us ... to download and give them all the materials ready, even if we refer them to the links and we tell them how you get this ... they were expecting us to share a completed thing. (Participant A2)

Another critical determinant for the uptake of the support was the biological age of the educators and experience with the former curriculum. Educators who were older with many years of teaching experience were not enthusiastic about the new curriculum, and therefore less likely to seek support. A participant from one institution reiterated:

I remember in my institution, particularly when we started, we had an educator who was I think two years away from retirement who plainly and simply said 'Aaah, I will continue with my content, you do your CBC kids' ... unfortunately she was the head of the programme, so you just had to let it go. (Participant E1)

The peer support activities extended to the clinical environment in the form of sharing information during pre- and post-placement meetings, supervisory visits and capacitation, as attested to by participants from all institutions. One participant commented:

Through the pre- and post-placement meetings, we were able to address ... issues and iron out some of the concerns that they (clinical staff) were having. (Participant C3)

There was an assumption that the previous donor-funded projects were unsustainable and taken for granted due to lack of accountability. The participants highlighted that this assumption influenced the perception of the need for peer support among educators.

Unstructured peer support strategies

Initially, peer support among educators comprised various unstructured strategies such as peer review of specific work, including learning and teaching material. This approach resulted in some of the educators experiencing feelings of emancipation, which gave them the ability to continue with the work. One of the participants stated:

They [support activities] helped a lot, particularly for me, I was nominated to be part of the facilitators to the process, and I was part of the planning team and the team that was leading the discussion. And it ... was helpful because it was not only the discussion, we were also actively engaged in those activities and then critiquing them to align them to what is expected, so actually it was very beneficial. (Participant C1)

The unstructured nature of the peer support strategies presented some challenges among the educators engaged in support activities. The participants indicated that there was inadequate support for reluctant educators, limited accountability and no monitoring and evaluation. These factors influenced educators' consistency in providing or seeking support and amplified the need for endorsement of peer support strategies by institutional administrators to improve their effectiveness. One participant reflected:

The challenge with the peer support was that it had no obligation ... because if I feel like I don't want to develop myself a study guide, no one would force me to, because my school administration felt like it's not a requirement for us. So nobody made a follow-up and nobody made a reinforcement. (Participant E1)

Another participant lamented:

After the meeting you would see people trying to do something, though after some time you would wonder what is happening now again, I thought we were on the right track, how come I don't see what we discussed before. (Participant B1)

These unstructured peer support interactions drove the educators to engage in a more structured approach, which resulted in the development of platforms for communication such as WhatsApp groups and emails to support one another. One educator stated:

[D]uring exchange of emails to say here am stuck here, how do I overcome this challenge is also another strategy that was used. (Participant D1)

Gradually, educators engaged in formal discussions through planned meetings and workshops as support platforms as one participant reflected:

We also had another workshop... where there was a task team of nurse educators and they took us through the CBC delivery and development of activities. (Participant D1)

Consequences of peer support among educators

The support activities were empowering and enhanced self-directedness and specific competencies among the educators. The participants claimed that the support activities enhanced their learning and improved specific skills, awareness and implementation of the new curriculum. One educator described their experience:

I did have some [challenges] on the use of the mannequins ... since I did not go through the training of how to use the mannequins ... but as time goes, through the support from other colleagues I was able to cope ... through in-house training. (Participant C3)

Another participant expressed it as follows:

I think now all people are aware ... initially there was no awareness and stuff, but for now, with the persistence ... of the key people [early adopters] has made ... competency-based curriculum to be known [among educators]. (Participant A4)

The peer support activities resulted in professional development strategies that were transferable within various contexts. Furthermore, the support activities promoted teamwork among educators, which enhanced the implementation of the new curriculum in the midwifery programme. One participant reiterated:

We were struggling together and assisting each other. Though we hardly peer-examine[d] each other, because we kept on asking, do you need assistance to facilitate? ... when we are preparing these activities, we were together. (Participant C2)

Another outcome of the peer support was interaction among educators, which enhanced sharing and empowering one another. One participant commented:

I think that opportunity of discussing, sharing what you are developing with others creates... dilemmas for you, which lead you to learn more and try to perfect the way we have been developing teaching and learning materials for CBC. (Participant A4)

Although favourable outcomes were expressed by participants, various emotional reactions were also generated among the supported towards the supporters and the new curriculum. The peer supporters experienced some emotional harassment and felt discrimination related to their new roles as supporters. Some educators associated the new curriculum with the peer supporters and blamed them for its dissemination. Others assumed that the supporter providers were using their peers as research subjects. One supporter recounted some of the comments of the supported peers in this statement:

[T]hese workshops are not workshops; it's his research that he is going to be presenting you wherever he goes. (Participant A1)

Although there was initial emotional disharmony during the peer support activities, there was also a positive side to it. The negative emotional reactions of the supported peers led to the development of resilience among the supporters. The peer supporters' resilience was enhanced secondary to emotional and personal abuse experienced. Two supporters expressed the positive side of the emotional reactions as follows:

Even personally, emotionally, we were called names, we were insulted, all that I still think it was also a benefit because I was able to endure all that. (Participant A2)

And I think the fact that I had gone through that ... blustering, and those insults and those things during development of the curriculum, I think I ended up saying, 'I have to own it, I cannot have gone through that and then few moments later it falls flat in the face.' (Participant A1)

Model performance inspires engagement with new curriculum

Observing the exemplary performance demonstrated by peer supporters inspired other colleagues to engage with the new curriculum. The early adopters of the CBC persistently engaged in and shared the new pedagogical practices with their peers, which became crucial in encouraging and guiding the undecided or those with inadequate or no knowledge of the new curriculum. One participant commented as follows:

Those individuals who caught fire ... related to issues of competency-based curriculum, those key people enabled to motivate and ... carry along those who were a bit reluctant to jump in[to] the ship of implementing [the] competency-based curriculum and also the development of competency-based curriculum-related materials. (Participant A4)

The colleagues who were knowledgeable readily provided tangible support to peers during the preparation of teaching/learning materials and the implementation of the new curriculum, thereby empowering/capacitating them. Participants alluded to this experience as follows:

[W]ith developing the workbooks, we were having someone ... a colleague from one institution who was almost now and then in every meeting wanting to know how far we are with ... the development of workbooks ... I would say he was serving as our mentor. (Participant C3)

The main ingredients that galvanised the supporters during curriculum implementation included a transformative leadership style, internal drive towards excellence, personality traits preferring to be associated with success, self-directedness, internal motivation for professional growth, risk-taking inclination and willingness to provide support. These were some of the comments alluded to by the support providers:

He uses [a] transformational leadership style ... were people feel comfortable, people are free to come up with their innovative way of doing things ... he allows you to work around but where he sees that there may be a problem he quickly assists you so that you do not fall, but basically I think that leadership style that he uses [motivates people]. (Participant A3)

The exemplary practice of one institution had rippling effects on institutional level. One institution was exceptional in the implementation of the new curriculum, with a potential of supporting other institutions. Some educators in different institutions sought assistance from colleagues in the excelling institution. One participant stated:

Actually where we needed help we call[ed] a colleague from [Institution A] to assist us ... the other time he even came to assist us in the strategic plan so we can also be able to include what we are doing in the ... curriculum. (Participant C2)

Discussion

Nurse educators need ongoing support during the enactment of a curriculum innovation. The transformation that comes with competency-based education demands new set of skills among implementers, which might leave the previously experienced educators vulnerable and disempowered (Brownie, Docherty, Al-Yateem, Gadallah, & Rossiter, 2018; McLean, Cilliers & Wyk, 2008). Affordable strategies such as peer support can improve the self-efficacy of individuals during curriculum change and enhance the fidelity of its implementation (Bandura, 1989). However, the consistency of unstructured peer support might be compromised when prolonged engagement is required, such as during curriculum change, which literature reports to be a slow process (Brownie *et al.*, 2018).

Peer support ought to address the needs and challenges of individuals aligned with the curriculum innovation. Some of the support activities associated with curriculum innovation include the utilisation of innovative facilitation skills, the use of high-tech equipment such as mannequins and other simulation-based approaches. The varied educational landscape among educators in this study led to the development of tailor-made support activities among peers to reduce the knowledge gap and promote collaboration. Similarly, literature emphasises that tailor-made support activities address relevant and applicable needs of individuals and promote participation and collaboration among peers (Carpenter & Linton, 2016; Hall & Zierler, 2015). However, tailor-made activities alone do not guarantee the success of peer support. There is a need for the commitment of the institutional leadership to peer support.

The commitment of institutional leadership to peer support is crucial, as it influences the participation of educators and the allocation of resources for support activities during curriculum change (McLean *et al.*, 2008). The current study highlighted administrative endorsement as fundamental in influencing the uptake and effectiveness of peer support. However, institutional administrators did not declare the endorsement of the unstructured peer support, resulting in a lack of monitoring and evaluation and

accountability. The lack of administrative endorsement resulted in some individual educators not feeling obliged to engage in the support activities, inasmuch as they were having difficulties with the enactment of the new curriculum. McLean *et al.* (2008) emphasise that institutional commitment influences participation in professional development activities. Other limitations associated with lack of administrative endorsement identified in this study were inadequate tangible assistance in some institutions, lack of structured communication and inability to apply newly gained knowledge. Nevertheless, these findings are contrary to those of Bell and Thomson (2018), who advocate for informal support strategies because they encourage ownership. To circumvent these encumbrances, literature proposes strategies such as having an administrative system and the commitment of institutional leadership (Hall & Zierler, 2015; Sexton *et al.*, 2016), the alignment of departmental needs and resources (Fleming *et al.*, 2015), and monitoring and evaluation (Bryant *et al.*, 2015), among other strategies. Ensuring that these important elements are in place is a measure towards enhancing peer support during curriculum change. Equally important to the success of this strategy are the attributes of both the supported and the peer support providers.

Various individual attributes influenced the uptake of peer support activities among educators. Most notably were that the educators who expressed a positive, willing and self-directed attitude actively sought assistance and support from their colleagues and enjoyed the activities. The attitude of educators towards the new curriculum determined their initiative and consistency in seeking support regarding the curriculum change. These findings support those of Louws, Meirink, Veen, and Driel (2017), who emphasise the importance of autonomy and self-directedness as essential elements that influence individual engagement with professional development activities. Louws *et al.* (2017) further describe other attributes that were not mentioned in the current study such as interest in and importance of the learning activity, desire for increased job satisfaction, self-esteem and quality of life as important elements. Despite these positive attributes that promote peer support, there are other deterring factors to participation, such as the biological age of individuals and power differences (Sexton *et al.*, 2016).

The age of individuals and their position at work featured as impediments in this study, given that the support providers were younger and had fewer years of work experience. Interestingly, however, this finding contradicts earlier studies, which revealed that individuals of different ages had varying support needs, with the older generation seeking adaption to the younger generation to gain mutual respect, with a focus on learning about interacting with students (Louws *et al.*, 2017). Power differences between senior and junior educators have also been noted to be a hindrance, which may compromise the individual's willingness to seek or provide support (Bryant *et al.*, 2015; Sexton *et al.*, 2016). Considering the context of this study, where there are strong traditional patriarchal and hierarchical value systems, power distance may have played a role in the uptake of support. Therefore, peer support providers need to be aware of such critical elements that may influence engagement in the support activities.

Similarly, the attributes of support providers are critical in enhancing peer support during curriculum change. The support providers in the current study were risk-takers, proactive, willing to support others, and striving for excellence in their work. Various studies have highlighted the characteristics of support providers to include willingness, interest, availability, commitment to professional development and service, expertise in the area to provide support, motivation to give back to the community of professionals, being a good communicator and objectivity (Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Garza & Harter, 2016; Louws *et al.*, 2017). Establishing effective peer support among educators requires individuals to have an internal drive, willingness, self-directedness and a positive attitude. Institutions embarking on peer support should be cognisant of the personal attributes as essential in establishing peer support. In this study, the peer supporters were internally driven to support colleagues during the curriculum change and had good communication and conflict management skills, which aided the settling of differences and establishing common ground among educators. The personalities of the supporters, self-directedness, transformative leadership style and drive for excellence featured as the catalysts for involvement in developing other educators in the current study. Furthermore, support providers displayed exemplary behaviour and verbal encouragement. Bandura (1971) describes the element of vicarious observation

as a strong tool in influencing others to learn as they observe the desired behaviour. Portraying and providing exemplar practice by the supporters and leading institutions encouraged colleagues to learn and improve their performance in the delivery of the new curriculum in nursing education institutions. Various platforms can be used for peer support.

The current study found that peers communicated and shared information related to the implementation of a new curriculum on various platforms, which included emails, telephone calls and WhatsApp groups, to support one another when the need arose. Electronic platforms are increasingly becoming alternative channels for providing support among colleagues. Chung and Chen (2018) found that online platforms were a source of support for teachers, where they shared best practices on effective teaching, challenges and emotions. The same researchers concluded that there was an association between social support exchange and teacher self-efficacy. The electronic platforms can be an alternative for seeking and providing support, especially for people who are separated by distance or when it is not feasible to have face-to-face interaction. These electronic platforms could be a viable option for support activities among educators in LMICs, where funds for professional development are limited; however, being mindful of connectivity challenges.

The peer support during curriculum innovation as reported in this study had both positive and negative outcomes. The outcomes of peer support described in this article included improved implementation of the curriculum innovation, enhanced competencies, personal and professional growth, increased networking, teamwork, a community of practice and a scientific publication. These findings concur with previous studies that report on collaboration and scholarly publications as outcomes of support activities (Hall & Zierler, 2015; Fleming *et al.*, 2015; Pololi, Knight & Dunn, 2004). Collaboration and knowledge sharing are key among educators and promote a community of practice during any change process. Patton and Parker (2017) posit that a community of practice among educators in higher education breaks isolation and encourages sharing, which ultimately help build confidence. The variety of interactions

in which the peers engaged during support sessions created avenues for sharing information and experiences and enhanced self-efficacy among nurse educators.

Engagement in the peer support activities also elicited some undesirable reactions experienced, particularly among the supporters. The providers of peer support experienced emotional harassment, discrimination and blaming. Literature confirms the challenges associated with peer support strategies such as difficult personalities, tension between junior leaders and senior educators, and power differences (Fleming *et al.*, 2015; Sexton *et al.*, 2016). However, in the current study, the vindictiveness towards the supporters also served to strengthen the resilience of the support providers and motivated them to engage in professional development as they strived to improve their capacity as support providers.

Conclusion

The curriculum transformation occurred in response to the changing healthcare needs of the country (Lesotho). Despite recommendations to capacitate educators and support them in implementing the curriculum innovation, no formal ongoing support was available. The unstructured support provided through workshops and meetings contributed to the development of skills, confidence and self-efficacy of midwifery educators. Participation in the support activities was driven by the need for more information on the curriculum innovation. However, the unstructured peer support presented challenges, such as lack of administrative endorsement, lack of motivation among educators, limited accountability, limited tangible support and lack of monitoring and evaluation. Therefore, institutions embarking on curriculum innovation need to consider the following key pointers:

- Experienced educators can suddenly experience incapability in implementing new pedagogical approaches demanded in the new curriculum.
- The successful implementation of curriculum change requires the ongoing support of the implementers.
- Peer support can enhance the implementation of a curriculum innovation.

- The success of a peer support strategy during curriculum innovation requires the endorsement of institutional leaders.
- Monitoring and evaluation of the implementation of the curriculum innovation and the peer support strategy can ensure their success.
- Practice guidelines for peer support can enhance the interactions of implementers during curriculum change.

This study was contextual, and the findings cannot be generalised. However, through the dense description, the findings may be transferable to similar contexts. Furthermore, the study explored the experiences of the nurse educators in the midwifery programme and did not include nurses working with students in the clinical area following the introduction of the new curriculum. There is a need for further research to explore the experiences of clinical nurses working with students training under a transformed curriculum and to evaluate the delivered curriculum against the intended curriculum. Guidelines for peer support have been developed and presented in another article (Shawa and Botma, 2020). The guidelines outline how best to provide peer support during curriculum change and may be beneficial for many LMICs undergoing similar curriculum change.

The authors argue that institutions embarking on curriculum transformation need to support the educators to ensure the fidelity of curriculum implementation. Peer support can be an affordable strategy to enhance the implementation of curriculum change in resource-limited countries. Practice guidelines for peer support can enhance the interactions of curriculum implementers during the change process.

Reference list

- Bandura, A. (1971). *Social learning theory*. New York, NY: General Learning Press.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175–1184.
- Bell, A., & Thomson, K. (2018). Supporting peer observation of teaching: Collegiality, conversation and autonomy. *Innovations in Education and Teaching International*, 55(3) 276–284.
- Botma, Y. (2014a). How a monster became a princess: Curriculum development. *South African Journal of Higher Education*, 28(6), 1876–1893.
- Botma, Y. (2014b). Implication of accreditation criteria when transforming a traditional nursing curriculum to a competency-based curriculum. *International Journal of Africa Nursing Science*, 1, 23–28.
- Botma, Y., & Nyoni, C. (2015). What went wrong? A critical reflection on educator midwives' inability to transfer education knowledge. *Journal of Nursing Education and Practice*, 5(6), 1–8.
- Brownie, S.M, Docherty, C., Al-Yateem, N., Gadallah, M.H., & Rossiter, R. (2018). Developing a national competency-based curriculum for technical nurses in Egypt. *Eastern Mediterranean Health Journal*, 24(8), 711–721.
- Bryant, A.L., Brody, A., Perez, A., Shillam, C., Edelman, L.S., Bond, S.M., ...Siegel, E. (2015). Development and implementation of peer mentoring program for early career gerontological faculty. *Journal of Nursing Scholarship*, 47(3), 258–266.
- Burgess, T., & Cilliers, F. (2017). A framework for ethical educational research: principles and application. Retrieved from www.healthedu.uct.ac.za/framework-ethical-educational-research-principles-and-application. [Date accessed 16 June, 2017].
- Carpenter, J.P., & Linton, J.N. (2016). Educamp unconferences: Educators' perspectives on an untraditional professional learning experience. *Teaching and Teacher Education*, 57(2016), 97–108.
- Chung, T.Y., & Chen, Y.L. (2018). Exchange social support on online teacher groups: Relation to teach self-efficacy. *Telematics and Informatics*, 35(5), 1542–1552.

- Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.)*. Los Angeles, CA: Sage.
- Dole, S., Bloom, L., & Kowalske, K. (2016). Transforming pedagogy: Changing perspectives from teacher-centered to learner-centered. *Interdisciplinary Journal of Problem-Based Learning*, 10(1). Available at: <https://doi.org/10.7771/1541-5015.1538>
- Ferguson, P.C., Caverzagie, K.J., Nousiainen, M., & Snell, L. (2017). Changing the culture of medical training: An important step toward the implementation of competency-based medical education. *Medical Teacher*, 39(6), 599–602.
- Fleming, G.M., Simmons, J.H., Xu, M., Gessel, S.B., Brown, R.F., Cutrer, W.B., ... Cooper, W.O. (2015). A facilitated peer mentoring program for junior faculty to promote professional development and peer networking. *Academic Medicine*, 90(6), 819–826.
- Frenk, J., Chen, L., Bhutta, Z.A., Cohen, J., Crisp, N., Evans, T., ... Zurayk, H. (2010). Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *The Lancet*, 376(9756), 1923–1958.
- Furimsky, I., Arts, I., & Lampson, S. (2014). Developing a successful peer-to-peer mentoring program. *Applied Clinical Trials*, 22(12), 27–30.
- Garza, R., & Harter, R.A. (2016). Perspectives from pre-service mathematics and science teachers in urban residency program: Characteristics of effective mentor. *Education and Urban Society*, 48(4), 403–420.
- Grove, S.K., Gray, J.R., & Sutherland, S. (2016). *Burns and Grove's the practice of nursing research: Appraisal, synthesis, and generation of evidence (8th ed.)*. Elsevier Saunders, Philadelphia.
- Gruba, P., Moffat, A., Sondergaard, H., & Zobel, J. (2004). *What drives curriculum change?* Paper presented at the Australasian Computing Education Conference, Dunedin.
- Hall, L.W., & Zierler, B.K. (2015). Interprofessional education and practice guide no. 1: Developing faculty to effectively facilitate interprofessional education. *Journal of Interprofessional Care*, 29(1), 3–7.

- Horton-Deutsch, S., & Sherwood, G. (2017). Turning vision into action: Reflection to develop professional practice. In S. Horton-Deutsch & G. Sherwood (Eds.), *Reflective practice: Transforming education and improving outcomes* (pp. 1–26). Indianapolis, IN: Sigma Theta Tau International.
- Iwasiw, C., & Goldenberg, D. (2015). *Curriculum development in nursing education*. Burlington: Jones & Bartlett Learning.
- Louws, M.L., Meirink, J.A., van Veen, K., & van Driel, J. H. (2017). Teachers' self-directed learning and teaching experience: What, how, and why teachers want to learn. *Teaching and Teacher Education*, 66(2017), 171–183.
- Maier, C.B., & Aiken, L.H. (2016). Task shifting from physicians to nurses in primary care in 39 countries: A cross-country comparative study. *The European Journal of Public Health*, 26(6), 927–934.
- McLean, M., Cilliers, F., & van Wyk, J.M. (2008). Faculty development: Yesterday, today and tomorrow. *Medical Teacher*, 2008(30), 555–584.
- Ministry of Health. (2013). *Lesotho Health Sector Strategic Plan 2012/13–2016/17*. Maseru: Author.
- Mortel, T.F., & Bird, J.L. (2010). Continuous curriculum review in Bachelor of Nursing Program: Preventing curriculum drift and improving quality. *Journal of Nursing Education*, 49(10), 592–594.
- Nyoni, C., & Botma, Y. (2018). Sustaining a newly implemented competence-based curriculum midwifery programme in Lesotho: Emerging issues. *Midwifery*, 59, 115–117.
- Nyoni, C., & Botma, Y. (2019). Implementing a competency-based midwifery programme in Lesotho: A gap analysis. *Nurse Education in Practice*, 34, 72–78.
- Patton, K., & Parker, M. (2017). Teacher education communities of practice: More than a culture of collaboration. *Teaching and Teacher Education*, 67, 351–360.
- Pololi, L., Knight, S., & Dunn, K. (2004). Facilitating scholarly writing in academic medicine: Lessons learned from collaborative peer mentoring program. *Journal of General Internal Medicine*, 19(1), 64–68.

- Sexton, J.M., Lord, J.A., Brenner, C.J., Curry, C.E., Stanley, I.S., & Cowley, D.S. (2016). Peer mentoring process for psychiatry curriculum revision: Lessons learned from the "Mod Squad". *Academic Psychiatry, 40*(3), 436–440.
- Shawa, M., & Botma, Y. (2020). Practice guidelines for peer support among educators during a curriculum innovation. *African Journal of Health Professions Education. (Accepted for publication, August 2020).*

CHAPTER 4

Practice guidelines to enhance peer support among educators during a curriculum innovation

4.1 INTRODUCTION

This chapter presents the practice guidelines for peer support for educators during a curriculum innovation in nursing education. The guidelines were developed through the triangulation of the evidence from two studies and validated by a panel of external reviewers.

4.2 MANUSCRIPT DETAILS

Title:	Practice guidelines for peer support among educators during a curriculum innovation
Authors:	Shawa, M. and Botma, Y.
Target journal:	<i>African Journal of Health Professions Education</i>
Journal details:	Double-blinded peer-reviewed Listed in accredited list of journals by the Department of Higher Education and Training, South Africa Impact factor – Not documented
Status:	Under review

4.2.1 Journal information

The African Journal of Health Professions Education (AJHPE) is a journal for health professions educators. It carries research articles, short scientific reports, letters, editorials, education practice, personal opinion and other topics related to education of health care professionals within African continent (*African Journal of Health Professions Education*, 2020: online).

4.2.2 Contribution record

The researcher and the research promoter developed the guidelines for peer support. The researcher further validated the guidelines through two cycles of a Delphi survey using external reviewers and incorporated the inputs to consolidate the final guidelines. The research promoter critically read the finalised guidelines. The researcher drafted the manuscript under the guidance of the research promoter, who also critically reviewed the manuscript.

4.2.3 Associated addenda

Addendum K:	AGREE II Tool
Addendum L:	Information brochure for external reviewers
Addendum M:	Health Sciences Research Ethics Committee (UFS)
Addendum N:	Lesotho Ministry of Health Research and Ethics Committee
Addendum R:	Author guidelines for African Journal of Health Professions Education

4.3 MANUSCRIPT 3

PRACTICE GUIDELINES FOR PEER SUPPORT AMONG EDUCATORS DURING A CURRICULUM INNOVATION

ABSTRACT

Background: Curriculum transformation in nursing education addresses changing healthcare needs of communities. However, without ongoing support of educators, the fidelity of curriculum enactment is compromised. Nursing education institutions in Lesotho implemented a competency-based curriculum that required novel pedagogical approaches. New facilitation approaches can challenge implementers, as was observed during the implementation of the new curriculum for the midwifery programme in Lesotho. Without ongoing professional development and support, the educators resorted to supporting one another. However, the sustainability and effectiveness of the unstructured peer support was compromised, hence the need to develop guidelines to enhance peer support among educators during curriculum innovation.

Objective: To develop and validate guidelines to enhance peer support among educators during curriculum innovation.

Methods: Primarily a qualitative research design with multiple data collection methods was conducted guided by the World Health Organization *Handbook for Guideline Development* as the framework. Three interrelated phases inclusive of an integrative review, an exploratory qualitative study, and guideline development and validation were conducted. External reviewers validated the developed guidelines through a Delphi survey.

Results: Practice guidelines for peer support among nurse educators during a curriculum innovation were developed and validated. Five priority areas and seven recommendations are addressed in the guidelines.

Conclusion: Practice guidelines can enhance the peer support interactions during implementation of a curriculum innovation. Peer support is an affordable strategy that can enhance implementation of curriculum innovation in resource-limited settings. Institutional leadership needs to endorse the support strategy and the practice guideline.

Keywords: curriculum innovation; guideline; peer support; implementation

Background

Curriculum transformation in higher education institutions contributes to enhancing the quality of graduates and prepares them to address emerging socioeconomic and health challenges in different communities.^[1,2] The successful execution of a transformed curriculum depends on the capability of the faculty as the drivers of the curriculum implementation.^[3] However, transforming the curriculum from one learning theory to another that is underpinned by different principles and pedagogical approaches can challenge the educators' existing set of skills. Ill-equipped educators may struggle to implement the curriculum as intended, thereby necessitating support strategies to enhance their abilities to appropriately enact the transformed curriculum. Therefore, educational institutions embarking on curriculum transformation need to proactively formulate clear strategies for relevant ongoing faculty development to support the change process.^[4] However, planning and undertaking formal professional development and capacity-building interventions in low- and middle-income countries (LMICs) may be deterred by limited resources. Therefore, LMICs embarking on curriculum transformation may benefit from affordable support strategies such as peer support.

Evidence shows that peer support can sustain and improve the outcomes of an innovation.^[5-7] Peers can support one another through encouragement and providing emotional support and information to improve knowledge and skills. Such supportive activities and exemplar behaviour may increase peers' self-efficacy and enhance the implementation of the change process. Bandura highlights vicarious experience and verbal persuasion as some of the means through which peers can support one another.^[8] However, the absence of a structured approach to the initiative, such as guidelines, peer support activities could be compromised. The researcher

argues that peer support guidelines can give direction and enhance the interactions of peers during the change process such as curriculum innovation. This article describes the guidelines for peer support developed for educators engaged in curriculum change in nursing education in Lesotho, a low-income country in southern Africa.

The context of the study reported in this article is the implementation of a curriculum innovation in the midwifery programme in the kingdom of Lesotho. In 2014, the nursing education institutions in Lesotho implemented the initial competency-based curriculum (CBC) in the one-year midwifery programme. The transformed curriculum required a new set of skills among the nurse educators, who were at different levels of readiness. However, the institutions had no deliberate plan for ongoing support or professional development. Naturally, the early adopters of the new curriculum provided unstructured support to their peers. Although the unstructured peer support were successful, there were some limitations, such as lack of administrative commitment, lack of accountability and lack of monitoring and evaluation^[9]

Methods

The practice guidelines were developed primarily through a qualitative research design using multiple data collection methods guided by the World Health Organization (WHO) *Handbook for Guideline Development* as a framework.^[10,11] Three separate interrelated studies were undertaken in different phases addressing specific objectives as illustrated in figure 1. The initial study synthesised existing peer support strategies that enhanced the implementation of an innovation or new programme among professionals between 2000 and 2016 through an integrative review. The details and findings of this phase have been reported elsewhere.^[11]

The second study described the experiences of midwife educators regarding peer support during the implementation of a new curriculum in Lesotho. Data were collected from 12 midwife educators through semi-structured interviews, which were recorded, transcribed verbatim and analysed inductively. Data saturation was reached with the 12 participants. The details and findings of this phase are reported elsewhere.^[12]

The third and final phase involved triangulation of evidence from the two preceding phases, followed by development and validation of guidelines for peer support. In line with the WHO *Handbook for Guideline Development*,^[11] the first author established a guidelines development task team of three consisting of a methodology expert and curriculum specialist, a senior lecturer who is an experienced mentor engaged in professional development, and the first author. Based on the triangulated evidence from the phase one and two, the guidelines development task team identified, discussed and agreed on priority areas and recommendations through consensus. Secret voting was used to reach a decision whenever there was a disagreement. Five priority areas and seven recommendations were formulated and evaluated against the quality assessment framework described in the WHO *Handbook for Guideline Development*.^[11] Validation of the guidelines was conducted by a panel of external reviewers through a Delphi survey. Detailed description of the development process and the guidelines are presented in the supplementary material.

Rigour of the guideline development process

The validation of the draft guidelines by an expert panel contributed to the rigour of the development of the guidelines. The guidelines development task team purposefully identified 16 experts in nursing education and mentorship from Africa and Asia based on their qualifications, expertise and experience. Nine reviewers accepted the invitation to participate in the Delphi survey. The expert panel used the 23-item Appraisal of Guideline for Research and Evaluation (AGREE II) tool to evaluate the guidelines through a two-cycle Delphi survey.^[13,14] The AGREE II tool addresses six domains, namely:

- Scope and purpose
- Stakeholder involvement
- Rigour of development
- Clarity and presentation
- Applicability
- Editorial independence.

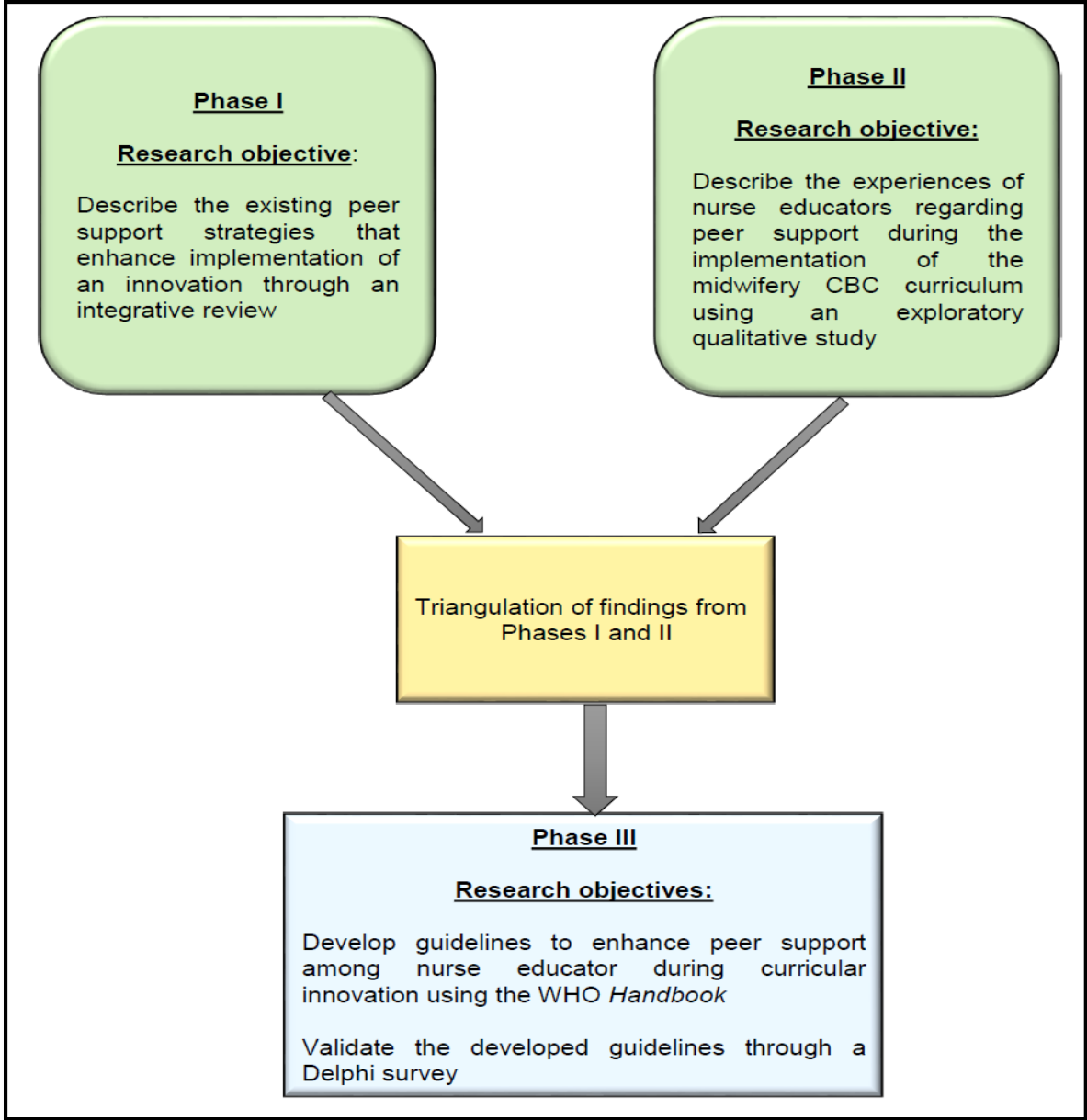


FIGURE 1: *Methodological process for guideline development (Source: Author-generated)*

The response rate during round one of the Delphi survey was 89% and 75% during round two. Hasson and colleagues citing Sumsion, suggest that a response rate of 70% is rigorous for a Delphi survey.^[14] The responses from the expert reviewers were analysed using the ratios and percentages of agreement for each of the items on the AGREE II tool. The task team made amendments and consolidated the recommendations based on the analyses of both rounds of the Delphi survey. Figure 2 shows the summary of the guideline validation process.

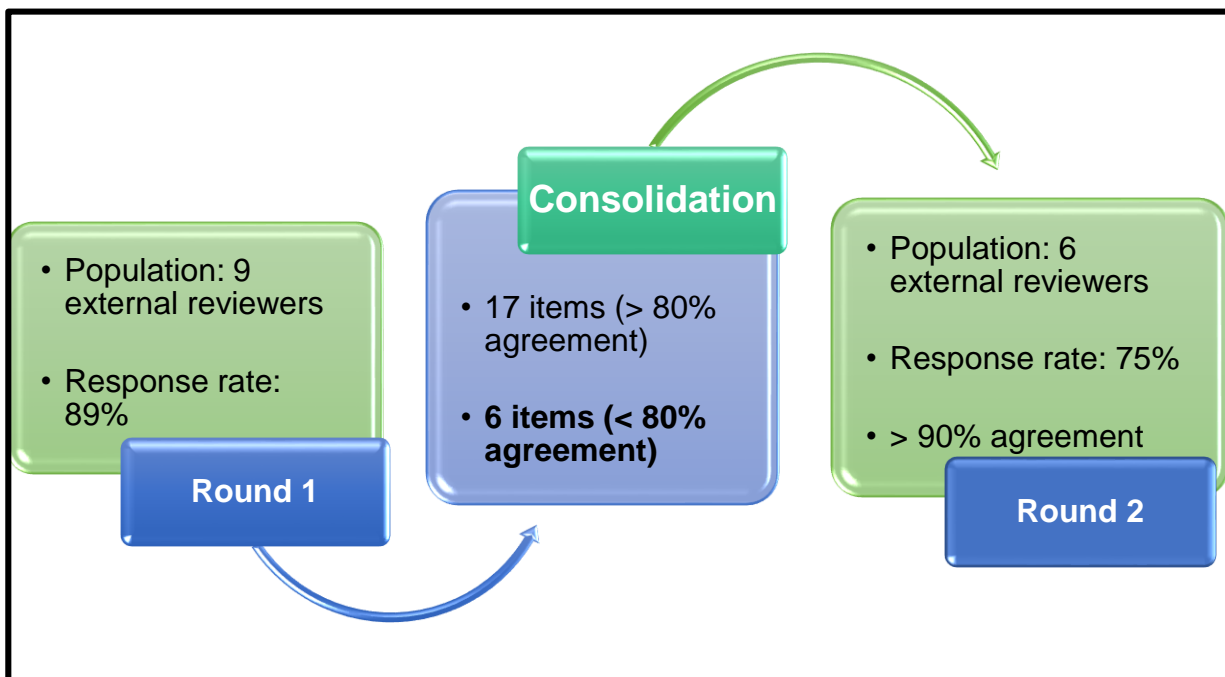


FIGURE 2: Summary of the guideline validation process (Source: Author-generated)

Ethical consideration for the development of the guidelines

Ethics approval was obtained from the Health Sciences Research Ethics Committee at the University of the Free State (HSREC 28/2017) and the Lesotho Ministry of Health Research and Ethics Committee (ID 91-2017). All participants in the qualitative study and the Delphi survey received detailed information and participated voluntarily. The external reviewers remained anonymous to one another throughout the guidelines validation process.^[14]

Results

Five priority areas and seven recommendations were developed for the peer support guidelines. The priority areas are as follows:

Priority area 1: Peer supporters

The focus of this area is the qualifications, capabilities and attributes of the peer support providers. The triangulation of the findings from the two preceding phases suggested that peer supporters should be in possession of a higher qualification such as a Master's or doctoral degree in nursing/health professions education. However, it is unlikely that many educators in LMICs have the necessary higher qualifications. Therefore, a formal qualification in nursing/health professions education is acceptable for a peer supporter. Attributes such as experience, motivation and commitment to peer support are valued and readily accepted among peers.

Priority area 2: Peer support strategies

This priority area focuses on the strategies for providing support and the characteristics of an effective support strategy. Evidence shows that relevant and tailor-made strategies and platforms have positive outcomes and are acceptable and valued by peers receiving support. Strategies include group support approaches and paired techniques. Acceptability and feasibility are high when there is institutional commitment to the support strategy.

Priority area 3: Content/support needs

Tailor-made support content is valued and acceptable, and has a positive effect on the peers. Assessment to determine the content or support needs should be done in collaboration with those who need support. The content should be aligned to the new curriculum implementation needs of individuals.

Priority area 4: Outcomes of peer support

The goals and objectives of peer support strategy should be directed towards sustaining the curriculum innovation, improved curriculum implementation, promotion of professional and personal growth. The commitment of institutional administrators enhances accountability and promotes the success of the peer support and ultimately sustains the curriculum innovation.

Priority area 5: Monitoring and Evaluation of the peer support strategy

Monitoring and Evaluation is an essential component of successful peer support, and enhances and sustains the peer support strategies. Peer support strategy should have a monitoring and evaluation mechanism that provides opportunity for feedback and enhance effectiveness of the strategy.

Table 1 presents a summary of the practice guideline recommendations.

TABLE 1: Summary of practice guideline recommendations on peer support

Priority area	Recommendations
A1: Peer supporters	<p>A1.1: Peer supporters should be in possession of higher qualifications, such as Master’s or doctoral degree in nursing/health professions education and expertise in a specific discipline. In the absence of such high qualifications, a formal qualification in nursing/health professions education is acceptable for a peer supporter. The peer supporter should be knowledgeable about the principles guiding the curriculum innovation, experienced in guiding/leading colleagues, and willing to facilitate the professional growth of the peers. Attributes such as experience, motivation and commitment to peer support are valued and readily accepted among peers.</p> <p>Level of evidence used: Moderate</p>
B1: Peer support strategies	<p>B1.1: Supporters should consider the needs of the peers related to the implementation of the curriculum innovation, such as developing appropriate facilitation materials and using relevant pedagogical and assessment methods. The supporters should select the most appropriate strategies and platforms to provide support.</p> <p>Level of evidence used: Moderate</p> <p>B1.2: The institutional leadership should ensure that the support strategy has clear goals and objectives, explicit systems and mechanisms to enhance and sustain the effective implementation of the strategy</p>

Priority area	Recommendations
	<p>during curriculum innovation.</p> <p>Level of evidence used: Moderate</p>
C1: Content/support needs	<p>C1.1: The support providers should collaborate with the peers/educators to assess and identify support needs to enable the development of relevant and applicable content that is aligned with the implementation of the new curriculum.</p> <p>Level of evidence used: Moderate</p>
D1: Outcomes of peer support	<p>D1.1: The goals and objectives of the peer support activities should be aligned with the identified needs and directed towards sustaining the curriculum innovation, capacity building, professional growth, community of practice and scholarship.</p> <p>Level of evidence used: Moderate</p> <p>D1.2: Institutions should recognise support strategies as a valued service and commit by allocating resources to meet the departmental/support needs to enhance peer support during a curriculum innovation.</p> <p>Level of evidence used: Moderate</p>
E1: Monitoring & evaluation of the peer support strategy	<p>E1.1: Institutional leadership should ensure that there is a mechanism for monitoring and evaluation of the peer support strategies used during the curriculum innovation.</p> <p>Level of evidence used: Moderate</p>

Source: Author-generated

Discussion

Practice guidelines can enhance peer support interactions among implementers of a transformed curriculum, particularly in resource-limited institutions that cannot afford ongoing professional development. The lack of ongoing professional development and support compromises the fidelity of the implementation of the transformed curriculum and creates a platform for a curriculum drift.^[15] Botma reiterates that educators who are not familiar with the principles underpinning the new curriculum would facilitate curriculum drift.^[16,17] Therefore, without ongoing support for the educators during the curriculum transformation, curriculum drift is imminent. These practice guidelines are contextualised and recommend strategies and processes essential for effective peer support among educators engaged in the enactment of curriculum innovation.

Various factors, including qualifications, experience and commitment of support providers influence the effectiveness of peer support strategies.^[5,6,18] However, in LMICs such as Lesotho, it may not be feasible for most nursing education institutions to have educators in possession of qualifications higher than the basic degree. In the absence of highly qualified support providers, institutions can utilise knowledgeable and experienced individuals such as the early adopters.^[17] The institutional leaders also need to develop deliberate professional development plans directed towards building capacity of the potential supporters.^[17,19] The peer support providers should also possess effective interpersonal and communication skills to facilitate positive and collegial environment and interactions during support activities.^[5,20,21]

The content for the peer support strategy should be well-planned and relevant to the curriculum implementation needs of peers. Klinge agrees with Pololi and colleagues that learning occurs naturally when adult students perceive it as relevant and contribute to improving their self-efficacy.^[22] Ensuring relevant content requires collaborative assessment and identification of the support needs.^[5,23] The designed content should be administered using appropriate strategies such as workshops, presentations, meetings, supportive peer reviews and hands-on methods. Role modelling and encouragement further enhances the self-efficacy of colleagues during the change process.^[8] The participants may value and prefer engaging and hands-on strategies that are in line with the challenges they are facing. Knowles' work cited by Klinge alludes to the principles of adult learning and emphasises the importance of designing needs-driven support strategies that promote active learning.^[22] However, peer support providers in LMICs need to be cognizant of the limitations associated with some strategies and platforms, such as connectivity, systems failure and the technological abilities of individuals^[20] which might influence the effectiveness and success of the support strategy.

Outcomes of an effective peer support strategy include sustained curriculum innovation, personal and professional growth and community of practice.^[6,7] Peer support approaches that promote self-directedness and critical thinking ought to be encouraged. Besides these positive outcomes, unintended effects such as negative emotional reactions might also be experienced and compromise the effectiveness of the support.^[5,18] Therefore, establishment of a committee instead of one person working on peer support interventions, may create a buffer for the potential

emotional strains that individuals may experience.^[6,18] Some factors that can compromise the effectiveness of a peer support strategy include disconnections in relationships, power differences, unclear mentoring roles and lack of monitoring and evaluation.^[5,18,21] However, critical to the attainment of positive outcomes is the commitment of institutional leadership to the peer support strategy.

The guidelines allude to the commitment of the institutional leadership, which is essential in creating an environment conducive to successful peer support strategies.^[4] Such commitment is key to the success of peer support and influences the allocation of resources, accountability and monitoring and evaluation of the support strategy.^[6,18,21] Both the integrative review and the qualitative study highlighted the importance of administrative endorsement.^[9,12] Although monitoring and evaluation is essential for any effective intervention, these quality assurance mechanisms are sometimes disregarded leading to delayed identification of challenges and weakness and subsequently no correctional measures undertaken.^[7,24] When consistently performed and recommendations thereof applied, monitoring and evaluation can be the mainstay for the support strategy and sustaining the implementation of the curriculum innovation.^[7,18]

These peer support guidelines can be adapted to different contexts and used among educators in institutions undergoing curriculum transformation in LMICs. Peer support is one of the affordable approaches that can benefit educators in resources-limited institutions.

Conclusion

The purpose of this article was to present the guidelines developed for peer support among educators during a curriculum transformation in a low-income country. Educators need ongoing support such as peer support to enhance the implementation of curriculum innovation. However, unstructured peer support can compromise the effectiveness of the strategy. The recommendations developed herein highlight some of the critical elements that should be considered during peer support engagements among educators. Poor or inadequate support can lead to inappropriate enactment of the curriculum, with adverse outcomes for the students and the communities served by the graduates. The authors conclude that practice guidelines can

enhance the peer support interactions during implementation of a curriculum innovation in resource-scarce countries. This article presents such guidelines for peer support. Institutional leadership needs to endorse the support strategy and the practice guidelines.

Further research is recommended to evaluate the effectiveness of these guidelines in the different institutions that may use them. There is also a need to evaluate the efficacy of the implementation of curriculum reforms funded by NEPI in African countries.

Declaration of conflicts of Interest

None of the members of the guideline development group had any personal, family or financial interest. Although the principal investigator received a tuition bursary from the University of the Free State, the development of these guidelines was self-funded.

References

1. Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T, *et al.* Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *Lancet.* 2010;376(9756):1923–58.
2. Niehaus E, Williams L. Faculty transformation in curriculum transformation: The role of faculty development in campus internationalization. *Innov High Educ.* 2016;
3. Snyman S. Academy of Science of South Africa (2018) Reconceptualising of health professions education in South Africa. Available from: DOI <http://dx.doi.org/10.17159/assaf.2018/0021>.
4. Galea S, Fried LP, Walker JR, Rudenstine S, Glover JW, Begg MD. Developing the new Columbia core curriculum: A case study in managing radical curriculum change. *Am J Public Health.* 2015;105:S17–21.
5. Bryant AL, Brody A, Perez A, Shillam C, Edelman LS, Bond SM, *et al.* Development and implementation of a peer mentoring program for early career gerontological faculty. *al Nurs Scholarsh.* 2015;47(3):258–66.

6. Fleming GM, Simmons JH, Xu M, Gesell SB, Brown RF, Cutrer WB, *et al.* A facilitated peer mentoring program for junior faculty to promote professional development and peer networking. *Acad Med.* 2015;90(6):819–26.
7. Magers TL. An EBP mentor and unit-based EBP team: A strategy for successful implementation of a practice change to reduce catheter-associated urinary tract infections. *Worldviews Evidence-Based Nurs.* 2014;11(5):341–3.
8. Bandura A. Human Agency in Social Cognitive Theory. *Am Psychol.* 1989;44(9):1175–84.
9. Shawa M, Botma Y. Peer support strategies that enhance implementation of an innovation among professionals: An integrative review [Doctoral dissertation]. University of Free State, Bloemfontein, South Africa; 2020.
10. Harrell, MC; Bradley M. Data collection methods: Semi structured interviews and focus groups. Santa Monica, CA: RAND Corporation.
11. World Health Organization. WHO Handbook for Guideline Development. 2nd ed. Geneva: WHO Press; 2014. 1–179 p.
12. Shawa M, Botma Y. Peer support during implementation of a new curriculum: Experiences of nurse educators [Doctoral dissertation]. University of Free State, Bloemfontein, South Africa; 2020.
13. AGREE Next Steps Consortium. The Agree II Instrument [Electronic version] [Internet]. 2017. [Cited 2018 Nov 18]. Available from: <http://www.agreetrust.org>
14. Hasson F, Mckenna HP. Research guidelines for the Delphi survey technique. *J Adv Nurs.* 2000;32(4):1008–1015.
15. Burgess T, Cilliers F. A framework for ethical educational research: Principles and application [Internet]. 2017 [cited 2017 Jun 16]. Available from: www.healthedu.uct.ac.za/framework
16. Botma Y. Implications of accreditation criteria when transforming a traditional nursing curriculum to a competency-based curriculum. *Int J Africa Nurs Sci.* 2014;1(12):23–8. Available from: <http://dx.doi.org/10.1016/j.ijans.2014.06.002>
17. Botma Y. How a monster became a princess: Curriculum development. *South African J High Educ.* 2014;28(6):1876–93.

18. Sexton JM, Lord JA, Brenner CJ, Curry CE, Shyn SI, Cowley DS. Peer mentoring process for psychiatry curriculum revision: Lessons learned from the “Mod Squad.” *Acad Psychiatry*. 2016;40(3):436–40. Available from: <http://dx.doi.org/10.1007/s40596-014-0274-9>
19. Brownie SM, Docherty C, Al-Yateem N, Gadallah MH, Rossiter R. Developing a national competency-based curriculum for technical nurses in Egypt. *East Mediterr Heal J*. 2018;24(9):922–32.
20. Bang E. Hybrid-mentoring programs for beginning elementary science teachers. *Int J Educ Math Sci Technol*. 2013;1(1):1–15.
21. Bennett S, Paina L, Ssengooba F, Waswa D, M’Imunya JM. Mentorship in African health research training programs: An exploratory study of Fogarty International Center Programs in Kenya and Uganda. *Educ Heal Chang Learn Pract*. 2013;26(3):183–7.
22. Klinge CM. A Conceptual framework for mentoring in a learning organization. *Adult Learn*. 2015;26(4):160–6.
23. Bennett S, Santy J. A window on our teaching practice: Enhancing individual online teaching quality through online peer observation and support. A UK case study. *Nurse Educ Pract* [Internet]. 2009;9(6):403–6. Available from: <http://dx.doi.org/10.1016/j.nepr.2009.01.019>
24. Chukwu CL, Mezieobi DI, Uguwanyi BE, Okpoebo CC. Monitoring and evaluation on effective delivery of social studies for improved academic performance. *Rev Eur Stud*. 2019;11(1):175.

CHAPTER 5

Practice guidelines for peer support

5.1 INTRODUCTION

The previous chapter discussed the development of the practice guidelines for peer support. These practice guidelines refers to a set of formulated evidence-based recommendations that describe peer support interventions and processes to assist nurse educators during a curriculum innovation. The current chapter presents the practice guidelines outlining the purpose of the guidelines, the target audience and stakeholder involvement, the scope of the guidelines, formulated guideline recommendations for peer support, quality of evidence used in the recommendations, monitoring and evaluation of guidelines and updating guidelines. For each recommendation, a summary of supporting evidence and considerations thereof are also described. The implications for implementing these guidelines have also been outlined. The guidelines development was nested in the WHO (2014) *Handbook for Guideline Development*.

5.2 PURPOSE OF THE GUIDELINES

The practice guidelines were produced in relation to a curriculum change in nursing education institutions in Lesotho, which transformed curriculum from a teacher-centred to a student-centred approach. This transformation implies a paradigm shift from behaviourism to constructivism with associated pedagogical changes. The curriculum transformation had posed a challenge for implementers, necessitating peer support.

The overall objective of these guidelines was to provide recommendations that can inform peer support interactions among nurse educators during the implementation of a curriculum innovation. These systematically developed recommendations can provide direction on peer support interventions and decision making that might benefit the educators, peer support providers, and institutional administrators, and contribute to appropriate enactment of the new curriculum and ultimately improve the quality of graduates. The practice guidelines also intend to give structure to the peer support strategy and enhance its sustainability, particularly when they are endorsed by the institutional leadership.

5.3 TARGET AUDIENCE AND STAKEHOLDER INVOLVEMENT

The recommendations in these practice guidelines are proposed to inform peer support interactions among educators implementing an educational innovation. These practice guidelines are based on the evidence from the integrative review and the qualitative study conducted among the educators who had implemented the curriculum innovation in the midwifery programme in Lesotho. The results from the qualitative study were triangulated with the evidence from an integrative review and used to formulate the priority areas and recommendations.

The developed guidelines are relevant to all educators who are receiving and providing support during the implementation of a curriculum change or an educational intervention in higher education institutions in LMICs. The practice guidelines are also essential for institutional administrators, managers and all curriculum innovators. These guidelines are intended to enhance peer support strategies among educators during the implementation of an innovation and address various aspects of such support. The guidelines should be used in tandem with the curriculum/innovation implementation plan and the institution's professional development strategies and policies.

5.4 SCOPE OF THE GUIDELINES

These guidelines outline critical elements related to peer support strategies among educators during the implementation of a curriculum innovation. Implementing a curriculum innovation presents challenges among educators when their existing skills set are redundant. Educators facing such challenges may not enact the new curriculum correctly and could benefit from peer support. The target audience for these includes educators implementing a curriculum innovation in higher education, institutional administrators and managers. The priority areas addressed in these guidelines include:

- peer supporters,
- peer support strategies,
- content/support needs,
- outcomes of peer support and
- monitoring and evaluation of the peer support strategy.

The specific recommendations and the supporting evidence for each priority area are described in the following sections.

5.5 FORMULATED RECOMMENDATIONS FOR PEER SUPPORT

The recommendations were formulated by a small group of guideline developers using the WHO (2014) *Handbook for Guideline Development* as a framework. The researcher established a task team to develop the peer support guidelines, as proposed in the WHO (2014) *Handbook for Guideline Development*. The task team consisted of a methodology expert and curriculum specialist, a senior lecturer who is an experienced mentor engaged in professional development, and the researcher. The guideline developers identified and discussed priority areas, which were informed by triangulated evidence from the integrative review and the qualitative study on educators. The themes from the integrative review and qualitative study were the basis for formulating the five priority areas. The supporting evidence for the themes was used to craft the recommendations. The formulated recommendations were discussed among the

members of the task team and consensus was reached before finalising them. Seven recommendations were formulated based on the triangulated evidence from the integrative review and the qualitative study. Each recommendation formulated was evaluated against the domains described in the WHO *Handbook for Guideline Development* (2014) and the triangulated evidence. The domains considered included:

- Effects – describes the perceived benefits and harms associated with the intervention and their importance to the stakeholders
- Values and preference – describes the relative importance assigned to outcomes associated with the intervention of the stakeholders
- Resource implications – describes the anticipated relevant resources that may be required to implement the intervention in the guideline
- Equity – describes how the intervention might increase fairness and justice during the implementation of an innovation and reduce inequalities among stakeholders
- Acceptability – describes the likelihood that the stakeholders will embrace and apply the recommendations/intervention
- Feasibility – represents the practicality of using the recommendations among the stakeholders and is influenced by available resources such as financial, technological, infrastructure and human resources.

Table 5.1 presents a summary of the formulated practice guideline recommendations and priority areas included in the peer support guidelines.

TABLE 5.1: Summary of practice guideline recommendations on peer support

Priority area	Recommendations
A1: Peer supporters	<p>A1.1: Peer supporters should be in possession of higher qualifications, such as master’s or doctoral degree in nursing/health professions education and expertise in a specific discipline. In the absence of such high qualifications, a formal qualification in nursing/health professions education is acceptable for a peer supporter. The peer supporter should be knowledgeable about the principles guiding the curriculum innovation, experienced in guiding/leading colleagues, and willing to facilitate the professional growth of the peers. Attributes such as experience, motivation and commitment to peer support are valued and readily accepted among peers.</p> <p>Level of evidence used: Moderate</p>
B1: Peer support strategies	<p>B1.1: Supporters should consider the needs of the peers related to the implementation of the curriculum innovation, such as developing appropriate facilitation materials and using relevant pedagogical and assessment methods. The supporters should select the most appropriate strategies and platforms to provide support.</p> <p>Level of evidence used: Moderate</p> <hr/> <p>B1.2: The institutional leadership should ensure that the support strategy has clear goals and objectives, explicit systems and mechanisms to enhance and sustain the effective implementation of the strategy during curriculum innovation.</p> <p>Level of evidence used: Moderate</p>
C 1: Content/support needs	<p>C1.1: The support providers should collaborate with the peers/educators to assess and identify support needs to enable the development of relevant and applicable content that is aligned with the implementation of the new curriculum.</p> <p>Level of evidence used: Moderate</p>

Priority area	Recommendations
D1: Outcomes of peer support	<p>D1.1: The goals and objectives of the peer support activities should be aligned with the identified needs and directed towards sustaining the curriculum innovation, capacity building, professional growth, community of practice and scholarship.</p> <p>Level of evidence used: Moderate</p>
	<p>D1.2: Institutions should recognise support strategies as a valued service and commit by allocating resources to meet the departmental/support needs to enhance peer support during a curriculum innovation.</p> <p>Level of evidence used: Moderate</p>
E1: Monitoring and evaluation of the peer support strategy	<p>E1.1: Institutional leadership should ensure that there is a mechanism for monitoring and evaluation of the peer support strategies used during the curriculum innovation.</p> <p>Level of evidence used: Moderate</p>

Source: Author-generated

5.5.1 Recommendations and evidence

This section describes the recommendations per priority area and the evidence considered.

A1: Peer supporters

One recommendation was developed for this priority area which focused on the characteristics of the peer supporters.

A1.1: Characteristics, qualifications and motivation of peer supporters

Recommendation A1.1: Peer supporters should be in possession of a higher qualification in education, be knowledgeable about the principles guiding the curriculum innovation, experienced in mentoring, motivated and committed to provide support and facilitate the professional growth of the peers.

Remarks:

- The evidence from the integrative review indicated that support providers possessed high qualifications in the relevant disciplines, which included being PhD holders, professional medical editors and postgraduate alumni, and/or occupied leadership positions such as associate professors and programme directors (Bang, 2013; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Pololi *et al.*, 2004; Provident, 2006). Most of the evidence in the integrative review was from high-income countries. The guideline developers noted that in LMICs few educators might have master's or PhD degrees; therefore, emphasis should be on the supporters' experience and knowledge of the curriculum innovation. There may be a need for professional development to build the capacity of the supporters.
- Evidence from the qualitative data suggested that stakeholders valued the knowledge and willingness of supporters during support activities. The evidence further indicated that supporters were internally driven to support their colleagues. The guideline developers noted that in the absence of a qualified or willing supporter, the institution may consider collaborating with other institutions that have experienced supporters and source peer support.

- Evidence from the integrative review indicated that supporters should have experience in evidence-based practice and change processes and interest in areas in which mentees need to be mentored (Bang, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006).
- The integrative review showed that supporter commitment and interest in mentoring are essential for an effective support strategy (Bennett & Santy, 2009; Bryant *et al.*, 2015; Provident, 2006; Sexton *et al.*, 2016). Similarly, qualitative evidence from the stakeholders suggested that knowledge, experience and willingness of the peer supporter are essential in a peer support strategy.
- Guideline developers noted that supporter qualification, experience and commitment to professional development were essential elements for a successful peer support strategy.
- The evidence from the integrative review was of levels III and V of good quality, as classified in the JHNEBP Research Evidence Rating Scale (Addendum D). No randomised controlled trials or systematic reviews on peer support during an innovation were found during the integrative review.

Note: *The remark on the quality of the evidence used (levels III and V) applies to all the recommendations and will not be repeated in the subsequent recommendations.*

Summary of evidence and considerations

Effects: The integrative review evidence described the outcomes of support strategies for the innovations or new programmes. Positive outcomes were reported in all innovations/new programmes included in the integrative review (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky

et al., 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016).

Qualitative evidence from the stakeholders also suggested positive outcomes, which included educator empowerment, enhanced competencies and improved implementation of the curriculum innovation. However, the qualitative evidence also indicated that there were negative emotional reactions towards the support providers among colleagues who were being assisted during the implementation of the new curriculum.

Values: The qualitative evidence suggested that stakeholders considered experience, expertise and commitment of the supporter as important for effective peer support. Similarly, the evidence from the integrative review indicated that interest and commitment to peer support and the innovation are essential values.

Resources: The most relevant resources in this recommendation include human resources and time. The institutional administrators need to allocate appropriate human resources for the peer support strategy.

Equity: Most of the evidence from the integrative review was from high-income countries and supporters were highly qualified, ranging from associate professors and PhD holders to postgraduate alumni (Bang, 2013; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Pololi *et al.*, 2004; Provident, 2006). In LMICs very few supporters may possess such high qualifications in education, therefore deliberately identifying and capacitating educators who are willing and interested in professional development could help ensure that those in need will be able to access peer support.

Acceptability: The qualitative evidence from the experiences of stakeholders regarding peer support suggested that knowledgeable, experienced and willing supporters are essential in a peer support interaction. Therefore, the peers are more likely to accept and participate in support activities that are provided by qualified and experienced supporters.

Feasibility: The qualitative evidence from the stakeholders suggested that limited knowledge and experience levels of the supporters may affect the practicality and influence the quality of peer support. The lack of knowledge and honest self-assessment among the individuals in need of assistance may also affect their potential for seeking support. However, the lack of knowledge and honest self-assessment related to the implementation of the curriculum innovation may be mitigated through objective peer evaluation, supervision and performance appraisal reports. The qualitative evidence from the stakeholders showed that early adopters were essential in supporting the implementation of the new curriculum. Therefore, the capacitation of early adopters of the innovation may increase the feasibility of peer support in the face of limited resources in LMICs or when there is no funding for robust professional development.

B1: Peer support strategies

Two recommendations were developed for this priority area which focused on selecting support strategies and characteristics of effective peer support strategies.

B1.1: Selecting strategies for providing support

Recommendation B1.1: Supporters should consider the needs of the peers related to the implementation of the curriculum innovation, such as developing appropriate facilitation materials and using relevant pedagogical and assessment methods. The supporters should select the most appropriate strategies and platforms to provide support.

Remarks:

- Both the integrative review and the qualitative evidence suggested that the support providers should consider the various support strategies and select those that will best meet the needs of the peers.
- The integrative review evidence identified team mentoring strategies as group-facilitated mentoring, unit-based mentoring, collaborative mentoring, paired mentoring such as dyads leading to triads, peer-to-peer mentoring, online peer observation and multiple techniques, which include hybrid and multiple approaches to mentoring (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016).
- Similarly, the qualitative evidence indicated that support among stakeholders was provided using group approaches such as workshops, presentations on specific topics, meetings and paired techniques such as supportive peer reviews, hands-on support and one-on-one methods. Face-to-face interactions and electronic platforms such as WhatsApp groups and email communication were engaged in.
- The qualitative evidence also highlighted the limitations of using electronic platforms, such as availability and functionality of the communication infrastructure and poor connectivity. The evidence from the integrative review also identified technological challenges such as system failure, connectivity and data loss (Bang, 2013).

- The guideline developers recommend that the support providers in LMICs be aware of these limitations associated with the use of technology when selecting the mode/platform to use for providing support. The supporters also need to be aware of the technological capacity of the mentees before deciding on a technological platform.
- The guideline developers recommend that support providers consider and tailor-make support strategies based on the needs of their peers.
- The quality of evidence has already been described earlier.

Summary of evidence and considerations

Effects: The integrative review evidence described the outcomes of various peer support strategies used during the implementation of an innovation or new programmes. The outcomes included improved and sustained patient outcomes, professional growth, professional networks, the acquisition of knowledge and skills, designed curricula and updated modules, and improved research capacity (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016).

The qualitative evidence from the stakeholders also highlighted positive effects of the peer support strategies, which include the empowerment of peers, improved awareness and understanding of the curriculum innovation, enhanced specific competencies to implement the new curriculum, the promotion of teamwork and strengthened resilience of supporters.

Values: The qualitative evidence from the stakeholders indicated that different strategies were used during the support activities. The qualitative evidence suggested that both team and individualised approaches during support activities are considered important among stakeholders. The integrative review highlighted trust, honest

affirmation, openness to self-disclosure, collegial relationships, relevant and applicable learning opportunities, regular and positive feedback, confidentiality and role of co-mentoring as essential values in peer support engagements (Bang, 2013; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Provident, 2006).

Resources: The most relevant resources in this recommendation are those required for the selected specific strategy, which may include infrastructure, technological equipment and connectivity, time, human resources and the associated financial resources (Bang, 2013; Bennett & Santy, 2009; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Provident, 2006). Evidence from the stakeholders also highlighted time, communication infrastructure and human resources.

Equity: The evidence from the integrative review did not explicitly address equity. However, peer support strategies used had the potential of improving the competence of implementers and sustaining the interventions with subsequent long-term impact reducing inequalities among communities. Strategies selected for the peer support should be accessible to all peers.

Acceptability: The qualitative evidence from the stakeholders suggested that tailor-made and individualised peer support strategies, based on the educational landscape associated with implementing the new curriculum, are likely to be accepted. In a similar light, evidence from the integrative review indicated that contextualised support programmes, relevant and applicable learning opportunities, experiential learning opportunities, collaborative mentoring, writing self-determined goals, co-creating scope and expectations of the peer support interactions were acceptable among stakeholders (Bennett *et al.*, 2013; Bryant *et al.*, 2015; Hall & Zierler, 2015; Pololi *et al.*, 2004; Sexton *et al.*, 2016).

Feasibility: The qualitative evidence from stakeholders suggested that various strategies were feasible, although time was a constraint where support activities were conducted after official working hours. Limitations associated with the use of technological platforms in LMICs may also make the provision of support unfeasible. Evidence from the integrative review suggested that support strategies used were feasible, although some showed technical and time limitations, lack of mentoring experts and difficulty of pairing peers with supporters in different locations (Bang, 2013; Furimsky *et al.*, 2014; Provident, 2006).

B1.2: Characteristics of an effective support strategy

Recommendation B1.2: The institutional leadership should ensure that the support strategy has clear goals and objectives, explicit systems and mechanisms to enhance and sustain the effective implementation of the strategy during curriculum innovation.

Remarks:

- Evidence from the integrative review described the elements of effective support strategy as including clear organisational and operational mechanisms, strategies to sustain innovation, effective communication and feedback, monitoring and evaluation, leadership and responsibility, and guidelines for interaction (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016)
- The qualitative evidence from the stakeholders suggested that the effectiveness of unstructured support is compromised due to limited accountability by both the supporter and the supported, lack of monitoring and evaluation, limited tangible support for implementation, inadequate time to engage in support activities and inadequate support provided to resistant colleagues. These limitations might be addressed by implementing structured peer support strategies and identifying a

committee or a focal person to be responsible and accountable for the support activities in the institution. There is also a need for monitoring and evaluation of the peer support strategies implemented in the institution.

- The evidence from the integrative review suggested that an effective peer support strategy should have a clear vision, goals and guidelines for engagement in the support strategy, involvement of senior educators, institutional approval, administrative systems and established committees for support strategies (Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016).
- Evidence from the integrative review emphasised that the commitment and capacitation of the institutional leadership are essential for an effective support strategy. The integrative evidence further specified the provision of resources, recognition and acknowledgement of champions of the innovation, monitoring compliance and ongoing support as some of the essential responsibilities undertaken by the institutional leadership (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016).
- The leadership should also be conscious of the support needs of the educators in their institution. The qualitative evidence from the stakeholders concurred with the integrative review evidence in suggesting the endorsement of peer support by administrators as fundamental for its effectiveness. The qualitative evidence also highlighted limited accountability when the institution did not endorse the support strategy. The endorsement of the support strategy may be enhanced by ensuring institution administrators' buy-in of the guidelines and communicating them to the educators themselves, thereby committing their support.

- Both the qualitative evidence and the integrative review highlighted the importance of communication in enhancing peer support using suitable communication media. All the evidence from the integrative review underscored the importance of mentor–mentee communication and the sharing of information (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). The qualitative evidence further indicated that unstructured communication in some institutions compromised the sharing of information on the exemplary practice.
- The evidence of the integrative review described the importance of monitoring and evaluation, the provision of ongoing feedback and reinforcement as essential elements for an effective support strategy (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). In the same manner, the qualitative evidence reiterated that accountability drives monitoring and evaluation and highlighted that a lack thereof compromised the effectiveness of the unstructured support strategies.
- The integrative review highlighted disconnections in relationships such as difficult personalities, power differences, relocation and physical proximity, working in isolation and lack of clarity of mentoring roles as some of the threats to an effective peer support strategy (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). The evidence from the integrative review also identified timing and time limitations such as time-consuming models, time lapses between implementation and technological challenges that may affect the effectiveness of support strategies.

- The guideline developers recommend that support providers take cognisance of the essential ingredients of effective peer support strategies, be alert of the threats and take appropriate precautions.

Summary of evidence and considerations

Effects: The integrative review evidence described the systems and mechanisms that resulted in a successful and sustained support strategy and implementation of an innovation (Hall & Zierler, 2015; Magers, 2014; Provident, 2006; Sexton *et al.*, 2016). The evidence underscored the importance of institutional buy-in and approval of the support strategy to enhance its effectiveness. The stakeholder evidence also revealed that the peer support activities resulted in educator empowerment and improved competencies. The qualitative evidence further indicated that without administrative ratification, there was limited accountability from both the supporters and the supported, as they did not feel obliged to participate in support activities. The guideline developers suggest that institutions establish mechanisms such as assigning a senior/experienced educator to be responsible for the peer support interventions to enhance accountability.

Values: The qualitative evidence showed that stakeholders considered peer support intervention as important. The endorsement of peer support by administrators was perceived as fundamental for effective peer support by the stakeholders. The qualitative evidence also indicated that stakeholders valued the tailor-made support that was readily available and accessible. The evidence from the integrative review also amplified the value of peer support and shed light on the value of involvement of senior educators, a strong mandate from institutional leadership, effective communication and recognition of mentors and successes achieved (Bennett *et al.*, 2013; Fleming *et al.*, 2015; Sexton *et al.*, 2016).

Resources: The most relevant resources for this recommendation include those required for the selected specific strategy, which may consist of clear operational policies and guidelines, time, human resources, incentives, communication, connectivity, training, capacitated leadership and the associated financial resources (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). The resources should also be aligned to the needs of the units or organisation. The qualitative evidence also emphasised the importance of institutional autonomy in enabling the appropriate distribution of resources. The guideline developers suggest that institutions that are non-autonomous need to identify and assign a senior educator who will be mandated to mobilise resources for peer support strategies. Most of the evidence from the integrative review indicated that resources essential for effective strategies were mobilised based on the needs of individual institutions.

Equity: The evidence from the integrative review did not explicitly address equity. However, peer support strategies used had the potential of improving the competence of implementers and sustaining the interventions with subsequent long-term impact reducing inequalities among communities.

Acceptability: The qualitative evidence suggested that support strategies that were endorsed by administrators and tailor-made were considered important and therefore likely to be accepted among peers. Similarly, evidence from the integrative review indicated that institutional approval and commitment, and contextualised interventions improve the acceptability of the support strategy (Fleming *et al.*, 2015; Hall & Zierler, 2015; Magers, 2014; Sexton *et al.*, 2016).

Feasibility: The evidence from the integrative review suggested that ensuring institutional commitment and approval of the support strategy enhances the feasibility of putting in place various mechanisms to increase the effectiveness of the support strategy (Fleming *et al.*, 2015; Hall & Zierler, 2015; Magers, 2014; Provident, 2006;

Sexton *et al.*, 2016). The qualitative evidence from the stakeholders suggested that the monitoring and evaluation of support activities is compromised when institutional leaders are not capacitated in the implementation of the new curriculum. Limited connectivity in some institutions made effective use of electronic communication challenging. Furthermore, limited institutional autonomy also made the acquisition of resources essential for the support strategy difficult.

C1: Content/support needs

One recommendation was developed for this priority area on content and support needs for the peer support strategy.

C1.1: Determining/assessing the support needs

Recommendation C1.1: The support providers should collaborate with the peers/educators to assess and identify support needs to enable the development of relevant and applicable content that is aligned with the implementation of the new curriculum.

Remarks:

- The evidence from the integrative review showed that it was important to identify areas needing support, co-create a mentoring scope with the mentees, sequence guiding support activities, provide learning materials with relevant focused activities and provide experiential and contextualised learning to enhance the support provided (Bang, 2013; Bennett & Santy, 2009; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Provident, 2006; Sexton *et al.*, 2016).

- The qualitative evidence from the stakeholders also highlighted the importance of considering the educational landscape associated with implementing the curriculum innovation and educational/competency needs of the peers to enable the development of appropriate content for support.
- Both the integrative and the qualitative evidence suggested that individuals appreciate the support activities that are relevant to their needs. Hence, support providers should be able to conduct a needs assessment and design content that is tailor-made to individual support needs (Bryant *et al.*, 2015; Pololi *et al.*, 2004).
- The integrative review evidence emphasised the importance of awareness of the need for support among peers/educators, openness to self-disclosure of weaknesses and identifying areas needing support, seeking support and voluntary participation in the support activities (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Provident, 2006). Self-disclosure of weaknesses can be enhanced through the creation of a supportive and emotionally safe environment among peers to promote the sharing of personal information (London, 2003). Knowledgeable individuals should also be encouraged to share information with peers experiencing challenges during support activities. The evidence from the stakeholders showed that the difficulties that implementers were experiencing directed most of the peer support activities.
- The evidence from the stakeholders suggested that awareness of the need for support among peers is compromised by the cultural background of individuals, which does not encourage young people to develop skills such as critical thinking and self-assessment. Therefore, support providers should be aware of the cultural factors that may hinder self-assessment and openness about individual weaknesses. These limitations might be minimised by promoting a culture of openness among peers and encouraging them to develop a culture of questioning and sharing information.

Summary of evidence and considerations

Effects: The integrative review evidence described the content of the support activities based on the innovation or new programme that was implemented. Structuring the support content in line with the type of innovation or new programme enhanced the support strategy. The support activities and innovations described in the integrative review were successfully implemented (Hall & Zierler, 2015; Magers, 2014; Provident, 2006; Sexton *et al.*, 2016). The qualitative evidence from the stakeholders indicated that peer support resulted in the empowerment of educators, enhanced competencies and improved implementation of the curriculum.

Values: The evidence from the integrative review highlighted the importance and value of trust, openness to self-disclosure, maintaining confidentiality and honesty during the interactions (Bang, 2013; Bryant *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Provident, 2006). The qualitative evidence indicated that peers had different levels of understanding and capabilities related to the implementation of the new curriculum, which necessitated tailor-made activities. The evidence suggested that individuals valued respect during support activities that addressed their needs and improved their self-efficacy.

Resource implications: The most relevant resources in this recommendation are those required for the execution of specific activities, which include time, human resources, communication and connectivity to enable the assessment of support needs.

Equity: The assessment of the needs should be made known to all individuals in the institution to enable the development of comprehensive content that will meet different needs. The evidence from the integrative review indicated that the needs of individuals or the specific innovation determined the support activities (Bang, 2013; Bennett & Santy, 2009; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Provident, 2006; Sexton *et al.*, 2016). Therefore, the focus should be on aspects related to educational innovation and ensuring that identified

needs are addressed during peer support activities. The qualitative evidence also highlighted that the support strategies were needs-driven. The guideline developers recommend that support providers carefully tailor-make support activities to meet the needs of different individuals.

Acceptability: The qualitative evidence suggested that tailor-made content based on the educational landscape associated with the implementation of the curriculum innovation is likely to be accepted among peers. The inclusion of content/activities related to the curriculum innovation, such as the new pedagogical and assessment approaches, may make the peer support strategies more appealing to the peers.

Feasibility: The qualitative evidence from the stakeholders suggested that determining the support needs among peers can be done. However, the indifferent attitudes of peers may make the assessment of learning needs difficult. Institutional leaders should create a safe and supportive environment that encourages the giving and receiving of feedback and the sharing of personal information to enhance self-disclosure.

D1: Outcomes of peer support

Two recommendations were developed for this priority area which focused on outcomes of peer support and institutional commitment to the peer support strategy.

D1.1: Outcomes of effective peer support

Recommendation D1.1: The goals and objectives of the peer support activities should be aligned with the identified needs and directed towards sustaining the curriculum innovation, capacity building, professional growth, community of practice and scholarship.

Remarks:

- The evidence from the integrative review shed light on some outcomes of effective peer support strategies, which include sustainable innovation, professional and personal growth, scholarship and establishing a community of practice (Bang, 2013; Bennett & Santy, 2009; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Provident, 2006; Sexton *et al.*, 2016).
- Similarly, the qualitative evidence from the stakeholders indicated that peer support enhanced specific competencies among educators, empowered peers, improved awareness of the curriculum, enhanced learning, improved implementation of the curriculum and resulted in a publication as some of the outcomes of peer support among stakeholders.
- The guideline developers recommend that support providers utilise approaches that promote self-directedness, critical thinking and personal growth.

Summary of evidence and considerations

Effects: The integrative review evidence indicated that effective support strategies promote the sustainability of the innovation, professional and personal growth, scholarship and community of practice. The evidence showed successful implementation of the innovations with positive outcomes, which included improved patient outcomes, successful utilisation of the fundamental curriculum, the acquisition of various skills among professionals, scholarship and enhanced community of practice (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016).

Values: The qualitative evidence indicated that support strategies had positive outcomes that were important to the peers. The stakeholders felt that peer support activities were empowering and stimulated self-directedness, improved awareness of the curriculum and enhanced learning and implementation of the new curriculum.

Resources: The resources necessary in this recommendation include human resources, time, infrastructure, finances, communication and connectivity to enable the utilisation of various strategies and attainment of the goals and objectives of the peer support strategy.

Equity: The integrative review evidence indicated that participants in different innovations had access to appropriate support strategies and resources, which enhanced implementation and promoted professional growth (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016).

Acceptability: The qualitative evidence suggested that peer support activities were acceptable among peers, with stakeholders reporting the positive outcomes, which included the acquisition of transferable skills, enhanced competence and resilience. However, the qualitative evidence indicated that there were also negative emotional reactions of educators towards the peer support. These emotional reactions might compromise the acceptability of the support.

Feasibility: The qualitative evidence from the stakeholders suggested that it is feasible to engage in a variety of support activities during peer support. Limited resources in LMICs may restrict the use of strategies requiring technology and connectivity.

D1.2: Institutional commitment to the peer support strategy

Recommendation D1.2: Institutions should recognise support strategies as a valued service and commit by allocating resources to meet the departmental/support needs to enhance peer support during a curriculum innovation.

Remarks:

- The evidence from the integrative review highlighted the importance of an institutional mandate and commitment to and investment in support strategies (Bang, 2013; Bennett *et al.*, 2013; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Provident, 2006). In addition, the qualitative evidence underscored the importance of administrative endorsement as essential for an effective support strategy. The endorsement by institution administrators may be enhanced through their buy-in of the guidelines. The administrators can also communicate the guidelines to the educators, thereby emphasising their importance and committing support.
- The integrative review also suggested the importance of recognition of mentoring as a valued service that can promote growth of the institution (Bennett *et al.*, 2013; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Sexton *et al.*, 2016).
- The evidence of the review further underscored the importance of investing in capacity development and developing leadership strategies (Bang, 2013; Bennett *et al.*, 2013; Furimsky *et al.*, 2014; Fleming *et al.*, 2015; Hall & Zierler, 2015; Sexton *et al.*, 2016). Developing the capacity of the leadership can enhance implementation of an innovation and peer support strategies.

Summary of evidence and considerations

Effects: The evidence from the integrative review indicated that institutional commitment, aligning departmental needs and resources, investing in capacity building and recognising mentoring and its successes contribute to successful peer support and sustainability of the innovation (Hall & Zierler, 2015; Magers, 2014; Provident, 2006; Sexton *et al.*, 2016).

Values: The qualitative evidence indicated that administrative endorsement was considered necessary for peer support strategies. The evidence further suggested that there was limited tangible support and limited accountability, which could compromise the peer support. Accountability may be enhanced by institution administrators' buy-in of the guidelines and promoting the utilisation during peer support strategies.

Resources: The resources required for this recommendation include clear policies and guidelines, performance appraisal systems, time, human resources, competent leadership, communication and connectivity.

Equity: The institutional leadership should ensure that resources are aligned with the support needs of all departments/units and that these resources are equitably available and accessible.

Acceptability: The qualitative evidence suggested that stakeholders view institutional commitment as important and therefore acceptable for a successful peer support strategy.

Feasibility: The qualitative evidence from the stakeholders suggested that obtaining institutional commitment is feasible through the rippling effects of exemplar practice from other institutions.

E1: Monitoring and evaluation of the peer support strategy

One recommendation was developed for this priority area which focused on the monitoring and evaluation of the peer support strategy.

Recommendation E1.1: Institutional leadership should ensure that there is a mechanism for monitoring and evaluation of the peer support strategies used during the curriculum innovation.

Remarks

- The evidence from the integrative review suggested that monitoring and evaluation can sustain peer support strategies and innovations (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). Some of the activities that were aligned with monitoring and evaluation in the integrative review include the monitoring of compliance, progress reports, the provision of ongoing support, reinforcement and redirection, and the provision of expert feedback.
- The qualitative evidence from the stakeholders also suggested that accountability drives the monitoring and evaluation of a strategy. The evidence indicated that there was no monitoring and evaluation, as no specific individual was responsible for the peer support activities. Therefore, the institutional leadership should establish a committee or mandate a focal person who could be held accountable for peer support activities in the institution. Such an intervention may enhance the peer support interactions during a curriculum innovation.

- Monitoring and evaluation of the peer support strategies and activities should be conducted regularly, especially during the initial phases of implementing the curriculum innovation. Regular monitoring and evaluation may help determine the effectiveness and relevance of the peer support strategy as well as identify any challenges that may be encountered.
- Monitoring and evaluation tools should be used for gathering information on peer support activities and reports written. Such information is also crucial for the monitoring and evaluation of the peer support guidelines as well as evaluation of the implementation of the curriculum innovation.
- There is a need for institutional commitment to the peer support strategy and the involvement of senior educators to enhance the monitoring and evaluation of the support activities (Bennett *et al.*, 2013; Fleming *et al.*, 2015; Sexton *et al.*, 2016).

Summary of evidence and considerations

Effects: The integrative review evidence indicated that monitoring and evaluation may be a strategy to enhance and sustain support strategies (Bang, 2013; Bennett & Santy, 2009; Bennett *et al.*, 2013; Bryant *et al.*, 2015; Fleming *et al.*, 2015; Furimsky *et al.*, 2014; Hall & Zierler, 2015; Magers, 2014; Pololi *et al.*, 2004; Provident, 2006; Sexton *et al.*, 2016). The qualitative evidence from the stakeholders highlighted the challenges associated with lack of monitoring and evaluation, which included lack of accountability among the support providers and the peers, and lack of follow-up on and reinforcement of the support strategy.

Values: The qualitative evidence suggested that the peers valued monitoring and evaluation and utilised peer review activities and frequent meetings to share and evaluate one another's work related to the implementation of the new curriculum. The evidence also indicated that the stakeholders valued the endorsement of the peer support strategy by administrators. The integrative review evidence also underscored

the importance of institutional commitment (Bennett *et al.*, 2013; Fleming *et al.*, 2015; Sexton *et al.*, 2016).

Resources: The resources necessary for this recommendation include validated tools for monitoring and evaluation, human resources, time and committed leadership.

Equity: The institution should ensure timely and objective monitoring and evaluation of all peer support strategies and activities. The use of validated tools for monitoring and evaluation may enhance equity for this recommendation.

Acceptability: Both the integrative review and the qualitative evidence underscored the importance of monitoring and evaluation of peer support strategies as essential for a successful support intervention. Such an agreement suggests the acceptability of this recommendation in the guidelines.

Feasibility: The evidence from both the integrative review and the stakeholders suggested that this recommendation is feasible with the institutional commitment to the support strategy. Therefore, it is important for the institutional leadership to endorse the support strategy and establish a monitoring and evaluation mechanism.

5.6 QUALITY OF EVIDENCE USED IN THE RECOMMENDATIONS

Evidence used to develop the recommendations was derived from triangulating the results of an integrative review on peer support strategies and evidence from a qualitative study that explored the experiences of educators regarding peer support during the implementation of a new curriculum in a low-income country. The integrative review included quantitative designs, qualitative designs, case studies and non-research organisational experiences. The evidence was evaluated using the JHNEBP Research Evidence Appraisal Tool (Addendum A) for the evidence from non-research organisational experiences, the Critical Appraisal Skills Programme (CASP) for the qualitative design (Addendum B) and the Centre for Evidence-Based Management Tool

for case studies (Addendum C) for case studies. Evidence from seven out of the eleven reports included in the review were rated at a strength of Level V and good quality (rated B), while the other four were at Level III of good quality based on the JHNEBP Research Evidence Rating Scale (Addendum D).

Data from the qualitative study were obtained through semi-structured face-to-face interviews, which were audio-recorded, transcribed verbatim and analysed inductively. Until recently, guideline development relied heavily on evidence from systematic reviews of randomised controlled trials. However, there has been a shift towards the use of qualitative evidence in guideline development (Lewin & Glenton, 2018; WHO, 2014).

5.7 MONITORING AND EVALUATION OF THE GUIDELINES

Monitoring and evaluation of these guidelines will be conducted at different nursing education institutions in LMICs, which will be using these recommendations for peer support activities during curriculum change. Monitoring and evaluation mechanisms will be employed to assess the effectiveness of the guidelines during peer support interactions. Tools for monitoring and evaluation will be developed, validated and used to collect and analyse data related to peer support interactions during curriculum innovation. The monitoring and evaluation should be done once every semester to assess the peer support interactions, changes in stakeholder practice and performance related to the implementation of the curriculum change.

5.8 UPDATING THE GUIDELINES

The guidelines should be updated every five years based on the new evidence that may emerge during the monitoring and evaluation processes that may affect the relevance of the recommendations. The WHO (2014) recommends that all guidelines be updated regularly to keep them relevant to needs and consistent with emerging evidence. Based on the evidence from the monitoring and evaluation processes and emerging scientific

literature, the recommendations that will be considered to be no longer appropriate/relevant will be supplemented and the guidelines updated. The process of updating the guidelines will be conducted by a multidisciplinary team, which will include the members who participated in the development of these guidelines, experts on peer support and critical appraisers.

5.9 IMPLICATIONS FOR IMPLEMENTING THE GUIDELINES

The developed practice guidelines propose strategies and processes that are essential to enhance peer support during curriculum innovation. At this point, it is worth mentioning some of the inherent implications of which implementers of the guidelines need to be mindful:

Institutional leadership commitment: The successful implementation of the guidelines is dependent on the commitment of institutional leadership. The administrators and managers need to ensure that the guidelines are disseminated to all educators and assign a responsible officer or committee to drive the peer support strategy and implementation of the guidelines.

Clarification of roles and responsibilities: It is important to clarify the roles and responsibilities of key players associated with the implementation of the guidelines for peer support. The institutional leaders need to consider the capabilities and skills of the educators engaged in peer support.

Resource allocation: Aligned with leadership commitment stated above is the allocation of resources essential for the peer support activities, as outlined in the recommendations. Resources may include human, material and time. Poor resource commitment for the support activities might set the stage for unsuccessful/ineffective peer support interventions.

Recognition of peer support as a valuable service: It is important to acknowledge peer support as an important strategy, particularly during the curriculum change. Educators who are sceptical of their ability to appropriately enact the new curriculum might benefit from peer support, hence the need for the guidelines.

Feedback related to the implementation of the guidelines: Timely feedback should be provided to acknowledge successes and offer alternatives related to the guidelines implementation. It is important to promote a collegial environment that enhances dialogue and effective communication between the support providers and their peers.

Monitoring and evaluation: There should be deliberate plans and strategies for monitoring the implementation of the peer support and the guidelines. Lack of a clear strategy for monitoring and evaluation might blind the institutional leadership to the success or failure of the guidelines and/or the peer support strategy.

5.10 CONCLUSION

Implementing a transformed curriculum can be overwhelming, even for experienced educators, particularly when there are no planned ongoing support strategies. Naturally, when faced with difficulties, individuals may engage in unstructured peer support. However, such support can be short-lived or inconsistent, thereby threatening the enactment of the new curriculum. Such a peer support strategy needs structure in the form of practice guidelines to enhance the interactions. The proposed guidelines present contextualised processes and strategies that might improve self-efficacy among peers, enhance the fidelity of curriculum enactment and ultimately sustain the curriculum innovation.

Further research in this field is recommended to evaluate the efficacy of the guidelines and the fidelity of implementing the curriculum innovation among nursing education institutions.

5.11 DECLARATION OF CONFLICTS OF INTEREST

None of the members of the guidelines development group had any personal, family or financial interest. The development of these guidelines was not funded; however, the first author received a PhD tuition fee bursary from the University of the Free State, which did not influence the content of the guidelines. Ethical clearance to conduct the study was obtained and written consent was sought from the qualitative study participants. The expert reviewers consented to participate in the Delphi survey after receiving a detailed information brochure about the study.

CHAPTER 6

Conclusion, recommendations and limitations of the study

6.1 INTRODUCTION

A comprehensive study was conducted with the aim of developing practice guidelines to enhance peer support among nurse educators implementing a curriculum change in Lesotho. This chapter presents a synopsis of the entire study, which includes factual findings on specific research objectives, conceptual findings and conclusions drawn, recommendations made from the study, the contribution to the body of knowledge, the limitations of the study, personal reflections and concluding remarks.

6.2 OVERVIEW OF THE STUDY

The current study sought to develop practice guidelines for peer support in response to the situation that prevailed in nursing education institutions in Lesotho following transformation of the midwifery curriculum. Despite transforming the curriculum, which demanded a new set of skills for the educators to enact it appropriately, there was no deliberate plan for the ongoing support of educators. The absence of planned support led the educators to seek support from colleagues who had a better understanding of and capabilities to enact the new curriculum. However, this peer support initiative was unstructured, which compromised its consistency and sustainability. This study sought to develop practice guidelines to enhance peer support among educators during curriculum transformation. The research question was therefore: What guidelines can be developed to enhance peer support among nurse educators during a curriculum innovation in Lesotho?

The research objectives that guided this study were as follows:

- Describe existing peer support strategies that enhance the implementation of an innovation or new programme among professionals through an integrative review (Phase I)
- Describe the experiences of educators regarding peer support during midwifery CBC implementation in Lesotho through an exploratory descriptive qualitative study (Phase II)
- Develop guidelines to enhance peer support among educators during the implementation of the CBC in Lesotho using the WHO (2014) *Handbook for Guideline Development* as a framework (Phase III)
- Validate the developed peer support guidelines using a Delphi survey (Phase III).

The research design used was primarily qualitative with multiple data collection methods appropriate to each objective. Inclusion criteria for each objective were determined to provide boundaries for the study. The inclusion criteria for the integrative review were published articles for the period 2000 to 2016 and were related to the focused research question. The inclusion criteria for the qualitative study were nurse educators who participated in the implementation of the curriculum innovation in the midwifery programme and engaged in unstructured peer support activities. Rigorous processes were applied, which included the use of the framework of Whitemore and Knafel (2005) during the integrative review, trustworthiness criteria (Lincoln & Guba, 1986), applying the interpretive paradigm and adhering to the WHO (2014) *Handbook for Guideline Development*. Pertinent evidence regarding peer support came to the fore during the different phases of this study.

The next section presents the factual findings for each of the research objectives.

6.3 FACTUAL FINDINGS

The discussion in this section focuses on the factual findings for each of the research objectives in the different phases of the study. The factual findings for phases I and II are presented parallel to each other based on similarities, as illustrated in Table 6.1.

The presentation of the factual conclusions in Table 6.1 illustrates the similarities in the triangulated evidence from the integrative review and the qualitative study. There were many similarities in the factual conclusions from the two phases. Although the content was varied in the different elements of peer support reported, the conclusions from both alluded to the characteristics of peer supporters, support strategies used, motivation for the peer support and many positive outcomes. The challenges and lessons were also similar. Marked differences were noted in the characteristics of effective peer support and monitoring and evaluation, which highlighted many aspects in the integrative review but not much in the qualitative study. On the contrary, the qualitative evidence highlighted many factors that affected the uptake of peer support.

The characteristics of the peer support providers include qualification and experience, but most critical is commitment and willingness to provide support. Inherent to the effectiveness of a peer support strategy is the dedication and willingness of the support providers, without which the provision of peer support can be compromised. Institutional leaders embarking on peer support as a strategy to enhance the implementation of change need to be cognisant of this important aspect of the willingness of support providers.

TABLE 6.1: Factual conclusion from the study

Integrative review: Phase I	Qualitative study: Phase II
Peer supporter characteristics	
<ul style="list-style-type: none"> • Possessed higher qualifications • Experienced • Administrators • Commitment and interest in mentoring 	<ul style="list-style-type: none"> • Early adopters of curriculum innovation • Experienced and knowledgeable • Internally driven and willing to support colleagues • Exemplary practice and model performance • Head of programme
Peer support strategies used	
<ul style="list-style-type: none"> • Team mentoring • Paired mentoring • Multiple techniques 	<ul style="list-style-type: none"> • Orientation and workload allocation • Workshops • Peer reviews • Hands-on activities • Frequent meetings
Drivers for need for support and content	
<ul style="list-style-type: none"> • Voluntary participation • Individuals seeking support • Needs assessment • Co-creation of mentoring scope 	<ul style="list-style-type: none"> • End of NEPI donor funding • Educational landscape associated with implementing the new curriculum • Tailor-made peer support
Characteristics of an effective peer support strategy	
<ul style="list-style-type: none"> • Clear organisation and modus operandi • Strategies for sustaining change • Communication and feedback mechanisms • Monitoring and evaluation mechanisms • System of identifying the need for support • Commitment from top institutional leaders 	<ul style="list-style-type: none"> • Committee driving educator support • Ad hoc meetings
Attributes affecting the uptake of support	
<ul style="list-style-type: none"> • None elicited 	<ul style="list-style-type: none"> • Limited accountability and 'nonchalant' attitude • History of unsustainable donor projects • Limited immediate application of new knowledge • Biological age and experience in the content-based curriculum

Integrative review: Phase I	Qualitative study: Phase II
Monitoring and evaluation	
<ul style="list-style-type: none"> • Providing ongoing and expert feedback • Guidance on change • Reinforcement of change • Checking on progress • Remediating and re-education • Peer observations 	<ul style="list-style-type: none"> • Peer reviews • Sharing information on progress
Outcomes of peer support	
<ul style="list-style-type: none"> • Sustained innovation • Professional and personal growth • Scholarship • A community of practice and interconnectedness 	<ul style="list-style-type: none"> • Teamwork enhanced • Improved curriculum implementation • Enhanced peer learning and self-directedness • Enhanced specific competencies • Research publication • Development of resilience
Challenges of implementing peer support strategies	
<ul style="list-style-type: none"> • Timing and time limitation • Disconnect in relationships and power differences • Lack of clarity of roles and change implementation • Technical challenges • Accessing mentoring support 	<ul style="list-style-type: none"> • Inadequate time • Communication and connectivity limitation • Lack of administrative endorsement • Lack of commitment among some peers • Emotional abuse of supporters
Lessons learnt from the peer support strategies	
<ul style="list-style-type: none"> • Importance of the commitment of institutional leadership • Setting clear goals and expectations • Ensuring feedback and information sharing • Development of a community of practice • Personal attributes are elements of successful mentoring 	<ul style="list-style-type: none"> • The administrative endorsement is fundamental • Active engagement is empowering • Communication enhances peer support • Adverse reactions from peers lead to the development of resilience among supporters

Source: Author-generated

Peer support strategies ought to be tailor-made to the needs of the individuals implementing the curriculum innovation. Given that change adoption does not always occur at the same rate among individuals, some adopt change early yet others are late adopters (Rogers, 1983). Similarly, the support needs for such adopters will be different, necessitating tailor-made support strategies. The needs of individuals and institutions should inform the content of the peer support strategy, therefore requiring an appropriate needs assessment before embarking on the intervention. In Lesotho, the ending of NEPI funding that supported the nursing education reforms, which resulted in CBE, was a key driver for peer support. The educators were faced with the reality of a new curriculum, which they were not adequately prepared to implement, leading to unstructured peer support. Despite the expectation placed on the educators to implement the new curriculum, some were not ready to engage and resulted in pockets of resistance to peer support. The uptake of the peer support strategy was affected by a number of factors, including a limited sense of accountability and a 'nonchalant' attitude, a history of unsustainable donor projects, and the biological age of educators and their experience with the content-based curriculum. Associated to the 'nonchalant' attitude was the glaring lack of monitoring and evaluation mechanisms, which was one of the factual conclusions from the qualitative study. Such attitudes compromise the implementation of an innovation and peer support providers need to be aware of these attributes that can affect the effectiveness of peer support.

Effective peer support strategies were found to have certain variables, such as clear organisational and operational systems, monitoring and evaluation mechanisms, the commitment of institutional leaders, and the commitment and willingness of the peers involved. Putting in place organisational structures becomes a critical point in the success of peer support. Overlooking such prerequisites for setting up a peer support strategy is setting a stage for failure or an ineffective support intervention. There is a need for the institutional administrators to assign the responsibility to specific individuals or a committee that can be held accountable for the peer support strategies in the institution.

Accountability is vital to the effectiveness of peer support and the implementation of the innovation. Lack of accountability or the sense of it, as was identified in the qualitative study, can lead to inappropriate implementation of the curriculum innovation. The situation can further lead to a global waste of resources, such as non-use of expensive high-tech mannequins and other equipment purchased to support the curriculum innovation in the nursing education institutions in Lesotho. In the absence of competence to use the high-tech mannequins or peer support among the educators to enhance the skills, such expensive equipment may go to waste. Therefore, monitoring and evaluation of both of the peer support and implementation of the curriculum innovation becomes a paramount accountability measure to ensure that an ongoing check on progress is made and to identify areas requiring remedying or reinforcement.

Peer support strategies in both the integrative review and the qualitative study had positive outcomes. The implications here are that the planners of peer support strategies should have outcomes in mind when planning such interventions. These outcomes can be used to guide the formulation of goals and objectives for peer support.

Peer support providers need to be aware of the challenges that may arise during peer support strategies. Some of the challenges are related to timing and time factors, communication, connectivity, power differences and abuse of the support providers. The support strategies should have built-in strategies to address such challenges.

The lesson learnt from the existing peer support strategies and the qualitative study can be harnessed and incorporated into the peer support strategies and activities. Some of the lessons include critical elements that can enhance peer support, which include the commitment of institutional leadership, communication and feedback, active engagement and setting clear goals and expectations.

6.4 CONCEPTUAL CONCLUSION

The discussion of the conceptual conclusion is based on the factual findings and related supporting evidence. Through the evidence synthesised during the integrative review, the researcher gained an understanding of the key elements that made the existing peer support effective, which were adopted and included in the guidelines for peer support. Similarly, using the interpretivist paradigm in an exploratory descriptive qualitative study, the researcher gained in-depth insight into and understanding of the experiences of nurse educators related to peer support during a curriculum innovation and socially constructed the new knowledge.

Until recently, guideline development was based on systematic reviews of empirical evidence. However, qualitative evidence is now used to inform guideline development (Lewin & Glenton, 2018; WHO, 2014). The evidence from the two phases was triangulated and used to determine the guidelines priority areas, which were discussed and agreed upon by the guideline development task team.

The evidence that the researcher immersed in suggested that peer support can enhance the implementation of an innovation. However, there was a paucity of literature relating to peer support guidelines for educators during a curriculum change. There is, however, a plethora of literature relating to peer support among students and non-professionals, such as patients living with chronic conditions. The lack of literature on guidelines for peer support of professionals was considered as a gap that this study set out to address. The researcher assumes that the developed guidelines might enhance peer support among educators during curriculum change and ultimately influence the implementation of the curriculum innovation. The conceptual conclusion was crafted based on the Donabedian quality improvement framework, which alludes to structure, process and outcome (Donabedian cited in Botma & Labuschagne, 2017). The Donabedian framework was applied to categorise the major elements into structure/prerequisite attributes for peer support, systems and processes of implementing peer support and outcomes of peer support when guidelines are utilized.

Figure 6.1 illustrates the conceptual conclusion and how it links to the guidelines for peer support.

6.5 CONCLUSION FROM THE STUDY

The study was conducted consequent upon the curriculum transformation to support the innovation in nursing education institutions in Lesotho. With the ending of the donor funding by NEPI and due to the lack of a deliberate plan for the ongoing support of educators, there was a threat to the implementation of the curriculum innovation. The successful implementation of the new curriculum demanded a new set of pedagogical skills of the educators as the key drivers of curriculum enactment. Although the implementation of the new curriculum was preceded by the initial professional development activities funded by NEPI, there was little thought about long-term support strategies for educators. Phase one of the implementation of a new curriculum in the midwifery programme exposed a high level of inadequate preparedness among educators (Botma & Nyoni, 2015). However, the early adopters from one institution naturally started providing unstructured support to colleagues without any official mandate or guidelines. Such unstructured peer support would be a challenge during the second phase of implementation in the nursing programme.

The study sought to develop guidelines for peer support to bridge the gap and influence the implementation of the curriculum innovation in Lesotho. Multiple studies were conducted, which generated empirical and theoretical evidence to inform the guidelines development nested in the WHO *Handbook for Guideline Development* (WHO, 2014) as a framework. The studies adopted the interpretive paradigm and a relativist ontology, generating multiple realities relating to peer support (see Kivunja & Kuyini, 2017).

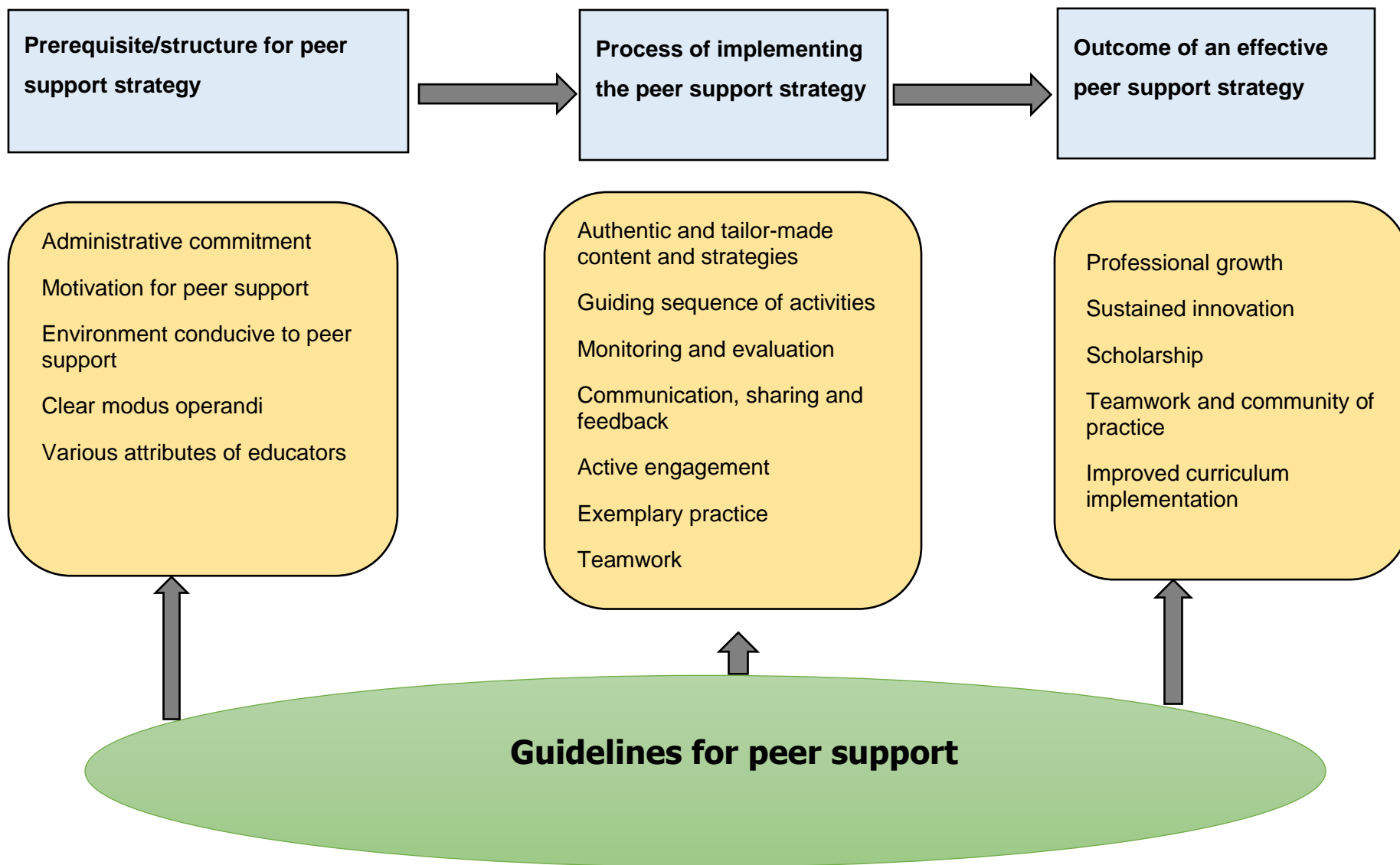


FIGURE 6.1: *The conceptual conclusion (Source: Author-generated)*

Conducting this study revealed critical information related to peer support and the difference it makes during the change process, which cannot be ignored. This affordable intervention can promote professional growth and enhance self-efficacy among educators and may contribute to the sustainability of curriculum innovation in resource-limited countries such as Lesotho. One of the major threats to curriculum innovation is the inability to appropriately enact the curriculum (Botma, 2014b). Ongoing support for educators during curriculum change can cushion sceptical implementers, considering that the uptake and diffusion of change vary among different individuals (Rogers, 1983). Sahin (2006, citing Rogers, 2003), describes variations in the uptake of change, with the possibility of some early adopters assuming a leadership role and providing support to their peers during the introduction of an innovation within the community in which they function. Without ongoing support among educators, the fidelity of curriculum implementation may be unattainable (Melle *et al.*, 2019).

Educators implementing a curriculum change need ongoing professional development and support. Providing such continuous professional development can be costly, especially in resource-limited settings such as Lesotho. Structured peer support can be an affordable approach and therefore requires a framework or guidelines for effective implementation. Developing and implementing guidelines to inform contextualised strategies such as peer support are part of the solution for appropriate curriculum enactment. These developed guidelines to enhance peer support among nurse educators therefore contribute significant original knowledge and form part of the solution leading to sustained curriculum innovation.

6.6 RECOMMENDATIONS

The following recommendations are made based on the findings from this study and are structured in terms of the stakeholders, namely the Lesotho Ministry of Health as the initiator of the curriculum transformation, nursing education institutional management as the custodians of the curriculum, nurse educators as the implementers and the research community.

Recommendations to government (Ministry of Health)

- The government of Lesotho, through the Ministry of Health as the initiator of the curriculum transformation and source of funding, is obliged to take an oversight role of the funded projects to maintain its own credibility with funders/donors. Government needs to be committed to and accountable for the funded projects and ensure that they benefit the population.
- The Ministry of Health ought to have a robust monitoring and evaluation mechanism to ensure the appropriate implementation of the innovation or intervention. This will ensure that challenges are identified early enough and appropriately addressed to avert the global waste of resources, such as expensive high-tech mannequins that lie unused due to lack of ongoing support.
- Government needs to consider assigning the training of nurses to the Ministry of Education and Training, whose focus is the development of human resources. Having the education of healthcare professionals under the Ministry of Health may compromise the monitoring and evaluation of educational interventions.

Recommendations to nursing education institutional management

- The nursing education institutional management needs to buy-in and endorse the peer support strategy and the guidelines to enhance the implementation of the peer support and the curriculum innovation.
- The institutional managers should be committed to the peer support strategy and allocate adequate resources for the activities related to peer support.
- There is a need for monitoring and evaluation of the peer support strategy and the implementation of the curriculum to check progress, rectify shortcomings and reinforce the appropriate practices.

- The institutional leaders need to have an ongoing professional development and support plan for the nurse educators during the curriculum innovation.

Recommendations to nurse educators

- The educators need to commit to the peer support intervention.
- There is a need for educators to engage in continuous professional development.

Recommendations to the research community

- Further research is recommended to evaluate the effectiveness of the guidelines among educators during curriculum innovation in different institutions utilising the guidelines.
- There is a need for research to assess the efficacy of the implementation of curriculum reforms funded by NEPI in African countries. The assumption is that funded projects in LMICs have limited sustainability when funding comes to an end. The question that arises is ‘how did other African nursing education institutions manage the curriculum reforms supported by NEPI after the funding came to an end?’

6.7 CONTRIBUTIONS FROM THIS STUDY

The study builds on the existing evidence advocating for ongoing support for educators during a curriculum change (Dath & Iobst, 2010; Harpe & Thomas, 2009). The literature search revealed limited evidence relating to guidelines for peer support during curriculum change. The researcher proposed and developed these practice guidelines, assuming that they will serve as a roadmap for peer support, while promoting appropriate curriculum enactment.

The different phases of this study made a significant original contribution to knowledge in nursing education in LMICs. The developed guidelines for peer support among nurse educators during curriculum innovation in Lesotho are a significant contribution to knowledge. The guidelines may be used by higher education institutions embarking on curriculum change and using peer support as an affordable ongoing support strategy. The developed guidelines are among the few guidelines developed using qualitative evidence as an upcoming practice (Lewin & Glenton, 2018; WHO, 2014).

This study makes a significant original contribution to knowledge through the following:

- Three articles were written, which addressed the gaps that were identified. There is little literature on peer support for professionals during change processes and this study contributes evidence towards the area of peer support.
- Guidelines were developed that can be used in broader but similar contexts.
- The developed guidelines are specific for the professionals engaged in curriculum innovation, and few guidelines for professionals during a change process exist.
- The study highlighted the need for the Ministry of Health to oversee the continuation of funded projects.
- The study further highlighted that the management of nursing education institutions have a responsibility to support nurse educators during curriculum innovation, and these guidelines are the tool that can be used for this.
- A paper from one of the phases was presented at an international conference and emphasised the need for contextual support during the implementation of an innovation in education.

This study answered the research question articulated through the four research objectives. Each of the phases of the study has contributed to the existing body of knowledge, as shown in Table 6.2.

6.8 LIMITATIONS OF THIS STUDY

- Most of the evidence used in the integrative review was on organisational experiences and limited empirical studies were found, which may affect the quality of the guidelines. This limitation was addressed through the use of validated critical appraisal tools.
- The integrative review included only evidence from English sources and may have missed significant information in other languages.
- The primary qualitative research design generated contextual evidence that informed the development of the guidelines and may have rendered the guidelines relevant to the Lesotho context. However, the rigorous processes, providing thick descriptions, make the guidelines transferable to LMIC contexts. The development processes based on the WHO *handbook for Guideline Development* included evidence from the integrative review and adhered to an extensive audit trail, thereby enhancing the transferability of the guidelines to other similar settings in LMICs.

TABLE 6.2: Contributions of the study

Research objective	Major step of the WHO handbook	Research design	Manuscript	Contribution
a. Describe existing peer support strategies that enhance the implementation of an innovation or new programme among professionals	Systematic literature search	Integrative review	Peer support strategies that enhance the implementation of an innovation among professionals (see Chapter 2)	This study synthesised and described existing peer support strategies, highlighting the features of effective peer support strategies, possible challenges and lessons learnt.
b. Describe the experiences of educators regarding peer support during midwifery CBC implementation in Lesotho	Stakeholder involvement	Exploratory descriptive qualitative study	Peer support during the implementation of a new curriculum: The experiences of nurse educators in Lesotho (see Chapter 3)	The study brought to the fore experiences of nurse educators related to unstructured peer support. Benefits, limitations and challenges of the unstructured support were highlighted.
c. Develop guidelines to enhance peer support among educators during the implementation of the CBC in Lesotho	Formulation of recommendations	Discussion and consensus	Practice guidelines to enhance peer support among nurse educators during a curriculum innovation (see Chapter 4)	Guidelines were developed for peer support, highlighting the prerequisites and implications for each of the recommendations included.
d. Validate the developed peer support guidelines	External review of the guidelines	Delphi survey		

Source: Author-generated

- The sample of participants for the qualitative study was only 12 which could be considered small; however, it included all the nurse educators who participated in the implementation of the new curriculum. Data saturation was reached.

The next section presents the personal reflections of the researcher during the journey of working on this study.

6.9 PERSONAL REFLECTIONS

This thesis and its related studies present an under-researched area of educator support during curriculum change. Conducting this study led me to the realisation that although considerable resources are invested in the development of and preparations for curriculum transformation, little is done to ensure ongoing support of educators for appropriate curriculum enactment, particularly in LMICs. There is limited or no accountability or monitoring and evaluation mechanisms put in place by governments and/or institutions to ensure the appropriate implementation of the curriculum change and support of the educators. Without the commitment to support and monitor curriculum implementation processes, such expensive innovations become a waste of resources. Ongoing support for educators during curriculum change is neglected, yet it is the key to the successful implementation of a new curriculum. Undertaking this study gave me the understanding that the strategies used in other change processes can be contextualised to provide tangible solutions for educators during curriculum change.

While engaging in this study, I recognised that constructing new knowledge requires extended hours of iterative processes involving reading, writing, critical thinking, reflection, refining, generating evidence and developing a deeper understanding of the concepts under study. Conceptual and theoretical frameworks and paradigms become critical elements in providing guidance to the entire research study. The knowledge generated should be embedded in and congruent with the relevant frameworks and paradigm without deviating from the research question and the central argument of the

study. It is importance not to lose focus of the research question, as it remains the compass guiding all areas of the study.

My experience in this journey made me realise that a doctoral study is a personal journey contributing to the scientific body of knowledge and academic growth. All the hard work should culminate in a solution to a problem through the contribution of knowledge, such as models, frameworks or guidelines informing practice. The invaluable support and encouragement from my promoter and experienced researchers and colleagues formed the scaffolds to lean on as I ventured into the uncharted waters of doctoral studies. The challenges and shortcomings along the journey helped me to go back to the drawing board, reflect and re-plan my actions, and contributed to my personal growth. Furthermore, the quality improvement mechanisms along the doctoral journey contributed to quality assurance and the credibility of the knowledge generated. I realised that paramount to the success of the entire journey, although difficult, were commitment, sacrifice, being organised and good time management.

6.10 CONCLUSION

The discussion in this final chapter focused on the overview of the study, the research objectives, key findings related to each objective, the conclusions of the study and the recommendations. The contributions of this study, the study limitations and the researcher's personal reflections on the journey were also highlighted.

6.11 COMPREHENSIVE REFERENCE LIST

- Author Guidelines. (2020). *African Journal of Health Professions Education*. Retrieved from: www.ajhpe.org.za/index.php/ajhpe/about/submissions#authorGuidelines [Date accessed: 18 March 2020]
- Author Information Pack. (2020). *International Journal of African Nursing Science*. Retrieved from: www.elsevier.com/locate/ijns [Date accessed: 10 January 2020]
- Author Information Pack. (2020). *International Journal of Nursing Studies*. Retrieved from: www.elsevier.com/locate/ijns [Date accessed: 10 January 2020]
- Bandura, A. (1971). *Social learning theory*. New York, NY: General Learning Press.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175–1184.
- Bang, E. (2013). Hybrid-mentoring programs for beginning elementary Science teachers. *International Journal of Education in Mathematics, Science, and Technology*, 1(1), 1–15.
- Bell, A., & Thomson, K. (2018). Supporting peer observation of teaching: Collegiality, conversation and autonomy. *Innovations in Education and Teaching International*, 55(3) 276–284.
- Bennett, S., Paina, L., Ssenooba, F., Waswa, D., & M'Imunya, J.M. (2013). Mentorship in Africa health research training programs: An exploratory study of Fogarty International Centre Programs in Kenya and Uganda. *Education for Health*, 26(3), 183–187.
- Bennett, S., & Santy, J. (2009). A window on our teaching practice: Enhancing individual online teaching quality through online peer observation and support: A UK case study. *Nurse Education in Practice*, 9(2009), 403–406
- Biggs, J. (2003). Aligning teaching and assessing to course objectives. *Teaching and Learning in Higher Education: New Trends and Innovation*, 2(1), n.p.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32(3), 347–364.

- Botma, Y. (2014a). Implication of accreditation criteria when transforming a traditional nursing curriculum to a competency-based curriculum. *International Journal of Africa Nursing Science*, 1, 23–28.
- Botma, Y. (2014b). How a monster became a princess: Curriculum development. *South African Journal of Higher Education*, 28(6), 1876–1893.
- Botma, Y., Greeff, M., Mulaudzi, F. & Wright, S. (2010). *Research in health sciences*. Cape Town: Pearson.
- Botma, Y., & Labuschagne, M. (2017). Application of the Donabedian quality assurance approach in developing educational programme. *Innovations in Education and Teaching International*, DOI:10.1080/14703297.2017.1378587
- Botma, Y., & Nyoni, C. (2015). What went wrong? A critical reflection on educator midwives' inability to transfer education knowledge. *Journal of Nursing Education and Practice*, 5(6), 1–8.
- Brouwers, M.C., Kho, M.E., Brownman, G.P., Burgers, J.S., Cluzeau, F., Feder, G.,... Zitzelsberger, L. (2010). For the AGREE Next Steps Consortium. AGREE II: advancing guideline development, reporting and evaluation in healthcare. *Canadian Medical Association Journal*, 182, E839–E842.
- Brownie, S.M., Docherty, C., Al-Yateem, N., Gadallah, M.H., & Rossiter, R. (2018). Developing a national competency-based curriculum for technical nurses in Egypt. *Eastern Mediterranean Health Journal*, 24(8), 711–721.
- Bryant, A.L., Brody, A., Perez, A., Shillam, C., Edelman, L.S., Bond, S.M., ...Siegel, E. (2015). Development and implementation of peer mentoring program for early career gerontological faculty. *Journal of Nursing Scholarship*, 47(3), 258–266.
- Bucciarelli, L. (2015). A review of innovation and change management: Stage model and power influence. *Universal Journal of Management*, 3(1), 36–42.
- Bureau of Statistics. (2018). *2016 Population and Housing Census. Analytic report. Population Dynamics Vol IIIA*. Maseru: Government of Lesotho.
- Burgess, T., & Cilliers, F., 2017. A framework for ethical educational research: principles and application. Retrieved from www.healthedu.uct.ac.za/framework-ethical-educational-research-principles-and-application [Date accessed 16 June, 2017].

- Carpenter, J.P., & Linton, J.N. (2016). Educamp unconferences: Educators' perspectives on an untraditional professional learning experience. *Teaching and Teacher Education*, *57*(2016), 97–108.
- Chukwu, C.I., Mezieobi, D.I., Uguwanyi, B.E., & Okopoebo, C.C. (2019). Monitoring and evaluation on effective delivery of social studies for improved academic performance. *Review of European Studies*, *11*(1), 175–182.
- Chung, T.Y., & Chen, Y.L. (2018). Exchange social support on online teacher groups: Relation to teach self-efficacy. *Telematics and Informatics*, *35*(5), 1542–1552.
- Clark, M., Raffray, M., Hendricks, K., & Gagnon, A.J. (2016). Global and public health core competencies for nursing education: A systematic review of essential competencies. *Nurse Education Today*, *40*, 173–180.
- Cope, D. (2014). Meanings and methods: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, *41*(1), 89–91.
- Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Los Angeles, CA: Sage.
- Darling-Hammond, L., Hyler, M.E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.
- Dath, D., & Iobst, W. (2010). The importance of faculty development in the transition to competency-based medical education. *Medical Teacher*, *32*(8), 683–686.
- Dawes, M., Summerskill, W., Glasziou, P., Cartabellotta, A., Martin, J., Hopayian, K., ... Osborne, J. (2005). Sicily statement on evidence-based practice. *BMC Medical Education*, *5*(1), 1.
- Dennis, C.L. (2003). Peer support within a health care context: A concept analysis. *International Journal of Nursing*, *40*(3), 321–332.
- De Vos, A.S., Strydom, H., Fouché, C.B., & Delpont, C.S.L. (2012). *Research at grass roots for the social sciences and human service professions* (4th ed.). Pretoria: Van Schaik.
- Dole, S., Bloom, L., & Kowalske, K. (2016). Transforming pedagogy: Changing perspectives from teacher-centered to learner-centered. *Interdisciplinary Journal of Problem-Based Learning*, *10*(1). Available at: <https://doi.org/10.7771/1541-5015.1538>. [Date accessed: 10 January 2020]

- Feller, F. (2018). Transforming nursing education: A call for a conceptual approach. *Nursing Education Perspectives*, 39(2), 105-106.
- Ferguson, P.C., Caverzagie, K.J., Nousiainen, M., & Snell, L. (2017). Changing the culture of medical training: An important step toward the implementation of competency-based medical education. *Medical Teacher*, 39(6), 599–602.
- Fleming, G.M., Simmons, J.H., Xu, M., Gessel, S.B., Brown, R.F., Cutrer, W.B., ... Cooper, W.O. (2015). A facilitated peer mentoring program for junior faculty to promote professional development and peer networking. *Academic Medicine*, 90(6), 819–826.
- Frank, J.K., Snell, L.S., Cate, O.T., Holmboe, E.S., Carraccio, C., Swing, S.R., ... Harris, K.A. (2010). Competency-based medical education: Theory to practice. *Medical Teacher*, 32(8), 638–645.
- Frenk, J., Chen, L., Bhutta, Z.A., Cohen, J., Crisp, N., Evans, T., ... Zurayk, H. (2010). Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *The Lancet*, 376(9756), 1923–1958.
- Furimsky, I., Arts, I., & Lampson, S. (2014). Developing a successful peer-to-peer mentoring program. *Applied Clinical Trials*, 22(12), 27–30.
- Gagliardi, A.R., Webster, F., Perrier, L., Bell, M., & Straus, S. (2014). Exploring mentorship as a strategy to build capacity for knowledge translation research and practice: A scoping systematic review. *Implementation Science*, 13(122), 1–10.
- Galea, S., Fried, L., Walker, J., Rudenstine, S., Glover, J., & Begg, M. (2015). Developing New Columbia Core Curriculum: A Case Study in Managing Radical Curriculum Change. *American Journal of Public Health*, S17–S21.
- Garza, R., & Harter, R.A. (2016). Perspectives from pre-service mathematics and science teachers in urban residency program: Characteristics of effective mentor. *Education and Urban Society*, 48(4), 403–420.
- Gravina, E. (2017). Competency-based education and its effects on nursing education: A literature review. *Teaching and Learning in Nursing*, 12, 117–121.
- Grove, S.K., Gray, J.R., & Sutherland, S. (2016). *Burns and Grove's the practice of nursing research: Appraisal, synthesis, and generation of evidence* (8th ed.). Philadelphia: Elsevier Saunders.

- Gruba, P., Moffat, A., Sondergaard, H., & Zobel, J. (2004). *What drives curriculum change?* Paper presented at the Australasian Computing Education Conference, Dunedin.
- Hall, L.W., & Zierler, B.K. (2015). Interprofessional education and practice guide no. 1: Developing faculty to effectively facilitate interprofessional education. *Journal of Interprofessional Care, 29(1)*, 3–7.
- Halpin, D., Dickson, M., Power, S., Whitty, G., & Gewirtz, S. (2004). Curriculum innovation within an evaluative state: Issues of risk and regulation. *The Curriculum Journal, 15(3)*, 197–206.
- Harden, R. (2013). Curriculum planning and development. In J. Dent & R. Harden (Eds.), *A practical guide for medical teachers* (pp. 8–15). London: Churchill Livingstone Elsevier.
- Harpe, B., & Thomas, I. (2009). Curriculum change in universities. *Journal of Education for Sustainable Development, 3(1)*, 75–85.
- Harrel, M., & Bradley, M. (2009). *Data collection methods: Semi-structured interviews and focus groups*. Santa Monica, CA: RAND Corporation.
- Hasson, F., Keeney, S., & Mckenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing, 32(4)*, 1008–1015.
- Horton-Deutsch, S., & Sherwood, G. (2017). Turning vision into action: Reflection to develop professional practice. In S. Horton-Deutsch & G. Sherwood (Eds.), *Reflective practice: Transforming education and improving outcomes* (pp. 1–26). Indianapolis, IN: Sigma Theta Tau International.
- Iwasiw, C., & Goldenberg, D. (2015). *Curriculum development in nursing education*. Burlington: Jones & Bartlett Learning.
- Kivunja, C., & Kuyini, A.B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education, 6(5)*, 26–41.
- Klinge, C. (2015). A conceptual framework for mentoring in a learning organization. *Adult Learning, 26(4)*, 160–166.
- Knowles, M. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Englewood Cliffs, NJ: Cambridge Adult Education.

- Kram, K., & Isabella, L.A. (1985). Mentoring alternatives: The role of peer relationships in career development. *The Academy of Management Journal*, 28(1), 110–132.
- Lewin, S., & Glenton, C. (2018). Are we entering a new era for qualitative research? Using qualitative evidence to support guidance and guideline development by the World Health Organisation. *International Journal for Equity in Health*, 17(1), 126.
- Lincoln, Y.S., & Guba, E.G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New directions for program evaluation*, 1986(30), 73–84.
- London, M. (2003). Antecedents and consequences of self-verification: Implications for individual and group development. *Human Resource Development Review*, 2(3), 273–293.
- Louws, M.L., Meirink, J.A., van Veen, K., & van Driel, J. H. (2017). Teachers' self-directed learning and teaching experience: What, how, and why teachers want to learn. *Teaching and Teacher Education*, 66(2017), 171–183.
- Magers, T. (2014). An EBP mentor and unit-based EBP team: a strategy for successful implementation of a practice change to reduce catheter-associated urinary tract infections. *Worldviews on Evidence-Based Nursing*, 11(5), 341–343.
- Maier, C.B., & Aiken, L.H. (2016). Task shifting from physicians to nurses in primary care in 39 countries: A cross-country comparative study. *The European Journal of Public Health*, 26(6), 927–934.
- Makhakhe, A., & Khalanyane, T. (2013). Nurses' experience of the transition from student to professional practitioner in a public hospital in Lesotho. *International Journal of Nursing Science Research*, 1(1), 1–22.
- Mathews, B.W., & Linski, C.M. (2016). Shifting the paradigm: Re-evaluating resistance to organizational change. *Journal of Organizational Change Management*, 29(6), 963–972.
- McLean, M., Cilliers, F., & Van Wyk, J.M. (2008). Faculty development: Yesterday, today and tomorrow. *Medical Teacher*, 2008(30), 555–584.

- Melle, E.V., Frank, J.R, Holmboe, E.S, Dagnone, D., Stockley, D., Sherbino, J., & International Competency-based Medical Education Collaborators. (2019). A Core Components Framework for Evaluating Implementation of Competency-Based Medical Education Programs. *Academic Medicine*, *94*(7), 1002–1009.
- Middleton, L., Howard, A., Dohrn, J., Zinkernagel, D., Hopson, D., Aranda-Naranjo, B., ... El-Sadr, W. (2014). The Nursing Education Partnership Initiative (NEPI): Innovations in nursing and midwifery education. *Academic Medicine*, *89*(8), S24–S28.
- Ministry of Health. (2013). *Lesotho Health Sector Strategic Plan 2012/13–2016/17*. Maseru: Government Printers.
- Monk, C., & Purnell, L. (2014). What constitutes ‘peer support’ within peer supported development? *Journal of Pedagogical*, *4*(1), n.p
- Mortel, T. F., & Bird, J.L. (2010). Continuous curriculum review in Bachelor of Nursing Program: Preventing curriculum drift and improving quality. *Journal of Nursing Education*, *49*(10), 592–594.
- Niehaus, E., & William, L. (2016). Faculty transformation in curriculum transformation: the role of faculty development in campus internationalization. *Innovative Higher Education*, *41*(2016), 59–74.
- Nyoni, C., & Botma, Y. (2018). Sustaining a newly implemented competence-based curriculum midwifery programme in Lesotho: Emerging issues. *Midwifery*, *59*, 115–117.
- Nyoni, C., & Botma, Y. (2019). Implementing a competency-based midwifery programme in Lesotho: A gap analysis. *Nurse Education in Practice*, *34*, 72–78.
- Patton, K., & Parker, M. (2017). Teacher education communities of practice: More than a culture of collaboration. *Teaching and Teacher Education*, *67*, 351–360.
- Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice*. Philadelphia, PA: Wolter Kluwer, Lippincott Williams & Wilkins.
- Pololi, L., Knight, S., & Dunn, K. (2004). Facilitating scholarly writing in academic medicine: Lessons learned from collaborative peer mentoring program. *Journal of General Internal Medicine*, *19*(1), 64–68.

- Portela, G.Z, Fehn, A.C, Ungerer, R., & Poz, M. (2017). Human resources for health: Global crisis and international cooperation. *Ciência & Saúde Coletiva*, 22(7), 2237–2246.
- Provident, I. (2006). Outcomes of selected cases from the American Occupational Therapy Foundation's Curriculum Mentoring Project. *American Journal of Occupational Therapy*, 60(5), 563–576.
- Raymond, C., Profetto-McGrath, J., Myrick, F., & Streaan W.B. (2017). An integrative review of concealed connection: Nurse educators' critical thinking. *Journal of Nursing Education*, 56(11), 648 –654.
- Rehman, A.A., & Alharthi, K. (2016). An introduction to research paradigms. *International Journal of Educational Investigations*, 3(8), 51–59.
- Ringberg, T., Reihlen, M., & Ryden, P. (2019). The technology-mindset interactions: Leading to incremental, radical, revolutionary innovations. *Industrial Marketing Management*, 79, 102–113.
- Rogers, E. (1983). *Diffusion of Innovation*. New York, NY: The Free Press.
- Rose, S., Shah, B.J, Onken, J., DeCross, A.J., Davis, M.H., Jain, R., ... Marks, L.N. (2015). Introducing the Gastroenterologist-accountable Professionalism in Practice (G-APP) pathway: Bridging the G-APP – replacing MOC with a model for lifelong learning and accountability. *Gastroenterology*, 149(6), 1609–1626.
- Rosenberg, M. (2018). Toward more meaningful accountability to the public: Assessing lifelong competence of physicians. *Clinical Journal of the American Society of Nephrology*, 13(1), 167–169.
- Sahin, I. (2006). Detailed review of Rogers' diffusion of innovations theory and educational technology-related studies based on Rogers' theory. *Turkish Online Journal of Educational Technology*, 5(2), 14–23
- Schick-Makaroff, K., MacDonald, M., Plummer, M., Burgess, J., & Neander, W. (2016). What synthesis methodology should I use? A review and analysis of approaches to research synthesis. *AIMS Public Health*, 3(1), 172–251.

- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of scientific, interpretive and critical research paradigms. *English Language Teaching*, 5(9),10–16.
- Sexton, J.M., Lord, J.A., Brenner, C.J., Curry, C.E., Stanley, I.S., & Cowley, D.S. (2016). Peer mentoring process for psychiatry curriculum revision: Lessons learned from the "Mod Squad". *Academic Psychiatry*, 40(3), 436–440.
- Shahin, A., Barati, A., Dabestani, R., & Khalili, A. (2017). Determining factors influencing radical and incremental innovation with a case study in the petrochemical industry. *International Journal of Business Innovation and Research*, 12(1), 62–79.
- Shawa, M., & Botma, Y. (2020a). Peer support strategies that enhance implementation of an innovation: An integrative review. University of the Free State, Bloemfontein, South Africa.
- Shawa, M., & Botma, Y. (2020b). Peer support during the implementation of a new curriculum: Experiences of nurse educators. University of the Free State, Bloemfontein, South Africa.
- Shawa, M., & Botma, Y. (2020). Practice guidelines for peer support among educators during a curriculum innovation. *African Journal of Health Professions Education*. (Accepted for publication, August 2020).
- Shi, H. (2017). Planning effective educational programmes for adult students. *World Journal of Education*, 7(3), 79–83.
- Snyman, S. (2018). Academy of Science of South Africa (ASSAf). Reconceptualising of health professions education in South Africa: Consensus study report. Available from: DOI <http://dx.doi.org/10.17159/assaf.2018/0021>.
- Souza, M., Silva, M., & Carvalho, R. (2010). Integrative review: What is it? How to do it? *Einstein (São Paulo)*, 8(1), 102–106.
- Sox, H. (2017). Conflict of interest in practice guidelines panels. *JAMA*, 317(17), 1739–1740.

- Stetler, C.B., Morsi, D., Rucki, S., Broughton, S., Corrigan, B., Fitzgerald, J., ... Sheridan, E.A. (1998). Utilization-focused integrative reviews in a nursing service. *Applied Nursing Research, 11(4)*, 195–206.
- Sunderland, K., & Mishkin, W. (2013). *Mental Health Commission of Canada: Guidelines for the practice and training of peer support*. Retrieved from <http://mentalhealth.commission.ca>. [Date accessed: 16 February, 2020]
- Tanner, C. (2006). Thinking like a nurse: a research-based model of clinical judgement in nursing. *Journal of Nursing Education, 45(6)*, 204–211
- Torraco, R.J. (2016). Writing integrative reviews: Using the past and present to explore the future. *Human Resource Development Review, 15(4)*, 404–428.
- Watson, L.C., Raffin-Bouchal, S., Melnick, A., & Whyte, D. (2012). Designing and implementing an ambulatory oncology nursing peer preceptorship programme: Using grounded theory research to guide program development. *Nursing research and Practice, 2012(451354)*, 1–15.
- Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing, 52(5)*, 546–553.
- Wilson, E.A, Rudy, D., Elam, C., Pfeifle, A., & Straus, R. (2012). Preventing curriculum drift: Sustaining change and building upon innovation. *Annals of Behavioral Science and Medical Education, 18(2)*, 23–26.
- World Health Organization. (2013). *Transforming and scaling up health professionals' education and training*. Geneva: WHO Press.
- World Health Organization. (2014). *Handbook for guideline development* (2nd ed.). Geneva: WHO Press.
- Xu, M., David, J., & Kim, S. (2018). The Fourth Industrial Revolution: Opportunities and challenges. *International Journal of Financial Research, 9(2)*, 90–95.

ADDENDUM A

***Johns Hopkins Nursing Evidence-Based
Practice Research Evidence Appraisal
Tool***

Johns Hopkins Nursing Evidence-Based Practice Appendix E: Research Evidence Appraisal Tool

Evidence Level and Quality: _____

Article Title: _____		Number: _____	
Author(s): _____		Publication Date: _____	
Journal: _____			
Setting: _____		Sample (Composition & size): _____	
Does this evidence address my EBP question?		<input type="checkbox"/> Yes	<input type="checkbox"/> No Do not proceed with appraisal of this evidence
Level of Evidence (Study Design)			
A. Is this a report of a single research study? <i>If No, go to B.</i>			
<ol style="list-style-type: none"> 1. Was there manipulation of an independent variable? 2. Was there a control group? 3. Were study participants randomly assigned to the intervention and control groups? 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> LEVEL I → <input type="checkbox"/> LEVEL II → <input type="checkbox"/> LEVEL III →
<p>If Yes to all three, this is a Randomized Controlled Trial (RCT) or Experimental Study</p> <p>If Yes to #1 and #2 and No to #3, OR Yes to #1 and No to #2 and #3, this is Quasi Experimental (some degree of investigator control, some manipulation of an independent variable, lacks random assignment to groups, may have a control group)</p> <p>If No to #1, #2, and #3, this is Non-Experimental (no manipulation of independent variable, can be descriptive, comparative, or correlational, often uses secondary data) or Qualitative (exploratory in nature such as interviews or focus groups, a starting point for studies for which little research currently exists, has small sample sizes, may use results to design empirical studies)</p>			
<p>NEXT, COMPLETE THE BOTTOM SECTION ON THE FOLLOWING PAGE, "STUDY FINDINGS THAT HELP YOU ANSWER THE EBP QUESTION"</p>			

**Johns Hopkins Nursing Evidence-Based Practice
Appendix F: Non-Research Evidence Appraisal Tool**

Evidence Level & Quality: _____

Article Title:		Number:	
Author(s):		Publication Date:	
Journal:			
Does this evidence address the EBP question?		<input type="checkbox"/> Yes	<input type="checkbox"/> No Do not proceed with appraisal of this evidence
<input type="checkbox"/> Clinical Practice Guidelines: Systematically developed recommendations from nationally recognized experts based on research evidence or expert consensus panel. LEVEL IV			
<input type="checkbox"/> Consensus or Position Statement: Systematically developed recommendations based on research and nationally recognized expert opinion that guides members of a professional organization in decision-making for an issue of concern. LEVEL IV			
<ul style="list-style-type: none"> • Are the types of evidence included identified? • Were appropriate stakeholders involved in the development of recommendations? • Are groups to which recommendations apply and do not apply clearly stated? • Have potential biases been eliminated? • Were recommendations valid (reproducible search, expert consensus, independent review, current, and level of supporting evidence identified for each recommendation)? • Were the recommendations supported by evidence? • Are recommendations clear? 		<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No
<input type="checkbox"/> Literature Review: Summary of published literature without systematic appraisal of evidence quality or strength. LEVEL V			
<ul style="list-style-type: none"> • Is subject matter to be reviewed clearly stated? • Is relevant, up-to-date literature included in the review (most sources within last 5 years or classic)? • Is there a meaningful analysis of the conclusions in the literature? • Are gaps in the literature identified? • Are recommendations made for future practice or study? 		<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No
<input type="checkbox"/> Expert Opinion: Opinion of one or more individuals based on clinical expertise. LEVEL V			
<ul style="list-style-type: none"> • Has the individual published or presented on the topic? • Is author's opinion based on scientific evidence? • Is the author's opinion clearly stated? • Are potential biases acknowledged? 		<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No

**Johns Hopkins Nursing Evidence-Based Practice
Appendix F: Non-Research Evidence Appraisal Tool**

Organizational Experience:			
<input type="checkbox"/> Quality Improvement: Cyclical method to examine organization-specific processes at the local level. LEVEL V			
<input type="checkbox"/> Financial Evaluation: Economic evaluation that applies analytic techniques to identify, measure, and compare the cost and outcomes of two or more alternative programs or interventions. LEVEL V			
<input type="checkbox"/> Program Evaluation: Systematic assessment of the processes and/or outcomes of a program and can involve both quantitative and qualitative methods. LEVEL V			
Setting:		Sample (composition/size):	
<ul style="list-style-type: none"> • Was the aim of the project clearly stated? • Was the method adequately described? • Were process or outcome measures identified? • Were results adequately described? • Was interpretation clear and appropriate? • Are components of cost/benefit analysis described? 		<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> N/A
<input type="checkbox"/> Case Report: In-depth look at a person, group, or other social unit. LEVEL V			
<ul style="list-style-type: none"> • Is the purpose of the case report clearly stated? • Is the case report clearly presented? • Are the findings of the case report supported by relevant theory or research? • Are the recommendations clearly stated and linked to the findings? 		<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No
Community Standard, Clinician Experience, or Consumer Preference			
<input type="checkbox"/> Community Standard: Current practice for comparable settings in the community LEVEL V			
<input type="checkbox"/> Clinician Experience: Knowledge gained through practice experience LEVEL V			
<input type="checkbox"/> Consumer Preference: Knowledge gained through life experience LEVEL V			
Information Source(s):		Number of Sources:	
<ul style="list-style-type: none"> • Source of information has credible experience. • Opinions are clearly stated. • Identified practices are consistent. 		<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> No <input type="checkbox"/> N/A
Findings that help you answer the EBP question:			

**Johns Hopkins Nursing Evidence-Based Practice
Appendix F: Non-Research Evidence Appraisal Tool**

<p>QUALITY RATING FOR CLINICAL PRACTICE GUIDELINES, CONSENSUS OR POSITION STATEMENTS (LEVEL IV)</p> <p>A High quality: Material officially sponsored by a professional, public, private organization, or government agency; documentation of a systematic literature search strategy; consistent results with sufficient numbers of well-designed studies; criteria-based evaluation of overall scientific strength and quality of included studies and definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years.</p> <p>B Good quality: Material officially sponsored by a professional, public, private organization, or government agency; reasonably thorough and appropriate systematic literature search strategy; reasonably consistent results, sufficient numbers of well-designed studies; evaluation of strengths and limitations of included studies with fairly definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years.</p> <p>C Low quality or major flaws: Material not sponsored by an official organization or agency; undefined, poorly defined, or limited literature search strategy; no evaluation of strengths and limitations of included studies, insufficient evidence with inconsistent results, conclusions cannot be drawn; not revised within the last 5 years.</p>
<p>QUALITY RATING FOR ORGANIZATIONAL EXPERIENCE (LEVEL V)</p> <p>A High quality: Clear aims and objectives; consistent results across multiple settings; formal quality improvement or financial evaluation methods used; definitive conclusions; consistent recommendations with thorough reference to scientific evidence</p> <p>B Good quality: Clear aims and objectives; formal quality improvement or financial evaluation methods used; consistent results in a single setting; reasonably consistent recommendations with some reference to scientific evidence</p> <p>C Low quality or major flaws: Unclear or missing aims and objectives; inconsistent results; poorly defined quality improvement/financial analysis method; recommendations cannot be made</p>
<p>QUALITY RATING FOR LITERATURE REVIEW, EXPERT OPINION, COMMUNITY STANDARD, CLINICIAN EXPERIENCE, CONSUMER PREFERENCE (LEVEL V)</p> <p>A High quality: Expertise is clearly evident; draws definitive conclusions; provides scientific rationale; thought leader in the field</p> <p>B Good quality: Expertise appears to be credible; draws fairly definitive conclusions; provides logical argument for opinions</p> <p>C Low quality or major flaws: Expertise is not discernable or is dubious; conclusions cannot be drawn</p>

ADDENDUM B

CASP tool



10 questions to help you make sense of qualitative research

How to use this appraisal tool

Three broad issues need to be considered when appraising a qualitative study:

- Are the results of the study valid? (Section A)
- What are the results? (Section B)
- Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions.

There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.:

Critical Appraisal Skills Programme (2017). CASP (insert name of checklist i.e. Qualitative Research) Checklist. [online] Available at: *URL*. Accessed: *Date Accessed*.

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Screening Questions

1. Was there a clear statement of the aims of the research?

Yes Can't tell No

HINT: Consider

- What was the goal of the research?
- Why it was thought important?
- Its relevance

2. Is a qualitative methodology appropriate?

Yes Can't tell No

HINT: Consider

- If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants
- Is qualitative research the right methodology for addressing the research goal?

Is it worth continuing?



Detailed questions

3. Was the research design appropriate to address the aims of the research?

Yes Can't tell No

HINT: Consider

- If the researcher has justified the research design (E.g. have they discussed how they decided which method to use)?

4. Was the recruitment strategy appropriate to the aims of the research?

Yes

Can't tell

No

HINT: Consider

- If the researcher has explained how the participants were selected
- If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study
- If there are any discussions around recruitment (e.g. why some people chose not to take part)

5. Was the data collected in a way that addressed the research issue?

Yes

Can't tell

No

HINT: Consider

- If the setting for data collection was justified
- If it is clear how data were collected (e.g. focus group, semi-structured interview etc.)
- If the researcher has justified the methods chosen
- If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted, or did they use a topic guide)?
- If methods were modified during the study. If so, has the researcher explained how and why?
- If the form of data is clear (e.g. tape recordings, video material, notes etc)
- If the researcher has discussed saturation of data

6. Has the relationship between researcher and participants been adequately considered?

Yes

Can't tell

No

HINT: Consider

- If the researcher critically examined their own role, potential bias and influence during
 - (a) Formulation of the research questions
 - (b) Data collection, including sample recruitment and choice of location
- How the researcher responded to events during the study and whether they considered the implications of any changes in the research design

7. Have ethical issues been taken into consideration?

Yes

Can't tell

No

HINT: Consider

- If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained
- If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)
- If approval has been sought from the ethics committee

8. Was the data analysis sufficiently rigorous?

Yes

Can't tell

No

HINT: Consider

- If there is an in-depth description of the analysis process
- If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data?
- Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process
- If sufficient data are presented to support the findings
- To what extent contradictory data are taken into account
- Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

9. Is there a clear statement of findings?

Yes Can't tell No

HINT: Consider

- If the findings are explicit
- If there is adequate discussion of the evidence both for and against the researchers arguments
- If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)
- If the findings are discussed in relation to the original research question

10. How valuable is the research?

HINT: Consider

- If the researcher discusses the contribution the study makes to existing knowledge or understanding e.g. do they consider the findings in relation to current practice or policy?, or relevant research-based literature?
- If they identify new areas where research is necessary
- If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

ADDENDUM C

Critical appraisal – Case study

Critical Appraisal of a Case Study

Appraisal questions	Yes	Can't tell	No
1. <i>Did the study address a clearly focused question / issue?</i>			
2. <i>Is the research method (study design) appropriate for answering the research question?</i>			
3. <i>Are both the setting and the subjects representative with regard to the population to which the findings will be referred?</i>			
4. <i>Is the researcher's perspective clearly described and taken into account?</i>			
5. <i>Are the methods for collecting data clearly described?</i>			
6. <i>Are the methods for analyzing the data likely to be valid and reliable? Are quality control measures used?</i>			
7. <i>Was the analysis repeated by more than one researcher to ensure reliability?</i>			
8. <i>Are the results credible, and if so, are they relevant for practice?</i>			
9. <i>Are the conclusions drawn justified by the results?</i>			
10. <i>Are the findings of the study transferable to other settings?</i>			

Adapted from Crombie, *The Pocket Guide to Critical Appraisal*; the critical appraisal approach used by the Oxford Centre for Evidence Medicine, checklists of the Dutch Cochrane Centre, BMJ editor's checklists and the checklists of the EPPI Centre.

ADDENDUM D

JHNEBP evidence rating scale

JHNEBP EVIDENCE RATING SCALES

STRENGTH of the Evidence	
Level I	Experimental study/randomized controlled trial (RCT) or meta analysis of RCT
Level II	Quasi-experimental study
Level III	Non-experimental study, qualitative study, or meta-synthesis.
Level IV	Opinion of nationally recognized experts based on research evidence or expert consensus panel (systematic review, clinical practice guidelines)
Level V	Opinion of individual expert based on non-research evidence. (Includes case studies; literature review; organizational experience e.g., quality improvement and financial data; clinical expertise, or personal experience)

QUALITY of the Evidence		
A High	Research	consistent results with sufficient sample size, adequate control, and definitive conclusions; consistent recommendations based on extensive literature review that includes thoughtful reference to scientific evidence.
	Summative reviews	well-defined, reproducible search strategies; consistent results with sufficient numbers of well defined studies; criteria-based evaluation of overall scientific strength and quality of included studies; definitive conclusions.
	Organizational	well-defined methods using a rigorous approach; consistent results with sufficient sample size; use of reliable and valid measures
	Expert Opinion	expertise is clearly evident
B Good	Research	reasonably consistent results, sufficient sample size, some control, with fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence
	Summative reviews	reasonably thorough and appropriate search; reasonably consistent results with sufficient numbers of well defined studies; evaluation of strengths and limitations of included studies; fairly definitive conclusions.
	Organizational	Well-defined methods; reasonably consistent results with sufficient numbers; use of reliable and valid measures; reasonably consistent recommendations
	Expert Opinion	expertise appears to be credible.
C Low quality or major flaws	Research	little evidence with inconsistent results, insufficient sample size, conclusions cannot be drawn
	Summative reviews	undefined, poorly defined, or limited search strategies; insufficient evidence with inconsistent results; conclusions cannot be drawn
	Organizational	Undefined, or poorly defined methods; insufficient sample size; inconsistent results; undefined, poorly defined or measures that lack adequate reliability or validity
	Expert Opinion	expertise is not discernable or is dubious.

**A study rated an A would be of high quality, whereas, a study rated a C would have major flaws that raise serious questions about the believability of the findings and should be automatically eliminated from consideration.*

Newhouse R, Dearholt S, Poe S, Pugh LC, White K. The Johns Hopkins Nursing Evidence-based Practice Rating Scale. 2005. Baltimore, MD, The Johns Hopkins Hospital; Johns Hopkins University School of Nursing.

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ADDENDUM E

Data extraction tool

Data Extraction Tool

Research Question: What peer support strategies enhanced implementation of an innovation or a new programme among professionals?

Evidence number:

1. Biographic details of the evidence

Title of the Evidence:

Author(s):

Source:

Year:

Type of Evidence:

2. Methods

Complete the question in this section based on the relevant evidence provided

- 2.1 What **design** was used in this evidence?
- 2.2 Who was the **population and sample** for this evidence?
- 2.3 What is the **data collection method** described in this evidence?
- 2.4 What is the **context** of this evidence?

3. Innovation or New programme

From the evidence what was the innovation or new programme that was implemented? Write your response in the blank space below number 3.1. Please be as elaborate as possible.

- 3.1 What **innovation or new programme** is describe in the evidence?

4. Data extraction central questions

For each of the questions below describe the relevant response as elaborate as you can. If the aspect of the question is not addressed in the article, please note it as 'not addressed' as the response below.

- 4.1 What peer support strategy was used to enhance the implementation of the innovation or the new programme?
- 4.2 How was the peer support strategy used?
- 4.3 Who used the peer support strategy?
- 4.4 Why was the support strategy used?
- 4.5 Where was the peer support strategy used?
- 4.6 What was the outcome of using the peer support strategy?
- 4.7 What were the challenges experienced during the peer support strategy?
- 4.8 What lessons were learnt from the peer support strategy?

End of the tool

ADDENDUM F

Semi-structured interview

Interview Tool for Key informants (Support Providers)

Central question for the unstructured interview

You have been identified as one of the facilitators who were involved in the implementation of the competency-based curriculum (CBC) in the midwifery programme.

Question:

Please share with me your experiences of the support you provided to the nurse educators during the implementation of the new curriculum in the midwifery programme

Possible probing questions

- Can you elaborate on the factors that led you to engage in the collaborative support activities?
- Can you share more about how the collaborative support activities were initiated and implemented?
- How did you feel about engaging in the collaborative activities with your colleagues?
- How helpful were the collaborative activities that you participated in with your colleagues in relation to implementing the new curriculum?
- What would say you personally benefit from these collaborative support activities?
- To what extent was the support from collaborative activities adequate?
- What role did the institutional leaders play during your collaborative activities?

- How did you experience the monitoring and evaluation of these collaborative activities?
- What would you say were the challenges of these collaborative activities, if any?
- How did you overcome the challenges during these collaborative support activities?

Interview Tool for Midwifery Nurse Educators

Central question for the unstructured interview

You have been identified as one of the facilitators who were involved in the implementation of the competency-based curriculum (CBC) in the midwifery programme.

Please share with me your experiences of the sessions where you collaborated with other educators to develop materials and acquire/improve skills to enable you implement the CBC in the midwifery programme.

Possible probing questions

- Can you elaborate on the factors that led you to participate in the collaborative support activities?
- Can you share more about how the collaborative support activities were initiated and implemented?
- How did you feel about engaging in the collaborative activities with your colleagues?
- How helpful were the collaborative activities that you participated in with your colleagues in relation to implementing the new curriculum?
- What would say you personally benefit from these collaborative support activities?
- To what extent was the support from collaborative activities adequate?
- What role did the institutional leaders play during your collaborative activities?
- How did you experience the monitoring and evaluation of these collaborative activities?
- What would you say were the challenges of these collaborative activities, if any?

ADDENDUM G

Information brochure – Qualitative study

Information brochure for participants

Study Title: Peer support guidelines for nurse educators during curriculum innovation in Lesotho

Principal Investigator's Name: Mirriam Shawa

Principal Investigator's title: Doctoral Candidate

Principal Investigator's Institution: University of Free State

Principal Investigator's contact details: Mobile +26658404454; email mmshawa@yahoo.co.uk

Principal Investigator's Supervisor: Professor Y. Botma

Purpose of study

This study is designed to develop guidelines that may enhance peer support among nurse educators during competence based curriculum (CBC) implementation in Lesotho. CBC is a new curriculum that uses innovative teaching and learning approaches and requires supportive strategies to enhance its implementation.

Invitation to participate in study

You are invited to participate in phase II of this multi-phased study which will include describing experiences of midwifery educators through an exploratory qualitative. Unstructured interviews will be used to collect data for the qualitative study. The analysed data will be triangulated with integrative review evidence to develop peer support guidelines during phase III. Your participation in this study is voluntary and be informed that you are free to withdraw at any time without giving any reason. If you withdraw your

participation, your data will be withdrawn and destroyed. You are requested to read this information brochure and ask questions to seek clarification regarding the study.

Confidentiality

All the information obtained during the exploratory qualitative study and any personal details in possession of the researcher will be treated with strictest confidence and not be traced back to you. Code will be assigned and no names will be used in any discussion or report.

Benefits/reward

There are no direct benefits or rewards given for participating in the study. However, the guidelines that will be developed will benefit educators during implementation of curriculum innovation.

Contact details for questions

Should you require any information regarding this study or its findings do not hesitate to contact the Principal Investigator on mobile number +266 5840 4454 or email: mmshawa@yahoo.co.uk. Should you feel that you were unfairly treated you may report to the Chairperson of Health Sciences research Ethics Committee at the University of Free State in Bloemfontein, South Africa and Ministry of Health Research Coordinating Unit in Lesotho.

Dissemination of findings

Results from this study will be disseminated by means of conference proceedings and published articles.

The researcher kindly requests your consent to participate in this study. If you are willing to participate append your signature on the attached consent form and return it to the researcher. The consent form will be kept separate from the interview transcripts.

ADDENDUM H

Consent form

Consent Form

I confirm that I have read and understand the participant information leaflet for this study. I have also had an opportunity to ask questions which have been answered to my satisfaction.

I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. If I withdraw my data will be removed from the study and will be destroyed.

I further understand that confidentiality will be assured and that not my name but a code assigned to me will be used. I have also been assured that information that I will share will not be traced back to me.

Based on the above, I voluntarily agree to participate in this study.

Signature of participant: _____ Date: _____

Signature of researcher: _____ Date: _____

ADDENDUM I

Interview transcript samples

TRANSCRIPT 1

SUPPORT PROVIDER

Interviewer: Am conducting a study which ultimately will lead to the development of guidelines for peer support. You have been identified as one of the educators who supported other nurse educators in the implementation of the competence based curriculum in the midwifery program. Please can you share with me your experiences of the collaborative support sessions you provided to the nurse educators during the implementation of the competency-based curriculum (CBC) in the midwifery programme?

Response: Absolutely! So, so the, the initial story with the implementation was uumm, you would realize that a lot of the... there were two issues that were coming on board. The first issue was an issue of knowledge uumm, or let's put it as competency deficit where they felt they were not having that ability to, to do. And then the second issue was working against resistance to change. So you would, you needed to sort of generate approaches that deal with issues of knowledge deficit and issues of creating exemplary practice such that you are hoping this is what is going to sort of going to attack that issue of resistance to change. In my understanding I thought the resistance to change would also have been as a result of knowledge deficit or result of poor motivation to change, why are we changing. And we haven't seen any alternative to say this is better. So it sort of then grounds that level of resistance. So in my, in my approach which initially was not as structured as it has grown to be now, it was a matter of uumm..., identifying what is the challenge with staff. Is it an issue of resistance or is it an issue of competence deficit? And then if it's an issue of competence deficit, was it now an approach of saying, lets design a workshop, and let's design a workshop according to what is missing, for example

you get new staff that really are eager to work but are not so sure what to do. So you start a workshop on constructivism, basic principles of a curriculum....

Interviewer: ...So was it basically the knowledge part of it?

Response: So there was that part of knowledge for some staff and then there was resistance part for other staff. And, and with the knowledge part that's where the workshops on competence issues were coming. Not competence for the students, but competence for the staff, how can they best implement this in their own setting. And then in resistance again it was an issue of saying how do we create that exemplary practice, which means in some cases you go to class with the same participant, I mean lecturer. You are aware that you have discussed maybe for example, how to do an activity, activity X, but you still feel that this person is not convinced and they are not sure if it will ever work, so now going into class with them and actually initiating that form of activity and being with them and holding their hand sort of left it a little bit better to move uumm, in that, in that regard. So initially that was, that's how it has moved uumm from the beginning. But now the, the..., I won't say challenges, but the limitation to that approach....

Interviewer: May be before you go to the limitation, can you just share with me how you were able to identify the people who had limitation in terms of competence or knowledge and those who were actually the issue was resistance, how were you able to identify such?

Response: So, like I said, it wasn't really unstructured hey. So initially it was because of our institution, it's easier to work with challenges that you can talk to down the road. And then in other institutions, I think this is where I was going with the limitation that we were then meeting.....on an issue of this is the next meeting. And in the next meeting, knowledge or incompetence would have been rightly expressed, "*we do not know what we need to do, we want to start to do OSCEs, but we have got three procedure that we know, how do we do an OSCE?*" And you now have to think of a workshop on that. Then resistance is a full outright story, "*we are not going to do it even if you say it, we have heard that you have said it, we are not going to do it*". So that has pushed us,I think that was where I was going with the limitations that the extent of that peer support or sort of support workshops ended up being limited or circumscribed to my institution, and not

filtering to everywhere else, 1, because there wasn't any form of responsibility. I wasn't responsible for them. And I felt like this is where I am, these are the people that am dealing with and then this's what it ended up at.

Interviewer: mmm, so I hear it's like when you say eventually it ended up being restricted to your institution. Does...., are you saying that at some point all other institutions were involved in these supportive activities?

Response: Absolutely!

Interviewer: So can you share with me the experiences. What were really the issues that made you eeer start up these support activities even involving other institutions?

Response: So this...., my personal involvement came in after...., during and after NEPI. If you remember this curricular development was under the wing of NEPI. And so NEPI was the one planning for institutional meetings and who does what and then the consultant will be there to sort of drive everyone together. So when that funding of NEPI ended we sort of naturalized into a system of how do we move on, you know. So, so the question is what do we do? NEPI is gone, the consultant is gone, we need to implement. So naturally since we were working together as a group in NEPI, so it, it sort of followed that structure. But now there wasn't any cement like what NEPI was doing because NEPI was also in exchange, they would support institutions with A, B, C, D. And you feel like people were more obliged to attend the NEPI trainings. So when we then fell out of NEPI, the funding is finished, now we have to implement, that's when we unearthed a lot of issues as if that training initially didn't happen. So now we are like, 'what are the competencies?', people are still wondering what competency are we saying, but people had worked. A good example is the issue of workbooks, very good example. All schools were sitting on a round table, we are all going through the steps of developing a workbook. Each institution was even given a module I remember. And then after that session, NEPI is gone. We are trying to say, where are the workbooks?.....dololo! No one has the workbooks until today (*was nobody answerable for that?*). No one is answering for anything (*No one can account for that?*). Absolutely! And now we come, and then we are saying what do we do from here? Then the issues of resistance comes in, to say others are just not going to do it. No matter how much knowledge you provide and how much...

they are just not going to do it. And that's how we ended up coming to our institution and say let's focus on our own issues.

Interviewer: mmmm..., so, could this also be attributed to the fact that this was some unstructured type of support where institutions may be, they didn't feel they were answerable to you, they could do it if they wanted and they could not. Can you comment on that?

Response: Yeah, I wanted to say it was a two way thing. They felt they were not answerable to me, I also was not answerable to them. My job was HOP (Head of Programme) for midwifery at school X, and that is it. So this extra support thing was coming in because not that I had better knowledge or maybe, but there wasn't any scale to measure that. But I was, being part of the system, I had read a lot on the competence. I had started to write a lot on competence based education. So it was easy for me to sort of lead the pack. But then the pack decided whether they wanted to be led or not. I also would have said, it's not part of my key result area, I can stay in the office and its fine.

Interviewer: mmm...so, can you just go back to when you started these support activities, what really prompted you to say, 'let me start this', or was it somebody among the institutions who thought, maybe you should. What prompted you to, to start up offering support to your colleagues?

Response: Apparently that's a very good question and I still do not have the answer now. I have attributed it most of the times to my personality that when I see weakness in leadership am one person who always just takes it naturally. I think that has been the main issue. And that fact that you know you do not want to be associated with things that are falling apart especially when you know what needs to be done. So that's how I naturally just took over. And I think the fact that I had gone through thatwhat's the word?blustering, and those insults and those things during the development of the curriculum. I think I ended up saying 'I have to own it, I cannot have gone through that and then few moments later it falls flat in the face and sort of proves what they were saying about, about the initial story'. So I think the, the drive has been the personality that I love, I love to be associated with staff that work. And if there is someone who is leading it then its fine, but if the leader is..., you know, I, naturally it comes in.....

Interviewer: It just kicks in and you take it up. So what could have been the main issue among the, the other nurse educators, may be from other institutions, what could have been real the main issue for the them not to take up this support, other than issue that may be it was informal, because this was a national project and they were obliged to start up the new curriculum. What could have been the issues? Am not sure whether you had an opportunity to find out what really is the issue, what brings in the issue of saying 'we are not going to do this' or 'we are having these challenges in this aspect in terms of the curriculum'?

Response: uummm, I can think about of about five possible reasons and uumm..., unsubstantiated with so much literature, but from my observation. Issue number 1 is the issue of culture. I think predominantly this is a culture that is not easy to change. It's a culture that is very patriarchal and it's a whole top-down approach, we only listen to the highest of the hierarchies. Even if that highest person has no idea what they are saying, what they are doing but we only follow that approach. So I think for me that's an issue number 1. It was an issue of the culture of the nation as the Basotho that...uumm, that became a challenge. The second issue would have been personalities as individuals that..., I mean, they could sort of then give that attitude of saying...uumm, we are just literally not going to be engaged in this, and that's the end of the story. And then you can link it nicely with the fact that I am foreign in Lesotho, so that was issue number 1 which made me a little bit more different. So when change normally comes and like being led by foreign people it looks as if it is a foreign ideology which is being imposed on them. So without local uptake, it will look as if it's a foreign idea and it stays like that. So may be that could have been one of the reasons. And another thing, I think also history in Lesotho has proven. Am trying to link history and accountability that we have had a lot of donor funding coming in pouring money and they go and nothing really changes. And I think in this case because it was NEPI, people are like 'oh, this is another donor who's going to come and just give us things and they go' and for years later you know. So when you start taking it up, it's like 'what's wrong with you, historically we've had things happening, there is nothing that changes, it's the same old new thing'. And another issue could have been the age, am thinking that we have a predominantly older type of educators that have been perhaps in the system a little bit longer. By that time I hadn't been very much in the system

and there were people that had been teaching since. So you know now you have this small boy who is coming and telling you what to do, it's quite a challenge. You know the older you are the more engrained in your ways, and it's not easy for you to really change, the more the resistance. So link that to patriarchy, now you are 50 something and there is a 20 year old boy who is foreign and who's trying to tell you what to do, it could have been an issue of resistance. So that's what I could think at the top of my head could have been the issue. But another big one was, I think I recently found about this, no source..., no form of accountability whatsoever. So they do not feel then....., because change is uncomfortable and literally you have to do a lot of things that you are not expected to and if there was a form of tracking, 'so and so, you need to do this and why'. Now there is no reason, there is no need for me to really do it, so why, why bother. I think those were many factors in this case.

Interviewer: Ok, so now what about the, the nurse educators that were engaged in the, in the support activities, those who willingly may be participated in the support activities or who benefited from the support that you provided, what were the characteristics that you picked among the people who were willing to be part of the support,.....other than the issue of age, could there have been any other characteristics that you picked, probably that could have made them to be in that willing state of being supported?

Response: Yeah, again from the top of my head, you have already mentioned that the age issue, that they were also a little bit younger and more receptive to change. Uuur... part of those that we worked with initially were also foreign, so it was easy again to link because uuur..., I don't know whether it's the educational system differences that prepared them to be more critical thinkers and lifelong learners compared to what we are having here. So they were more eager to..., to do that. And I think they were also working in enabling environments. So being in an environment that was more positive and seeing the change and the need for change was another, I think, more of a key ingredient in this whole mix and recipe to get the stuff done. I think that was one issue, and for them was also, I was just a door away, I think that also really became the mainstay for their work.

Interviewer: So do you mean the proximity?

Response: Yeah, they could pick a phone 'da-da-da-da-da', they could come in and sit, they cry all their problems out and you always troubleshoot. It's not, there wasn't like a logistical, you know 400km thing to access some form of support. So the fact that there was some tangible support just down the road, you have a problem with the learning activity, this person is not going over the phone telling you, 'change the learning outcome', no! They are saying let's sit, let's work with this together, and so that I think made the whole issue a little bit better. There is this thing about once beaten, twice shy you know, so once you get some form of support, you know you can try it and then you can be supported as you move on. Sometimes when you try to get support, you hit a block, you end up saying, 'what the heck'. I think that could have been the difference between the two.

Interviewer: So basically being in close proximity and also the ability to hold their hands, and have the hands-on type of approach to support was more beneficial (*yeah*). But could it also be attributed to the fact that now this was exactly what they were supposed to be doing and they were stuck and they had to quickly call on uur somebody? What is your comment on that?

Response: Absolutely, such that it's not the airy-ferry principles that you go to a 5 day workshop and people expect you to do this on your own. It's after the 5 day workshop, there is someone behind your head who is ready to say press this button, do this, now 2 days later you troubleshoot, am there let's do this. So I think the difference with other institutions is after the 5 day workshop, 'I go to my own institution, there is no one, there is nothing even if am to call him, he is kilometres away, he doesn't get what am going through,' and then it tappers off.

Interview: So, you mentioned workshops, how many workshops have you conducted where people from institutions have been part of and what has been the main issue in that particular workshop. What activities will you be working on?

Response: I can't really remember the number, but now a small little meeting can turn into a workshop, when suddenly we get stuck on something, it automatically turns into something else. But when we have, we have been....., could say most of the.....not most, sometimes it has been just regurgitation of what the NEPI funded workshops have been

about. Because people then say, 'we do not get the assessment', I come and then redo the assessment. And then a lot of them have been looking at troubleshooting of current issues. 'Now we do not have this, what do we do?' Then we sit and try to..., to work across, okay, what is literature saying, what's appropriate, what's feasible, and things like that. So a lot of them have been driven by need, what do we need and then that comes on board, and the need have always been skewed to this institution. So we realize we do not have checklists to do A, B, C, D. Other institutions don't have this, 'oh yeah we don't have' and then I start a workshop on that. 'We do not understand the assessment for this uurr throughout, look let's have a national training workshop', so it has really been needs driven and more, yeah, it's just been needs.

Interviewer: In terms of needs, how would you classify the support needs among nurse educators in the institutions in terms of their awareness of the change, desire to act, knowledge levels, ability to implement and need for reinforcement?

Response: Yeah, but when I think of it, I think it will, it will be treacherous if we can wholly put them in a basket. It's really been individual based, in as much as you might design a workshop that's focusing on knowledge needs but when you get there you still have questions that come, 'why are we doing CBC?' So suddenly the whole shifts goes back (*both laugh*). So we are seeing people that are at very different trajectories and we all need to contain them in one training workshop. And you can't, you come in there you are like, 'okay the workshop is on programs of assessment.....'(*both laugh*), but you are still referring to the strategic plan, you are still reinforcing some of the things that they have learnt. (*You are still getting answers, what is this CBC...?*). Exactly! I can't put up and say a lot of the workshops have been on the knowledge or desire, it has been one that addresses the entire spectrum depending on the trajectory of each person which in some cases they decide, and you know it's like measles or chickenpox, then you are sitting there, you knew what you were doing, you knew your story, then person X asks 'who said we want CBC?'. Now *le wena* you are now confused, '*ehlile*, who said we want CBC?' (*both laugh*). So in one training workshop you need as a facilitator, you have to be now aware, 'where are we?' Because the idea is, yes most of them are knowledge based, the idea is let's create, let's close this vacuum on knowledge. But others need reinforcement,

let's go back to the principles, why are we doing this? 'Oh yeah we did, we know what we are doing'. Others start from desire, others it's an issue of awareness, so it's been, it's been like this. And it's at every cycle, you start in the morning, you are all well, by the afternoon you don't want to talk to each other because you are just going back to the same old issues. Yeah, like I said it will be treacherous for us to say they are this, this it has been.

Interview: So could this situation be attributed to the fact that there is new staff going in, old staff going out or it's just.....may be something happens in between and somebody suddenly doesn't know why they are doing CBC? What could have happened? (*Both laugh*).

Response: It's quite a funny story. Well uurr, well you get the new staff....., I don't think so, because you get new staff who get it, who understand, who've got a problem with the way they were trained and then when you just click about the topic, they quickly get it but then you realize this person just needs to be supported with knowledge of how this is done. I will give you an example of this small boy from college X, he understands what needs to be done but he has no one who's there to give him support. Then you have the old ones that have been part of the system from the development of the strategic plan *sa naha* (of the country) okay, that were even there saying, 'yes we have a problem with training of nurses, we want to change them to be competence based'. Two years later they are like... 'Who said that?' Then you explain, then they were part of development, you now starting on assessment. 'Why are we doing competence, has there been a study to.....' So I think it's, it's really beyond the new and old, it has gone beyond age, it's really individual and I don't know, we can always dream about tailor-made individualized support, because people are.

Interviewer: Now, very interesting, how do you sustain yourself, who supports you?

Response: My coffee (*Both laugh*), yeah its very, it's a very uurr sad journey.

Interviewer: Because I mean, you, you have just said this is informal. You are not..., nobody can hold you accountable (*or pay me*). You do it because you want to do it. What motivates you? What gives you the drive to keep on keeping on?

Response: Good question, and I have asked that question myself especially after the insults and everything, you ask yourself 'why do I bother' (laughs)

Interviewer: Why are you doing it, what motivates you?

Response: I don't know, but I think that I can attribute it to where I am, has been 1, the support of the staff that I work with. They..., they sort of naturally create a shield, most of the times I don't know how they pick it, but they could pick that I am now you know, distressed or distraught. And you find them coming to talk to me even on general issues, we now start laughing about life and how we live at the back of the beyond and there is da-da-da-da... So for me that's a nice little distressing issue and then that goes back, and then we start the cycle again. I think the other story has been my international exposure, that at the end of the day, you know you also need to compete at that league, and these local issues are not really, you know they end up looking like they are petty. That's how they are supposed to happen and when you go at international league you need to have gone through also this form of struggles and form of challenges and things like that. I think that has been really, otherwise without that staff in here, without the colleagues internationally, it would have been really difficult, because at the end of the day (*because it would just kill you*) and you are like why? (*Why are you doing it?*). I could sit and drink my coffee and do the job that I was hired to do.

Interviewer: And be like everybody else?

Response: Absolutely! So now you get to be accused of things, you get to be told of things, people talk about this, but then, when you are like but am not going to stop to the local level, am not going to stop to this particular level of discussion, then am going to move forward. And whether people listen or they don't listen it's still an issue, that's fine.

Interviewer: Now, if we could uuur...according to your own assessment, I know there is no study to, to determine the extent at which this support has addressed the needs of the educators in these institutions, could you just comment on that. To what extent do you think this support strategy has been able to address the needs of the nurse educators?

Response: Yooo! (*Deep sigh*), heeei, its quite a good and at times disappointing approach. The good is that, I mean reactionary you can pick people that there has been

a change. When you host a workshop, after that, the discussions are a little bit better. Going back to awareness, desire, knowledge, ability and reinforcement, you can see now we are no longer at an awareness issue, now we are at desire to change, while others have skipped and have got the Knowledge and are able to relate. This is at the workshop stage. But what gets to be disappointing is now when you go and measure the evaluation, or measure what's happening in institutions that's when you are like, you know in the long run it was all just, evaporated immediately after we came out of the room, the sun heat the heads and all that just disappeared. And the arguments that we still get becomes very disappointing, uuumm, a typical example is after we did programs of assessment. The institutions invested a lot, uuumm to take their staff out and I think we spent almost M80,000.00, a hundred something thousand for the two training sessions, which by the way I did for free (*a disappointed laugh*) and then compile the document, send it to staff to comment, until today this has been more than a year since there's been any comment about the workshop and now when you get to ask even the [the person dealing with examinations], these are marks for students, she still struggles on how to interpret them. So at the end you feel like eeerr...., you know it's a problem. But again now when you measure in my institution, it's a little bit different. The argument is better, and you can tell that may be these people forgot, but they know what we were talking about. You are not starting from scratch, what document, what do you mean, where are we going? So it's been potato, potato! here and there yeah. It's sad, it's disappointing, but it is what it is.

Interviewer: What about at uuumm... the institutional leadership level, what support did you receive that made you continue supporting these others? Was there any support that you received? Can your share your experience.

Response: Well, I think my institution from where I work, is one of the most flexible places one can work in, uuummm, I have very limited comparisons, but I think my institutions, at leadership level, it has been extremely flexible that you know you click a button and things happens, you snap a finger, things happen. You decide to disappear from work and focus on this form of support for people, it happens. You do not need a full, you know, 3rd degree about what happened and why were you not at work, who gave you the opportunity to go and facilitate, where you did not via.....aah-aah (no). Our, our leader in this particular

institution allows for such things as long as your work is done. Institutionally it's not been a problem and I think our leader has also been quite appreciative of the fact that it has caused a lot of development in the institution. We have our own in-house person whom we can all just send everywhere to run to and do, things happen that way. Uuumm, I mean I can talk about structural support, comfortable offices to even plan activities, we work until late. I mean structurally we had amazing support and cognitively you can get your colleagues just to bounce ideas on, use them as Guinea-pigs, and I think really the leadership has enabled this form of support to, to sort of happen. It doesn't become hundred percent, obviously, uuumm like any, any system it has its flaws, uummm but it has been, it has been a very good enabler.

Interviewer: Did you sense any support from leadership of other institutions because I think at a number of opportunity, eeerr times you have provided support to other institutions.

Response: Well, a couple. I think again it was an issue of personal one, uuumm, this is a good story (*gets excited*). So you get institutions that are already seeing the example that is here (*at your institution?*). Exactly! And I think they have sort of blinded themselves to think this is a one man's job and it's because of person X. And once we get person X to come and support us it might start to work. So initially you could have branded those people as the resistance camp that these people did not want to do this. But now because we have time and again stood the test of time, our results are proving this, our teachers everywhere they go they are really top of what they are doing, and things like that. So like our..., our sister school which is just down the road, they are even wanting to benchmark, they have called me several times to do A, B, C, D for them and they have been quite supportive about the thing and whatever. And now I think I had a call from another institution that is also crying to say 'please come and support us with innovative teaching strategies, we have no clue how to implement a competence based curriculum', and things like that, which in the previous years was classified as really resistant, not ready to entertain a foreign young man to come and 'tell us what to do'. So when I received a phone call I think a couple of days ago, I was like, 'Okay, this is interesting, what does it

mean?' You know, so which means, for me it's that issue of exemplary practice now spilling over to have such type of a ripple effect. Yeah, she called on Friday.

Interviewer: So basically persistence and keeping on doing the right thing is, we could say may be finally trying to produce fruit, where institutions call and say, 'can you please come and help.'

Response: Nicodemously [secretely],... because no one knows about it. So it's now...., 'you know that eeeee...Ntate (sir), how are you there?' Even rubbing your mane so well. 'How is the weather [there]?' as though you work at the weather station and so forth. 'Do you, do you, what is your schedule like?' and people want to cry about all those things. But when they were naming and shaming and embarrassing, it's usually in front of the whole audience. [They would say] 'You will take these nurses and they will go and treat [your president] in your country like... Now two days later, 'haa-he-he-he, can you please come, he-he-he, we were wondering if you are available'. So you see but at the end of the day like you are talking about persistence, like you are talking about uuumm..., there is a word that I enjoy thinking about uumm....diligence. That the whole idea at the end of the day is maintaining your standards about, this is how you perform and cannot be swayed because the moods are like this, the weather is like this, and whatever. This is your performance and you can't drop down to mediocrity because the system is a mediocre system. So I think that has been interesting mainstay for all of this work.

Interviewer: So yeah, there is a, a lot of resilience that has developed in you (*yeah*), and which I think is spilling over to people around you (*yeah*), and uur..., looking at the results, people can see, now people are coming to think, 'okay, may be this thing works'. So I foresee a situation where this kind of peer support or these collaborative supportive activities will just spread out to all other institutions. Can you comment on this anticipated situation?

Response: Absolutely, I agree with you and I think the word, the moment you are using it as peer, it is as is, 'peer', very equal, none threatening, none top-down. It's me talking to you as a colleague, and me think, wow, this looks like this. Yes, I might be a specialist in, in this particular area, but the collegiality that surrounds the peer makes it more, more

worthwhile. I mean you have been part of the workshops that I have conducted, it's really a relaxed environment, we are laughing, we are dancing, we're referring to body organs and things like that as we move. But you know it won't be working if you got the boss to come and facilitate a similar workshop, where people sit and they have to listen and answer the right questions. So I think, I think it could be a fantastic way or approach to this, to this, yeah!

Interviewer: So now, you just talked about people now calling you secretly, 'heee, can you please come, and we think you can come and see what we are doing.' How was the communication and feedback between you and the peers or colleagues during the supportive activities?

Response: Well, initially it was horrible. I think initially it was, it was **bad** (emphasizing 'bad'). Uumm..., again it's also individual based. Initially you get these very nasty feedback, very bad communication, uumm..., how do I put it.....? Like I think our challenge in that particular time was very minimal emotional intelligence. When colleagues were not understanding things they would rather throw a tantrum, instead of you know, pausing and saying 'you know what, let me not', or whatever. And when that tantrum is thrown, your name is part of the discussion and this is, whatever. And then with time, it got a little better. So I remember initially it would be 'curriculum *ea* (for) person X [supporters name]', then it moved to '*ntho tseña bo* person X [supporter's name]' (these things for person X and his colleagues), then it moved to '*ntho ena ea makoerekoere*' (this thing for the foreigners), then it advanced to '*ntho ena ea* institution X' (this thing for institution X), then it advanced to '*ntho eana ea [name of the curriculum developer]*' (this thing for the curriculum developer). You know so it always seemed a little bit distant for them. But instead of just putting it as 'this new curriculum', it will be 'curriculum *ea mang-mang*' (this curriculum for someone) and it doesn't end there, it comes with a slur, it comes with mudslinging, it comes with things that come with that. And the idea I think that made us work through there was being steadfast. You know what, call it what it is, it is what it is, we are moving with this. Uumm, but then our communication started to improve, I think when implementation started because really people now were looking for and needing tools to work, and there was no way that you could skip person X in these discussions.

And person X sort of becomes the only person in this environment to support you. So now you can't really be ['funny'] about it. You now need to be careful and tread softly and whatever. And then the moment some penny dropped in people's heads as you are explaining this, suddenly it's 'you know when Prof. was facilitating, she was not clear, she didn't know what she was doing. You know there are these intelligent people that cannot express things to others, but when you were facilitating it at venue X, aaah CBC is very easy, it's clear, now we know what we are.....' and then you like...[what]?

Interviewer: And now suddenly they want to do it, they are already doing it.

Response: You see what I mean, so, so it has improved really. Now it's, it's in these Nicodemus (private) conversations, and then when you meet on the road, people are not afraid to talk about it and things like that, yeah. But I mean communication is never any one's stronghold heeh! People are not as good communicators as you want them to be.

Interviewer: How do you mean? Are you saying that they can just throw things at you without really thinking what this is going to do?

Response: Exactly, exactly, and, and it doesn't make it easy when you are foreign. It just doesn't make it easy, because even the colleagues that you think you can trust, you know, I work with this person and you are expressing this, two minutes later goes out to say, 'you know Person X [supporter] is crazy, now he is going to take your research studies and he is going to be..., these workshops are not workshops, it's his research that he is going to be presenting you wherever he goes' and then you like aaaah (*surprised*). Then now another person comes and says, 'but your colleague was saying *wena* (you) you are using us for research.....

Interviewer: mmmmm!

Response: You know, so we've grown

Interviewer: Yeah, so when people needed assistance, how did they do it? For your institution, I hear people will just knock on your door, they come in and you talk and you are already on your small whiteboard and you are drawing (*interviewee laughs*) and

people's eyes they pop out and they go like, 'but why did we not think about it', so that was easier. What about the institutions across the road, behind the mountain, how have they been communicating when they need assistance if they have?

Response: Others were direct, others would come directly, uuumm..., 'we need this, can you help us with this'. For example one institution needed a consultant to help them develop a strategy for their programs. I had worked with our institution that our programs got accredited, so amongst themselves then suggested that 'aaah, we think nstate (Mr.) X can help us with this. And then through their head of school, then they talked to my people, her people talked to my people and then it was like that. So there was some direct issues that were coming in. Others were spontaneous, uumm someone just comes in and you have no idea who they are, 'am from school X and really am struggling to, how do you do this?' and obviously you give them time to work. So that has been how, how we have been worked and how they have made their requests known.

Interviewer: So, what do we attribute all this type of communication to and the way we have been doing our seeking of support, uuurr from other colleagues? What could have gone wrong, is it the issue of there being no structure, this is how we find ourselves where everybody and anybody can just call, 'I want this, can you please do this'. How did we get here?

Response: Well, we could think of that and add that at the end of the day you feel like humans are also spontaneous, that's issue number 1. And then you have a need, and then you cannot move without the need, then personalities comes in, there are some people that get stuck on one thing, and they cannot progress until this thing is done, and hence this spontaneous calls and issues of coming in and things like that. And then the other, yes, again there hasn't been a structure of communication sorry, of how to get issues across, and then the question which comes, do we really need to have some form of structure because our needs are different and happen at different times (*different times*) so if am a facilitator for this particular module and am stuck in this and I cannot wait until the institution had done a thorough needs assessment for the whole school and then start. We need to have within a structured framework but some spontaneity and some levels of

approach, which we have seen working in our institution. I don't see people making appointments to see me, booking me in advance and things. When someone's stuck, they knock, guys let's talk and let's see how do we go around this. So I think that, yes we might need a structure may be to improve accountability and even for uuurr, you know even if like now we are sitting here and we are saying, we don't know how many workshops we have held, we don't know at what level they have been held and what was the issues discussed, because am not accountable for them, no one is, it's just let's do it, you know what I mean. But then they should have some level of flexibility, uumm, and, and allow for individuals to say, 'you know what, this is needed, and am stuck, and I need to get this done'.

Interviewer: So, so that gives me a sense that there is great need for flexibility, great need for tailor-made uuur strategies probably or support activities because it's not like one size fits all. Other people are ahead, others are still coming behind and others are still not even, they haven't even started off yet. Can you comment on this?

Response: And you know what I have learnt uuumm through my own personal study is again also the approach that we have taken as nursing education and as people, I think it's flawed. We are expecting a lot from poor, poor nurse educators (laughs), poor nurse educators....(sighs). We expect you to be specialists and, and, amazing people in your own field, and then again to be specialists and amazing people in a different field. And this becomes too much, and it's not that...., I don't know how many times I have said it, it's not that people are stupid, it's not that people do not know what nursing is, it's, they do, they have been teaching this thing forever and nurses have been produced and they have been saving lives, blah, blah, blah, blah. What's been the difference is how do we repackage it to align with current thinking processes and our current approach to what we think thinking is. How do we repackage courses? We sit and we are working on anatomy, you know this is anatomy, but how do we make this activity make meaning, which might not be someone's major because that's not what they do. But am doing a masters in health professions education, my work is really these little crazy things, so how do I come in now to support you to say well am not so clued on what's happening in anatomy but try

activity X and Y, don't you think you can close that gap? But now we want everyone to be at the same level, and I think that becomes a heavy burden to, to colleagues.

Interviewer: How did you experience the monitoring and evaluation of the collaborative support activities, if there was any?

Response: Mmmmm! Mmmmm! Mmmmm! Mmmmm! I, monitoring in our country is only done very minimally, very minimally. It's a spontaneous activity, well institution X that we know will have tools to see if the support has worked or are you seeing something happening in class. And even if it's not me necessarily implementing tools, you know lecturer A will go to class of lecturer B, and then they sit and they talk. And then after they still come and amongst themselves talk about what has happened and then get a report, 'you know I have been in class X, these are the challenges with class X and we discussed this'. So there has been monitoring a little bit in institution X, but am not, I cannot say much about what is happening everywhere else and then the level of evaluation and measuring if there is any form of outputs or outcomes from all this, uuum, I don't know, may be its too early, or maybe it's.... I also assume that what drives monitoring and evaluation is accountability. And if there is no accountability, there is no need for me to monitor anything.

Interviewer: Are you saying there was nothing to monitor?

Response: For who, for the what and for the why? Otherwise you will now be infuriating people, disturbing them in their offices. Otherwise if there was some form of major accountability, all these structures being part of the framework adding up to something you know, then that could be an issue..... uuumm and it's not an institutional, it's not a program issue, it's not a departmental issue, it's not an institution, it's a national issue. Because right now the country will struggle, to measure if the CBC has worked or not. Beautiful, beautiful strategic plan put on paper with absolutely no M&E framework whatsoever, and as administrators they only count, 'CBC developed, yes', 'CBC implemented' and teacher say 'yes', tick. Whether it is right, it isso it starts from that national accountability which should filter into institutions and here we are.

Interviewer: mmmm, you mentioned challenges earlier can we just go back to that, what were some of the challenges that you encountered during this whole journey of supporting other nurse educators, uurr peers. What were the challenges regarding the support strategy, regarding the...you being supported and many other issues that may have been, and how did you overcome them?

Response: (*laughs*) uuuu Jesus, so I think the major biggest challenge that I faced was time and that obviously led to overworking and that burden. Because I have as Americans say 9-5 job, fully employed with responsibilities which include teaching the same number of courses like every other teacher, marking the same number of students like every other teacher, being a national examiner, being this and supervising research students and all of that and I am a student on the other side, and then there is this added responsibility which now included local and national colleagues on the same person per se. So what it could mean was, initially the, the fallacy, no let's not say the fallacy, the limitation that you would face in the institution of the staff that is not supported was also because I was not there as am busy also sorting my own responsibilities and requirements. So initially that was one big challenge, so when you are not there, you are supporting in another workshop for 5 days, your students are stuck, the exam doesn't move, this paper is not written and things like that. So the overcoming for that has been we made a request to our head that I get relieved in some teaching duties and then focus purely on staff support in the class, support in preparation for the activities and things like that. I think that becomes another tick in the structuring of peer support in particularly our institution the fact that you can now have a full day 8 – 5 and your job is really to provide that level of support. 'Sit, let's work on your thing' and even probe those that were never going to come and say 'where are you, how far are you', so that you get that optimum performance. So for me that has been one big, uumm, one big issue. But in terms of resources I mean, it has been request and you receive, it has never been the main issue. Uurr and when you find the group in the right mood, or with very little influencing whatever, you really enjoy the entire workshop experience. Sometimes when you find a couple of rotten apples within the group (*laughs*) you keep on hammering the same questions over and over and over again. So, yeah I think time is one big issue that is coming to place which has been solved lately. And I guess the other issue is the emotional drainage, you know after

working your butt off and obviously it will never be perfect, then there is that whole draining and this whole non-appreciative type of face...yeah. So those were the major issues (*major challenges*).

Interviewer: Now, what about on personal level, what have you benefited from this support, peer support activities that you were providing, personally, academically, financially, psychologically and all other aspects?

Response: Mmmm, I think one of the major issues is, I know am one articulate person and,...and,... uumm, you know you always think uumm, I mean facilitation wouldn't be a big issue for me because I think I can nicely wiggle in and out, but I guess the experience was more easier when dealing with students and very different dimension when it's time for faculty. And I think for me that's what I have gained all these years, how to deal with faculty that are your senior, sometimes are more experienced than you, are your juniors, some look up to you, some look down at you, you know, how to deal with those variations and social dynamics, psychological dynamics that come into that, I think that has been a fantastic learning curve for me. I think I have even managed to get those as transferable skills even when am with SAFRI group. Then you know that you have people that view you differently, others enjoy your presence, others feel disgusted, but now that you come with it from Lesotho and you know how to deal with such issues, you know, it has made it very beautiful and transferable. I think I have also improved in my communication skills, I think that has been a plus, uumm and that level of emotional intelligence, you know that when 'person X' is angry at me today, she will tell me all that nonsense, she doesn't like the manner in which am talking to her and she's got a knife on the table. Then the following day that very same 'person X' now comes in with her claws and hands nice, 'hello, how are you, how are you *ntate oa ka* (my father), *ho joang hle nana* (how are you), yooo! Now you are getting calls and whatever, and then you are like, yesterday you know....but previously, I mean I would also get offended like, 'get out of my thing....., because I mean, you insulted me just yesterday. But now you get to that level of tolerance and you like you know, people are people, they go through their own things, and when we get to work sometimes it might not be their day and then we get to move on. I have, I meet and I even hug people that were telling me to take these nurse to [my country], when you meet

them now they are like, 'this is my husband, this is my what', and then you are like just few years ago you were saying, '*lekoerekoere lena le hlanyang*' (this crazy foreigner), '*hee, this abuti o batla ho etsa study sa hae ka rona*' (this boy wants to conduct his study on us) and whatever. So that has been an interesting journey. I've also managed to publish I think it was an article, an article that came out from one of the peer support, of one of the workshops that was done with the colleagues, I think the one on OSCEs, when we developed OSCEs for the first time. So it was really supporting colleagues developing the OSCE framework and then we wrote a paper on that and it was published with International Journal of African Nursing Science, 20...whatever[year], you know, so it has had its ups and downs, but I enjoy it, I enjoy it.

Interviewer: mmmm, okay. Considering the fact we have started the new curriculum and we are sending these students to the clinical area that is staffed by people that were trained in the content curriculum, what form of support have you been able to provide to colleagues that are working in the clinical area so that they can be able to supervise the students?

Response: Aaaah, initially I was a Jhpiego master trainer (*Okay*). What that means is that I was responsible for designing and implementing their training program on preceptorship. So my involvement is that we have redesigned our own preceptorship program in the institution and I've been actively involved in supporting colleagues to facilitate that, because the idea is I hope not to be, you know, in the main limelight of that for colleagues who work directly with preceptors to desire to implement that program. So yeah, that's how I've worked with clinical facilitators, yeah.

Interviewer: Okay, that's is really a wonderful story to listen to despite the ups and downs, lows and highs, the challenges. Am sure there were times when you felt like, argh, why am I even bothering because really am not paid to be supporting (*absolutely*) other people, am not employed to be supporting other people. But it is what it is, there has to be somebody who support other people in one way or another. So, were there any other people involved in this support activities that you worked with or that worked hand-in-hand?

Response: Yeah, so I would get some colleagues that were at my institution, may be give them a particular section or two within the training or the workshop and they do some form of presentations. So I think that has been, that's what I remember that worked.

Interviewer: But basically, who was the key person?

Response: I think so, I think I was the key, but then, yeah I was the key, then we would sit and say this workshop needs to look like this, can you present standard setting, can you present uurr teaching approaches, can you present learning strategies, can someone present learning styles and so forth. But like that yeah, then I would sit and plan what should it look like, what is it targeting, the audience and the literature and things.

Interviewer: Were the other people from your institution?

Response: Absolutely.....once it was, once we had other, other schools coming in place. I remember I planned a workshop, did all the material for the workshop including learning outcomes, objectives, and I mean the whole entire workshop but then I had to bring in people from other schools to do section X, section Y, section Z.

Interviewer: Did you discuss the planned activities with the colleagues before engagement?

Response: Yeah, like I am saying that I planned the entire thing but it's now saying, you'll do blueprinting, you'll do scaffolding and you'll do X. Okay once you are in blueprinting, talk about this matrix, talk about this, you too, so it was just getting different flavour, different person, instead of the same person from day 1 to day 7.

Interviewer: Okay. So as we come to the end of the interview is there any other information about support strategies that you would like to share with me or you would like to include?

Response: I don't know how the future, the future would look like but there is a lot of need for tangible support for faculty. There has been.....and faculty development in terms of getting workshops, and getting people in rooms doesn't work, I think. But once we twist the issues to say we grab them by the assessments, we grab them by their performance

appraisal or whatever, naturally it falls in place that people become self-directed. Oh, another big thing, we are not having self-directed faculty, so that becomes another huge impact, and I think that's one research area that we should look at because I think self-direction really influences a lot of the peer support – both being receptive of support and also offering support to other colleagues. If you look at my story, one mainstay issue is getting a boggle, going through literature, engaging a couple of people and saying, how then do I bring it down to the level of colleagues. Uumm also if you get a colleague who'll say, I think am stuck in here, their ability to stand up and say let me go and knock at that office, that's their level of self-direction, and they are specific to say, I do not understand point X, the rest I get but how do I go around this, that's the level of self-direction. So I think we could also dream about expanding that support, for peer being also individual, being physical, also peer being electronic, you know that can get information across in various platforms. I think that's those major things, yeah.

Interviewer: Wow, aaah, thank you very much (*it's a pleasure*). We have come to the end of our interview, thank you very much for participating and I have enjoyed, I have learnt quite a lot, and some of the things, that you never thought such things people were going through such things, but thank you very much for the good work you are doing. Keep on, keeping on.

Response: You are welcome.

END OF TRANSCRIPT

TRANSCRIPT 2
SUPPORTED EDUCATOR

Greetings and formalities were done.

Interviewer: I am conducting a study that will culminate into the development of guidelines for nurse educators in relation to peer support. You have been identified as one of the facilitators who were involved in the implementation of CBC in the midwifery programme. I would like you to share with me your experiences about the sessions or activities that you were involved in where you collaboratively worked on or developed materials for the midwifery CBC programme when it started.

Response: Thank you [Madam]. Uumm, my involvement with the competency based curriculum program for the midwives in Lesotho started in 2014, where I found already the curriculum developed. But I became part in the orientation to the same materials and also involved in the development of the study guides.

Interviewer: mmmh!

Response: Yes, and so we got oriented again on the teaching and learning strategies that are used in competence based curriculum. So the collaboration was quiet good because we had a variety of teachers who were involved at different levels. So as much as I got involved on the way, but we had those who were part of the process from the beginning, so they could come with their experiences and their knowledge from way back when they started to develop the programme. So it didn't become much of a challenges because where we were kind of missing out or were lost, they could give us a background of how it came about that they ended up..., or we ended up being where we are with the competence based curriculum.

Interviewer: mmmh

Response: So yes, the curriculum was developed, the modules were developed, the study guides were developed and then they were trainings that were mostly I think peer trainings, peer facilitated trainings, where most of those that were involved in

development now were sharing how the intention or how the plan is in the roll out or in the implementation of the same curriculum. Yes.

Interviewer: Ok, so in these peer trainings that were conducted, what were the main focus and what really led to the nurse educators coming to a decision to say let's have trainings among ourselves as peers to conduct trainings and support each other. What could have been the main reason for that and what were the focus areas?

Response: Well, I want to believe that the reason why educators felt that they needed peer support, like I mentioned earlier that there are some of our colleagues who were involved from the beginning, so the understanding was that they had a better understanding more than some of us who joined the process later. So they were sharing how they got to learn, what CBC is because it was really a new concept all together, and so what it entails and what it requires. And then over and above now they had already learned the process already of how to deliver it, and what tools, what processes that are involved in the implementation of competence based curriculum. So they were kind of step down training from what they also learnt during the process of development, now sharing with us as colleagues. And of course we have people who learn at different paces, so of course they had learnt. Of course some of them had learnt faster than others so they had a better understanding of what the whole CBC thing entails and requires.

Interviewer: mmmh

Response: Secondly I think in the country generally there was no capacity at all, when it comes to competence based curriculum, so other than using ourselves as peers to empower each other we wouldn't even have any consultant from within who could do the job. So it was kind of learning, teaching as we also learn to strengthen one another. Yes. Eeer, not also forgetting that we also came from different backgrounds, so probably there were some of us who had a feel, for instance, I had done my first degree at the University of Free State where they were already using outcome based curriculum, so it's kind of similar. So you come with such experiences and share with the rest how also you have found or how you have learnt about the principles of outcome based curriculum. Yes.

Interviewer: Ok, so you talked about the issue of other people who had maybe a little bit more knowledge than the others. What did you notice were the characteristics of these people who were supporting the others, other than may be being...

Response:...part of the process earlier?

Interviewer: mmmm [yes]

Response: (laughs). I think, I think much of it really it was interest, personal interest. And secondly, it could have been the desire to know about it from within. So they were involved mostly in self-directed learning themselves. So over and above what they got from being part of the process, they also took it further and did their own studying and their own learning to empower themselves about the same competencies, so I could really attribute it to the desire to know more through self-directed learning.

Interviewer: What about among the participants, the nurse educators who were to be supported, or who were involved in the support activities, did you sense the willingness to be part of this process or they were coming for these activities because may be the institutions where they were coming from delegated them to go?

Response: (laughs) yeah, obviously it was a paradigm shift, so being a shift from the norm, you expect quite different reactions. There are some who desired (sneezed). There were some who showed some desire, some really did it for the sake of doing it because it was trend. It was something coming, so you either had to face it or you fall because you had no other choice. Yeah. But with such people that's where you didn't see progress with work that they were supposed to do. For instance as part of training was to help ourselves develop our own tools, and so even when given assignments to go do, those who really didn't have much zeal would come back with nothing when we have to now come and show what we have done what we have learnt. And so I believe, yes there were some had interest, but some really had to do it for the sake of doing it because it was coming anyway. So!

Interviewer: There was no way out.

Response: There was no way out. Yeah.

Interviewer: So what were some of the challenges of this type of support? Because I assume, probably was it was a planned type of structured support or it was a kind of support where you find yourself in a corner but you have to continue functioning and you don't know how to get around, and then you say okay I need support?

Response: Well, the support had very good intentions, but I think it came as second choice. Because ideally, uumm, I think schools and faculty would have desired to have undergone formal training by a specialist or someone who at least has a better and clearer picture and so take us through. However, there was kind of lack of preparedness I think from our schools management in terms of getting such a person. So because we had to do it we had to find an alternative. So alternative had to be ourselves, peer support. But the challenge with peer support was that it had no obligation I would say, because if I feel like I don't want to develop myself a study guide, no one would force me to, because my school administration felt like it wasn't a requirement after all for us. So nobody made a follow-up and nobody made a reinforcement to say this has to be done. So there still some schools and some educators up to now who still [don't] have their own developed materials because I mean nobody followed it up. Yeah. So I think that's what was a challenge.

Interviewer: So basically you are saying that much as this types of support was going on, there wasn't a structured system of monitoring and evaluating these activities.

Response: Definitely, and there was no responsibility. Well one would be tasked but there was nobody who really following it up to ensure that it is done.

Interviewer: And even if you didn't do it, there was no consequence?

Response: They were fine. Nothing, nothing, that's why am saying even up to now you go to some schools there is still no materials that were intended to be there then when it was supposed to be. mmmh

Interviewer: What were the main challenges relating to this implementation of the CBC as in the hands-on type of activities, what were the main challenges that people faced?

Response: I think the biggest challenge for schools and for teachers in different schools was, I don't know whether I will be fair to say management didn't really show much support, for instance you find a school that has 3 teachers and the enrolment for the group that year becomes 55 and the classroom is the same, the classroom setting arrangement is the same, so no change in relation to what CBC requires. But as teacher you are expected to do things differently. So that became a very big challenge. Secondly I remember when we first did our workbooks, we did them, but there was no money to send them for printing, so we had them but we couldn't give them to student, and so they couldn't be used. So that way really compromised how you can implement it because without study guides then learners cannot be able to know what they have to learn. So it really affected the implementation.

Interviewer: were there main challenges relating to teaching strategies?

Response: Of course they were and still are. Because like am saying that uuur, it had to be a paradigm shift. So that means shift in the way I used to do things from then to now, how I am supposed to do things. It also involves the classroom setting, it also involves resources, it involves many thing that have to change, but most of them could not change, including the very student enrolment to accommodate using different activities. And again the numbers of students also made it very difficult for us to integrate theory and practice because with the number like we had 55 students, it's very difficult to integrate in a manner that in a week you are able to offer theory and practice, because the nearest hospital could only accommodate 8 students per module. And so when you have capacity for 8 in the hospital but you have 55 students in class, how do you send them out in a day to integrate theory and practice? So such things were not prepared in advance.

Interviewer: So now, I sense that there could have been, it may not be in your institution but it could in all other institutions. There could have been people who were still reluctant to start up, to really fully engage with the new CBC. How were such cases dealt with? You are in an institution, you are willing to go but you are still having challenges may be with teaching strategies, may with teaching materials, and then you have other people who say were reluctant to join in. How were such situations dealt with?

Response: Well unfortunately or fortunately for the midwives, all institutions agreed to engage in CBC all at once. However, there were still individual people in the very program who were reluctant. I remember in my institution particularly when we started we had an educator that was I think two years away from retirement, she plainly and simply said 'aaah, I will continue with my content, you do your CBC kids, we will meet somewhere'. So those two years before she went on retirement, indeed we had two teaching methods..... we had two programmes running, for the courses that she was teaching she was continuing with content based and then for the rest we made mixed content and competence because of other factors.

Interviewer: How did it make you feel?

Response: Well, as a teacher, unfortunately she was the head of program, so you just had to let it go, let it be... You do the best you can do where you are, yeah. She continued until she went on retirement.

Interviewer: The reason being that now she was even your senior, and she was the head of the programme and you could not stand up and say 'head of programme, this what we have started'

Response: (laughs) Of course and I was very junior in the programme by then. So I mean she just continued and things happened that way.

Interviewer: So, to what extent was such support strategy adequate? Did you think this type of peer support you were giving each was adequate? How adequate was it?

Response: It wasn't adequate, but it was really helpful because that was the only thing we had. If we were provided with another option, then probably it could have been better. And if our schools felt upon their shoulders that it is their responsibilities, they could also put strategies to ensure that it's happening the right way. But since that was not there, that's why am saying it ended up being an individual thing. You do it because we interest in it, if you don't then it's also fine, you continue with what you are comfortable with. So management really didn't see it as a must, because like performance appraisals were not done. Even if they would be done, or those that were done, tools that they used to assess the same would be the old ones so they didn't really cater for the transition.

Interviewer: What about the clinical area, how did you support staff in the clinical area in the face of the new curriculum to enable them support the students?

Response: The clinical area became a challenge because of the quota of our students. It was also a big challenge for the clinical practitioners to change. I think for the first 2 years we didn't really have a change in the way we conducted our clinical instruction. Students still went to do everything in one placement because that was the only time when they will be in MCH for that. So in terms of integration it really became a big challenge. Secondly, it was also because of the resistance in the clinical practitioners, however, I even don't blame them, because also as the school we didn't have a plan to prepare them for the change and so we didn't prepare them. So they continued with how they used to do things the way they used to do things and it happened like that.

Interviewer: Do I hear you saying that there was no support provided to the clinical staff?

Response: Yes, there was no support provided to clinical staff.

Interviewer: How best would you suggest we proceed with the implementing the CBC in general nursing?

Response: wow, I think there has been a little investment in the educators so far. The fact that the midwives have had some years in the curriculum, to me it's a strength for the colleges in terms of peer teaching and peer support because I want to believe that it will be easy for the nursing programme to learn from the experiences of midwifery programme. I also feel that if we have invested a bit in the educators themselves then the plan for implementing the nursing CBC should focus a little more on the administrations of the schools. Because right now the nursing faculty are doing the best to do what is supposed to be done with the support of the midwifery programmes. But if the administration does not respond equally then there will still be such challenges. Responding in the ways that they help faculty have adequate number of students, so that we can be able to work around integration properly from the beginning to the end, and also have means of placing students effectively in facilities where they have to. Secondly the schools taking it upon themselves through management to prepare the clinical people to be able to do their work properly, which will be supervising students in the way which

is required by CBC. So if management doesn't buy the idea, it becomes difficulty for faculty to go around especially because we have many hospitals or facilities. So it really needs I think, administrative support big time, this time. Yeah.

Interviewer: Now talking about administrative support, how do you think the managers can best support or encourage staff to support each other? Because at the end of the day the team in the institution need to support each other, people may still be at different levels of capacity. How now do the managers come in to encourage this support among staff?

Response: You know I don't think that is a problem. I don't think there is problem between faculty support, yeah. Educator-educator support is not a problem at all, and so I don't think it's a must for administration to really take it upon themselves to say, 'hey midwifery support nursing'. It's already happening even without their saying, yes. But am just looking at what became big challenges in the midwifery that they shouldn't be a problem again in the nursing. Issues like student quota, infrastructure changes so that it accommodates that, issues like clinical placement transitions and preparedness, yes. Because most of them will require funds, will require time out of normal work station to those other areas to prepare. May be it may also need some incentives for clinical practitioners to feel like they are part of the change. Yeah.

Interviewer: How best do we ensure support of the clinical staff so that we can support the students together?

Response: I think that's where I was saying that now it requires administrative support because now it will be the responsibility of the both programmes to go and orient the clinical practitioners on the transition that is expected and also prepare them on the role that they will be expected to play, so that they understand exactly how the curriculum is going to be rolled out, implemented and so what will be expected out of them. And of course it has been mentioned that it will be added responsibility. So with added responsibility obviously there has to be way of saying thank you, that one will be a management decision on how to thank these people.

Interviewer: Now that the curriculum is being rolled out, what kind of hands-on support can educators provide to each other?

Response: Educator to educator or educator to clinical?

Interviewer: Both educator to educator and educator to clinical.

Response: Well, it can come in forms of training, yeah, where we can organise regular trainings addressing different things. For instance we are going to use different assessment methods, so we can schedule and address such in forms of trainings, in forms of role play where we cannot have formal demonstration of each other's activities. I think we can use different ways of training each other. And we can also like peer support each other by being there to co-facilitate activities and develop and everything. I think we can do that in partnership, yeah. You have a mentor from one programme to the other where you can learn from each other.

Interviewer: We are almost at the end of our discussion. I would like to find out from you if there is anything else that you would like to add that we did not touch on or any recommendations that you would have regarding supporting one another during CBC implementation.

Response: I think I still have one thing that is still burning or itching up to now for me. We have really tried to do what CBC requires, we may not have reached the very highest point. But it's also a challenge to see that when it comes to assessment, especially the final assessment, it's still not complying to the CBC. Because when we started we were telling students that the pass mark is 80% otherwise you fail. Then you go to the clinical area you tell them a skill has to be 80% or otherwise you fail. But then you go into the examination the result says 50% and you have passed. So I really find that a challenge, so that also to me that shows a discordant between teachers and administration. Because if really the administration feels that we are in this thing, I don't understand how come assessment policy has not responded to the requirement of CBC and so the results should be the same. So that really I still find a challenge, I don't know how it will be fixed or when it will be fixed, because I don't think it should be complicated. It's simply to set up a pass mark and it's done.

Interviewer: Indeed that is a genuine area of concern that requires seriously interrogation and appropriate action from various stakeholders.

We have come to the end of our discussion. Thank you very much for your time and this very rich discussion.

Response: You are welcome.

END OF TRANSCRIPT

ADDENDUM J

Data coding sheet

Data coding sheet for the qualitative study

Experiences of nurse educators in Lesotho regarding peer support during new curriculum implementation

Themes	Sub-theme	Code	Evidence
1. Motivation for educators to participate in peer support	Drivers for peer support	The end of NEPI funding was a stimulus for peer support	<i>"So when that funding of NEPI ended we sort of naturalized into a system of how do we move on, you know....so the question is what do we do? NEPI is gone, the consultant is gone, we need to implement.....that's when we unearthed a lot of issues as if that training initially didn't happen." Participant A1, Pg. 3</i>
		Peer support tailor-made to individual and institutional needs	<i>"So the meeting that I remember which was now a workshop it was based on the challenges that we were facing. But normally even during the ordinary meetings that we had we would not leave without talking about the CBC, so it was part of the discussion in every meetings and special ones were being arranged for problems that were being observed." Participant C1, Pg. 3-4</i>

Themes	Sub-theme	Code	Evidence
			"...a lot of them have been driven by need, what do we need and then that comes on board.....we realize we do not have checklists to do A, B, C, D. Other institutions don't have this...and then I start a workshop on that. 'We do not understand the assessment for this throughout, look let's have a national training workshop' Participant A1, Pg. 8
		Educational landscape associated with implementing a new curriculum drove the need for faculty support	"Then after we had done the blueprint and made sure that everyone understand, then we were capacitated on how to develop those OSCE stations, developing checklist, developing scenarios, how to run an OSCE setup. We took some sessions capacitating one another as institutions." Participant A2 Pg. 4
	Continued engagement with reluctant faculty	Reluctant faculty need to be continuously engaged	We shouldn't have given up to say this person is so resistant, but we could have persisted to say no matter what she will be on board with everybody" Participant B1, Pg. 5-6
2. Attributes of educators influenced the extent of interaction and uptake of support	Individual characteristics influencing uptake of peer support	Attitude of faculty influenced the consistency of seeking support	"It (consistency of support) depends also on our attitude as nurse educators, whether you have taken this positively or it was just forced through your throat like NG-tube. If you accept it being forced then there is no initiative that you are going to take, you will continue at your old style and say, am still fine." Participant C2, Pg. 9

Themes	Sub-theme	Code	Evidence
		Limited immediate application of new knowledge	<p><i>"But what gets to be disappointing is now when you go and measure the evaluation, or measure what's happening in institutions that's when you are like, you know in the long run it was all just, evaporated immediately after we came out of the room, the sun heat the heads and all that just disappeared." Participant A1, Pg.11</i></p> <p><i>"To some extent they were helpfulbecause after the meeting you would see people trying to do something, though after some time you would wonder what is happening now again, I thought we were on the right track, how come I don't see what we discussed before." Participant, B1, Pg. 4</i></p>
		Limited accountability and 'nonchalant' attitude of educators influenced attitude of educators	<p><i>"But with the other institutions we found that even if we share our experiences, how we get things like videos, we tell them, we download them from You-tube....it's usually feasible to download afterhours when the network is not too congested. So you find that they are expecting us....to download and give them all the materials ready even if we refer them to the links and we tell them how you get this....they were expecting us to share a completed thing." Participant A2, Pg. 8</i></p> <p><i>"Or if you look across the whole collective of to-be implementers at the institution I think there were variations in terms of that willingness to</i></p>

Themes	Sub-theme	Code	Evidence
			<i>engage in this, there were variations....."</i> Participant A3, Pg. 3
		History of un-sustained donor projects influenced the perception of peer support need	<i>"Am trying to link history and accountability that we have had a lot of donor funding coming in pouring money and they go and nothing really changes. And I think in this case because it was NEPI, people are like 'oh this is another donor who's going to come and just give us things and they go' and four years later you know."</i> Participant A1, Pg. 5
		Age, experience in the former curriculum influenced uptake of peer support	<i>"...you hear when people talk, they will tell you that 'I have been in this program before so and so could be employed in this institution, who does she think she is or what'. But you know, I think, eer we were not giving enough support to each other."</i> Participant B1, Pg. 5
			<i>I remember in my institution particularly when we started we had an educator who was I think two years away from retirement who plainly and simply said 'aaah, I will continue with my content, you do your CBC kids, we will meet somewhere', so those two years before she went on retirement, indeed we had two teaching methods.....unfortunately she was the head of program, so you just had to let it go, let it be..."</i> , Participant E1, Pg. 6

Themes	Sub-theme	Code	Evidence
			<i>"Some institutions that had people who had long duration of experience or who were generally old biologically and old in the teaching, most of them had that tendency that they want to be resistant to change." Participant A2, Pg.7</i>
3. Unstructured peer support strategies	Strategies engaged during peer support	Inadequate time to engage in peer support	<i>"...the main challenge would be time, that's the only constraint that we have. To say, we have to meet at five and do the activities, after doing..., looking at the activities they have to be corrected the same night and be facilitated the following day...."Participant A3, Pg. 7</i>
		Strategies to support new colleagues included orientation and load allocation	<i>"You just have to be oriented to know how do we go about it, although it's challenging because you have to be preparing for long periods of time, you have to be creative, come up with new things all the time." Participant C1, Pg. 8</i> <i>She has not been involved in CBC, am telling you I have made a photocopy of the modules that...we decided, the 2 of us decided that...I should take labour, with an understanding that labour demands a lot and it needs experience, somebody with experience and all that, so she is going to take antenatal module. Participant B1, Pg. 15</i>
		Supportive clinical supervisors meetings	<i>When it (CBC) was just starting it was a challenge for most of us but through the supportive</i>

Themes	Sub-theme	Code	Evidence
		were essential in addressing challenges associated with curriculum implementation	<i>supervisors meetings, some of the challenges were overcome in such meetings...</i> Participants C3, Pg. 5
		Committee set-up to drive faculty support	<i>"...we set up this committee of midwifery implementers" Participant A2, Pg. 5</i>
			<i>"We also had another workshop in [Venue X] where there was a task team of nurse educators and they took us through the CBC delivery and development of activities...." Participant D1, Pg. 3</i>
		Workshop environment were non-threatening	<i>"...the moment you are using it as peer, it is as is, 'peer', very equal, none threatening, none top-down. It's me talking to you as a colleague....the collegiality that surrounds the peer makes it more, more worthwhile....the workshops that I have conducted, it's really a relaxed environment...But you know it won't be working if you got the boss to come and facilitate a similar workshop....." Participant A1, Pg. 14</i>
		Various platforms for sharing experiences were engaged by faculty	<i>"...we were having meetings with other nursing institutions, where we were supporting each other even the clinical supervisors were having that forum, we even created a WhatsApp group</i>

Themes	Sub-theme	Code	Evidence
			<p>were the main intention of that group was to share the challenges and experiences pertaining to CBC so that was very helpful indeed" Male Participant C3, Pg. 3</p>
			<p>"...during exchange of emails to say here am stuck here how do I overcome this challenge is also another strategy that was used." Participant D1 Pg. 3</p>
		Presentations on specified topics were used as a form of support	<p>"...that activity (blueprinting) came up when we were going to develop the timetable, we were tasked with an activity an item back for OSCE stations, so that's when that presentation it was done on that forum." Participant C 3, Pg. 4</p>
		Peer review was used as a strategy to evaluate colleagues work	<p>And one other thing that I saw working very well was this one of peer review.... much as we take it as.....a witch hunt exercise...(laughs).....if it's done correctly, its good, it's very good. At the end you realize you thought you were doing it right but when someone sits down and observe you objectively, they come up with very good suggestions and it improves our teaching and learning. Participant A3, Pg. 10</p>
		Frequent meetings were used as a platform of sharing experiences regarding	<p>"...they (meetings) had to be more intensive or more frequently because it was like we are nursing this new born curriculum. So they went on up to the time we had to start the next academic year." Participant A2, Pg. 5</p>

Themes	Sub-theme	Code	Evidence
		implementation of new curriculum	
	Unstructured nature of peer support	Limited tangible support for implementation in most institutions	<p><i>"It's after the 5 day workshop, there is someone behind your head who is ready to say press this button, do this, now 2 days later you troubleshoot, am there let's do this. So I think the difference with other institutions is after the 5 day workshop, I go to my own institution, there is no one, there is nothing even if am to call him, he is kilometers away, he doesn't get what am going through and then it tappers off."</i> Participant A1, Pg. 7</p> <p><i>"Because we were the only ones that attended the workshop for CBC in the midwifery and we were the first to implement, even our nurse educators, the Principal and the Deputy did not know what we're talking about. So it was us, us alone."</i> Participant C2, Pg.6</p>
		Limited accountability on both the supporter and the supported	<p><i>They felt they were not answerable to me, I also was not answerable to them. My job was HOP for midwifery at school X, and that's it. Participant A1, Pg. 4</i></p> <p><i>I also assume that what drives monitoring and evaluation is accountability. And if there is no accountability, there is no need for me to monitor anything. Participant A1, Pg. 18</i></p>

Themes	Sub-theme	Code	Evidence
			<i>"The challenge with the peer support was that it had no obligation I would say, because if I feel like I don't want to develop myself a study guide, no one would force me to, because my school administration felt like it's not a requirement for us. So nobody made a follow-up and nobody made a reinforcement." Participant E1, Pg.4</i>
		Support was initially unstructured and gradually became structured	<i>"So like I said initially we were not having structured ways of our discussion forums, they became more structured the issue of them becoming more structured come up from the experiences of the initial forum and also uh adequacy..."Participant A4, Pg. 10</i>
		Perceived inadequate support provided to resistant colleagues	<i>"...we were not giving each other enough support ...I have a feeling that we were not giving each other enough support because you start suggesting something to somebody, you see her being so resistant to change from that behavior to the one that is expected, and you become fed up....." Participant B1, Pg. 5</i>
		Unstructured faculty support perceived as inadequate	<i>When we started really it (support) wasn't that much, because everyone was looking at what he is supposed to present to student, what to prepare, so it was minimal.... in those days it was very hectic, you wouldn't even have a minute to go there because you need to prepare for another day (laughs). Participant C2, Pg. 7</i>

Themes	Sub-theme	Code	Evidence
	Endorsement of peer support by administrators	Administrative support perceived as fundamental	<i>So there is that good support from the administration to help other teachers to help others, so there is that much support, that one I have no doubt about it, yes. Participant C1, Pg. 7</i>
			<i>"...the institution was ready to support in any way that both the programs were saying they would need assistance. I would say even for, even for the times when we would come to work on weekend, if we requested lunch over the weekend, we would be provided with such. If we requested to have workshops, we would be assisted with such." Participant A3, Pg. 14</i>
		Availability and accessibility of support influence the impact of peer support	<i>"But this one who is always with you every day you learn a lot of things, you share a lot of information, you assist each other here and there to say no, this is how it is done and let us not do it this way...." Participant B1, Pg. 9</i>
	Engaging with material of the support was empowering	Engaging with workshop material before workshop was empowering	<i>"So to those who read and came prepared for those workshops they were very helpful because it was as I said it's an empowering." Participant A2, Pg. 4</i>
Active engagement in planning and provision of support activities was beneficial		<i>"They helped a lot, particularly for me, I was nominated to be part of the facilitators to the process, and I was part of the planning team and the team that was leading the discussion. And it...was helpful because it was not only the discussion, we were also actively engaged in</i>	

Themes	Sub-theme	Code	Evidence
			<i>those activities and then critiquing them to align them to what is expected, so actually it was very beneficial..." Participant C1, Pg. 3</i>
	Communication enhance peer support	Institution share information on progress made on implementation	<i>Actually in the intercollege we were sharing the progress not exactly the activities in our workbooks. We were sharing the progress as to how far are we with the development of workbooks. Participant C2, Pg. 3</i>
		Communication among institutions not well structured	<i>"You will never have even a telephone to call an institution, call your colleague to assist you in whatever challenge you are facing, you have to pop out your own money to buy your own airtime to communicate." Participant B1, Pg. 14</i>
4. Consequences of peer support among educators	Perceived adequacy of peer support	Peer support was adequate during implementation of new curriculum	<i>"I think the support was robust to some extent so we could improve those areas, on some..." Participant A4, Pg. 10</i>
			<i>"When it comes to the other nursing institutions, the support likewise I think it's enough....." Participant A4, Pg. 2</i>
	Reaction to the support	Reaction of the educators to the peer support	<i>"...these workshops are not workshops, it's his research that he is going to be presenting you wherever he goes" Participant A1, Pg. 15</i>
			<i>"Even if they see that this person is helping us or this institution is helping us, they sort of channel</i>

Themes	Sub-theme	Code	Evidence
			<i>their anger to that. Because they could not channel the anger to the partner organization"</i> Participant A2, Pg.11
	Outcomes of peer support in Lesotho	Strategies to empower faculty are transferable to others	<i>"And I think for me that's what I have gained all these years, how to deal with faculty that are your senior, sometimes are more experienced than you, are your juniors.how to deal with those variations and social dynamics, psychological dynamics that come into that, I think that has been a fantastic learning curve for me. I think I have even managed to get those as transferable skills even when am with SAFRI group."</i> Participant A1, Pg.20
Support activities in institutions enhanced specific competences among educators		<i>"Yes I did have some (challenges) the use of the manikins when it was still starting, since I did not go through the training of how to use the manikins, because I was employed...when CBC was already running...but as time goes through the support from other colleagues I was able to cope.....through in-house training"</i> Participant C3, Pg. 6	
		<i>And also amongst ourselves we had meetings and workshops on utilization of the OSCEs...."</i> Participant A4, Pg. 9	
		Peer support activities have been published in reputable journal	<i>"I think the one on OSCEs, when we developed OSCEs for the first time, so it was really supporting colleagues developing the OSCE"</i>

Themes	Sub-theme	Code	Evidence
			<i>framework and then we wrote a paper on that and it was published with International Journal of African Nursing Science” Participant A1, pg. 21</i>
		Peer support activities are empowering and stimulate self-directedness	<i>“But those meetings and developments, the monitoring, and then after you facilitated in class, someone comes and tells you that you did not do scaffolding, and you have no idea what scaffolding is. But because next time when the person comes you want to do it right, you go back to the internet and you check what is scaffolding? What am I expected to do when I do scaffolding? I think they were enough. Participant A3, Pg. 6</i>
		Awareness of curriculum improved due to peer support	<i>“I think now all people are aware. But inter-institutionally now initially there was no awareness and stuff, but for now with the persistence, that unrelenting quality of some of the key people has made it, have made competence based curriculum to be known....” Participant A4, Pg. 7</i>
	Interaction among educators due to peer support	Peer support resulted in teamwork which enhanced implementation of the new curriculum	<i>“But really we are adults, we need to support each other we don’t have to always wait for the Director Academic to say you guys should do 1, 2, 3, 4, we are adults, we are educators”. Participant B1, Pg. 11</i>
			<i>“...before going to class and facilitating activities, they had to be reviewed is the right</i>

Themes	Sub-theme	Code	Evidence
			<i>word to say I've developed my activities we would sit down as a team no one was to go to class to facilitate activities that were not reviewed. Participant A 3, Pg.5</i>
		Positive outlook of colleagues/peer enhanced learning	<i>"I have learnt a lot of things from them.....they are people who are always positive, very positive. Participant A3, Pg. 7</i>
		Limited reciprocity related to peer support among institutions	<i>"I haven't heard from them calling us for help, if I mention one school because now we are interacting with each other during examination. You find that with other school you find that they are still using the old evaluation tools for their students, so really am not sure if that one we are saying we are supporting each other effectively." Participant C2, Pg. 8</i>
			<i>"...since all the other institutions found themselves implementing when they were not ready, so it was mainly us capacitating them and helping them because they find that most of the things that we were ready and we were prepared, they had not done." Participant A2, Pg. 11</i>
		Interaction among educators enhanced learning and improved implementation	<i>"I think that opportunity of discussing, sharing what you are developing with others also creates those kind of I think dilemmas for you, which lead you to learn more and try to perfect the way we have been developing teaching and learning</i>

Themes	Sub-theme	Code	Evidence
			<i>materials for the competence based curriculum." Participant A4, Pg.2</i>
	Peer support extended to clinical area	Peer support extended to clinical facilitators	<p><i>"Through the pre and the post placement meetings, we were able to address... issues and iron out some of the concerns that they were having.... We are even having some preceptors in the clinical area who are serving.....who always try to motivate other staff members and make them understand the importance of signing for students. Participant C2, Pg. 5-6</i></p> <p><i>"And I tell you this time if you could go to our sister hospital, or training hospital.....they understand the concept and they can explain it better than we can to other preceptors, and I think that is because of the support they got from the institution." Participant A3, Pg. 15</i></p>
	Development of resilience by the peer supporter	Emotional reactions of the supported, strengthened the resilience of the supporters	<p><i>"Even personally, emotionally, we were called names, we were insulted, all that I still think it was also a benefit because I was able to endure all that." Participant A2, Pg. 12</i></p> <p><i>"And I think the fact that I had gone through thatblustering, and those insults and those things during the development of the curriculum. I think I ended up saying 'I have to own it, I cannot have gone through that and then few moments later it falls flat in the face..." Participant A1, Pg. 4</i></p>

Themes	Sub-theme	Code	Evidence
		External support to the developer/supporter enhanced resilience of the supporter	<i>"I think the other story has been my international exposure, that at the end of the day, you know you also need to compete at that league, and these local issues....end up looking like they are petty. That's how they are supposed to happen and when you go at international league you need to have gone through also this form of struggles and form of challenges and things like that....without the colleagues internationally, it would have been really difficult...." Participant A1, Pg.10</i>
5. Model performance inspired engagement with new curriculum	Peer supporter, experience, knowledge and willingness	A knowledgeable colleague supported educators in other institutions	<p><i>"...so they were kind of step down training from what they had learnt during the process of development, now sharing with us as colleagues. Participant E1, Pg.2</i></p> <p><i>"...with the developing the work books, we were having someone from a colleague another institution who was almost every now and then in every meeting wanting to know how far we are with, pertaining to the development of workbooks, so that one I would say he was serving as our mentor." Participant C2, Pg.5</i></p>
		Experienced faculty were willing to support inexperienced faculty	<i>"I think the two of us that were new we were curious to know what this CBC is all about, but the rest of the team there was willingness there was commitment and most of all there was support from the seniors who seemed to</i>

Themes	Sub-theme	Code	Evidence
			<i>understand, they supported us."</i> Participant A3, Pg. 3
		Early adopters were essential in supporting the new curriculum	<i>(Those individuals who) caught the fire, yes caught the fire related to issues of competence based curriculum those key people enabled to motivate and...carry along those who were a bit reluctant to jump in the ship of implementing competence based curriculum and also development of competence based curriculum related materials."</i> Participant A4 Pg. 4
		Peer supporters were internally driven to support colleagues during curriculum implementation	<p><i>I really wanted not to miss any opportunity to be empowered and to develop, not just to remain here and gain years of experience but without any development as a professional.</i> Participant A2, Pg. 5</p> <p><i>Personally, this person is young, energetic, enthusiastic, he is wise, and another thing is he was studying so...all that process of facilitating others didn't feel that he is being used or abused because it's part of his studies, he is also developing.</i> Participant A2, Pg. 9</p> <p><i>"I think much of it really it was... personal interest. Secondly, it could have been the desire to know about it from within....they were involved mostly in self-directed learning themselves...to empower...themselves about the same competencies..."</i> Participant E1, Pg. 3</p>

Themes	Sub-theme	Code	Evidence
		Limited knowledge levels of peer (supporters) influences the quality of peer support	"...fortunate enough the three of us we attended the workshop, the three of us. So when we came back we were in the same level... Either we were doing it rightfully so or wrongfully so, we were just moving blind, as blind as we were, the three of us." Participant C2, Pg. 6-7
	Rippling effects of exemplar practice of one institution	One institution was excellent with the potential of supporting other institutions	"Actually where we needed help we call a colleague from Institutions A to assist us... I think the other time he even came to assist us in the strategic plan so we can also be able to include what we are doing in the... curriculum." Participant C2, Pg. 3
		Institutional culture of productivity encourages faculty to learn and improve	I think the spirit that...prevailed among institutions is also the one that made people in the department ready to know, to be eager to do all these things...that's how I felt to say if I don't want to know this thing, it means am not going to be able to be productive because this is what is happening, which I feel was the same even for the person that I had joined the team with." Participant A3, Pg.7
		Exemplar practice in one institution influenced other institutions to	But now because we have time and again stood the test of time, our results are proving this, our teachers everywhere they go they are really top of what they are doing..... So like our sister school which is just down the road, Institution X

Themes	Sub-theme	Code	Evidence
		implement new curriculum	<i>are even wanting to benchmark....And now I had a call from Institution B....to say 'please come and support us with innovative teaching strategies, we have no clue how to implement a competence based curriculum" Participant A, Pg. 12</i>
		Providing exemplar practice provides some form of support	<i>Because they are taught how perhaps you develop an activity, it has to have certain elements, then we make an example together and then they become oriented. And then we have to develop for the next module then you know what to do. When you write introductions, when you conclude this is what you should look for, so I think that support is helpful, yes, because they are working as a team. Participant C1, P.9 -10</i>

ADDENDUM K

Agree II tool

AGREE II TOOL: FOR THE VALIDATION

Structure and content of the AGREE II

The AGREE II consists of 23 key items organized within 6 domains followed by Overall Assessment. Each domain captures a unique dimension of guideline quality.

The 6 domains are:

Domain 1: Scope and purpose – Item 1 -3

Concerned with the overall aim of the guideline, specific health questions, and target population.

Domain 2: Stakeholder involvement – Item 4 – 6

Focuses on the extent to which guideline was developed by appropriate stakeholders and represents views of intended users.

Domain 3: Rigor of development – Item 7 -14

Relates to the process used to gather and synthesize the evidence, methods to formulate recommendation.

Domain 4: Clarity of presentation – Item 15 -17

Deals with language, structure, and the format of the guideline.

Domain 5: Applicability – Item 18 -21

Relates to the likely barriers and facilitators to implementation, strategies to improve uptake, and resource implication of applying the guideline.

Domain 6: Editorial independence – Item 22 -23

Concerned with the formulation of recommendation not being unduly biased with competing interests.

Overall assessment: Rating the overall quality of the guideline and whether the guideline would be recommended for use in practice.

Evaluating the guideline

Please evaluate the guideline by ticking (✓) against “Yes” or “No” in the appropriate box depending on the completeness and quality of reporting.

No.	AGREE Item	Yes	No	Comment/Remarks
Domain 1: Scope and purpose – Item 1-3				
1.	The overall objectives of the guideline are specifically described			
2.	The research question covered by guideline is specifically described			
3.	The population to whom the guideline is meant to apply is specifically described			
Domain 2: Stakeholder involvement – Item 4 – 6				
4.	The guideline development group includes individuals from all relevant professional groups			
5.	The views and preferences of target population have been sought			

6.	The target users of guideline are clearly defined			
Domain 3: Rigor of development – Item 7 -14				
7.	Systematic methods were used to search for evidence			
8.	The criteria for selecting the evidence are clearly described			
9.	The strengths and limitations of the body of evidence are clearly described			
10.	Method of formulating recommendations are clearly described			
11.	The health benefits and risks have been considered in formulating recommendations			
12.	There is explicit link between recommendations and supporting evidence			
13.	The guideline has been externally reviewed by experts prior to its publication			

14.	A procedure for updating the guideline is provided			
Domain 4: Clarity of presentation – Item 15 -17				
15.	The recommendations are specific and unambiguous			
16.	The different options for management of condition/situation or health issue are clearly presented			
17.	Key recommendations are easily identifiable			
Domain 5: Applicability – Item 18 -21				
18.	The guideline provides advice and/or tools on how recommendations can be put into practice			
19.	The guideline describes facilitators and barriers to its application			
20.	The potential resources implications of applying the recommendations have been considered			

21.	The guideline presents monitoring and/or auditing criteria			
Domain 6: Editorial independence – Item 22 -23				
22.	The views of the funding body have not influenced the content of the guideline			
23.	Competing interest of guideline development group members have been recorded and addressed			

OVERALL GUIDELINE ASSESSMENT AND RECOMMENDATION

1. I would recommend this guideline for use	
Yes	
Yes, with modification	
No	

MAY YOU PLEASE MAKE YOU GENERAL COMMENT ABOUT THE GUIDELINE

--



The tool adapted from AGREE Next Steps Consortium (2009). *The AGREE II Instruments* [Electronic Version].

Retrieved March 13, 2017 from www.agreetrust.org

ADDENDUM L

Delphi survey

Information brochure for participants in the Delphi survey

Study Title: Peer support guidelines for nurse educators during curriculum innovation in Lesotho

Principal Investigator's Name: Mirriam Shawa

Principal Investigator's title: Doctoral Candidate

Principal Investigator's Institution: University of Free State

Principal Investigator's contact details: Mobile +26658404454; email mirriamshawa06@gmail.com

Principal Investigator's Supervisor: Professor Y. Botma

Purpose of study

This study is designed to develop guidelines that will enhance peer support among nurse educators during competence based curriculum (CBC) implementation in Lesotho. The CBC is a new curriculum and requires supportive strategies to enhance its implementation and prevent a curriculum drift.

The developed guidelines are as a result of the integration of the results from a multiple phased project. The initial phase was an integrative review which synthesized evidence on strategies used during peer support among professionals implementing a new programme, while the second phase explored the experiences of educators in Lesotho regarding peer support as they implemented a curricular change. Nested in the World Health Organization (WHO, 2014) *Handbook for Guideline Development* as a framework, the researcher integrated the findings of the two phases and developed a guideline to enhance peer support among educators during curricular change in higher education. The subsequent phase after the development of the guideline in the validation through the Delphi survey by experts in higher education. The process of validation will include evaluating and commenting on the content and development process of the using guideline a validation tool.

The Delphi survey process

The Delphi survey process is a cyclic/iterative consensus building approach, where experts in a field comment on material until consensus is reached. For this study, you will receive the developed guidelines and an Appraisal Guidelines for Research and Evaluation (AGREE) II tool which you will use to engage and comment on the developed guideline.

Ethical consideration

This study was approved by the Health Sciences Research Ethics Committee (HSREC) of UFS (HSREC 28/2017) and the Lesotho Ministry of Health Research and Ethics Committee (ID 91-2017). The framework for ethical educational research will be applied in this Delphi technique (Burgess & Cilliers, 2017).

Invitation

You are invited to participate in this Delphi survey to validate guidelines that have been developed to enhance peer support among educators implementing a curriculum innovation in higher education.

Timelines

If you accept this invitation, send your confirmation to participate by 1st March, 2019. You will receive the package for the first cycle on the 11th March 2019. Below is the activity plan for the Delphi technique. However, you welcome to communicate with the researcher for adjustments in timelines if need be:

Date	Activity	Responsible
11 th March, 2019	Package for Delphi survey received by reviewer	Researcher
12 th – 22 nd March, 2019	Reviewing the guidelines	External Reviewers
25 th March, 2019	Reviewers send feedback to researcher	External Reviewers

NB: There is a possibility of a subsequent cycle should the consensus not be reached in the first cycle.

Remuneration: Please note that there will not be any financial payment for this exercise.

Publication: Your contribution to this study will be acknowledged in the publication of this work although you will not be listed as co-author.

Lastly, I will greatly appreciate your participation and collaboration in this Delphi survey. Your time and efforts will forever be valued.

NB: May you please confirm your participation in this Delphi survey by the 1st of March 2019.

Regards

A handwritten signature in black ink, appearing to read 'Mirriam Shawa', with a circular stamp or mark over the first few letters.

Mirriam Shawa

ADDENDUM M

Ethical approval - UFS

IRB nr 00006240
REC Reference nr 230408-011
IORG0005187
FWA00012784

15 September 2017

M SHAWA
SCHOOL OF NURSING
IDALIA LOOTS BUILDING
UFS

Dear M Shawa

HSREC 28/2017 (UFS-HSD2017/0086)

PROJECT TITLE: PEER SUPPORT GUIDELINES FOR NURSE EDUCATORS DURING CURRICULUM INNOVATION IN LESOTHO

APPROVED

1. You are hereby kindly informed that the Health Sciences Research Ethics Committee (HSREC) approved this project after all conditions were met. This decision will be ratified at the next meeting to be held on 26 September 2017.
2. The Committee must be informed of any serious adverse event and/or termination of the study.
3. Any amendment, extension or other modifications to the protocol must be submitted to the HSREC for approval.
4. A progress report should be submitted within one year of approval and annually for long term studies.
5. A final report should be submitted at the completion of the study.
6. Kindly use the **HSREC NR** as reference in correspondence to the HSREC Secretariat.
7. The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act. No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2006); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; The International Conference on Harmonization and Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH Tripartite), Guidelines of the SA Medicines Control Council as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

Yours faithfully



MS MGE MARAIS
HEAD: HEALTH SCIENCES RESEARCH ETHICS COMMITTEE ADMINISTRATION



ADDENDUM N

***Ethical approval – Ministry of Health,
Lesotho***



LESOTHO

Ministry of Health
PO Box 514
Maseru 100

27 April 2017

Miriam Shawa (Ms.)
School of Nursing
UFS

Dear Ms. Miriam,


**Re: Peer support guidelines for nurse educators during curriculum innovation
in Lesotho (ID 91-2017)**


Thank you for submitting the above mentioned proposal. The Ministry of Health Research and Ethics Committee having reviewed your protocol hereby decides that it has the criteria "The subject is part of routine educational process". The committee exempts the proposal from research and ethics review and authorizes you to conduct the study with the understanding that you agree on the following conditions:

- In the event of changes in material or design or execution of the activity, the Research and Ethics Committee must be consulted through the Research Coordination Unit, MOH.
- The study is conducted among the specified population.
- The study protocol will be followed as stated.

Departure from the stipulated conditions will constitute a breach of the permission. We are looking forward to have a progress report and final report at the end of your study.

Yours sincerely,


Dr. Nyane Letsie
Director General Health Services


Dr. Amelia Ranotsi
Chairperson
National Health
Institutional Review
Board (NH-IRB)

ADDENDUM O

Institutional permission sample



Private Bag
Morija 190
Lesotho

Tel: (00266) 52500110/1
Email: scottnursingschl@gmail.com
Website: www.scottcon.ac.ls

4th August, 2017

Ms Miriam Shawa
Paray School of Nursing
Thabatseka
Lesotho

Dear Ms Shawa

**RE: YOUR STUDY ON PEER SUPPORT GUIDELINES FOR NURSE EDUCATORS DURING
CURRICULUM INNOVATION**

Thank you for your e-mail of July 28, in which you are requesting to perform a study on the midwifery educators as per the above topic.

It is my pleasure to inform you that Scott College of Nursing has agreed for you to continue with the study. I have requested the HOP Midwifery if there are issues or problems. She indicated her assent that you may continue and she will inform her Midwifery colleagues.

In short your research study has been approved.

Sincerely,

MAKIAISO RAMPHOMA
PRINCIPAL NURSE EDUCATOR
SCOTT COLLEGE OF NURSING
Morija

ADDENDUM P

Author guidelines



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ISSN: 0020-7489

DESCRIPTION

The *International Journal of Nursing Studies* (IJNS) provides a forum for original research and scholarship about **health care** delivery, organisation, management, workforce, policy and research methods relevant to **nursing, midwifery** and other health related professions. The *IJNS* aims to support evidence informed policy and practice by publishing research, systematic and other scholarly reviews, critical discussion, and commentary of the highest standard.

The journal particularly welcomes studies that aim to evaluate and understand complex health care interventions and health policies and which employ the most rigorous designs and methods appropriate for the research question of interest. The journal also seeks to advance the quality of research by publishing methodological papers introducing or elaborating on analytic techniques, measures, and research methods.

The journal has been publishing original peer-reviewed articles of interest to the international health care community since 1963, making it one of the longest standing repositories of scholarship in this field. The *IJNS* offers authors the benefits of:

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- Final online publication as soon as 2 weeks post-acceptance.

The *IJNS* endorses the Equator Network (<http://www.equator-network.org/>) an international initiative that seeks to improve reliability and value of research literature in health care by promoting transparent and accurate reporting of studies. We ask our authors to make use of appropriate

reporting guidelines to ensure excellence in scientific reporting. Guidelines for authors can be accessed at <http://ees.elsevier.com/ijns>.

AUDIENCE

Nurses, midwives, educators, administrators and researchers in all areas of nursing and caring sciences.

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GUIDE FOR AUTHORS

1. Introduction

The *International Journal of Nursing Studies* (IJNS) provides a forum for original research and scholarship about **health care** delivery, organisation, management, workforce, policy and research methods relevant to **nursing, midwifery** and other health related professions. The IJNS aims to support evidence informed policy and practice by publishing research, systematic and other scholarly reviews, critical discussion, and commentary of the highest standard.

Papers should address issues of international interest and concern and present the study in the context of the existing international research base on the topic. Studies that focus on a single country should identify how the material presented might be relevant to a wider audience and how it contributes to the international knowledge base.

1.1 Types of papers and word limits

The IJNS publishes original research, reviews, and discussion papers. Full papers can be a maximum of 7000 words in length (excluding references and text in tables or figures), although shorter papers are preferred. In addition we publish shorter editorials and letters, which comment on current or recent journal content.

1.1.1 Research Papers – 2,000–7,000 words

IJNS publishes original research that matches the aims and scope of the journal. Research papers should adhere to recognised standards for reporting (see guidance below and the [Author Checklist](#)). Instrument development or validation papers are only considered if accompanied by a copy of the full instrument, included as a supplementary file at submission stage so it can be published as an appendix online if accepted.

1.1.2 Reviews and Discussion Papers – 2,000–7,000 words

We publish systematic reviews (addressing focused research questions) and broader literature reviews (such as scoping reviews). We also publish discussion papers, which are scholarly articles of a debating or discursive nature. In all cases, there must be engagement with and critical analysis of a substantive body of research or other scholarship. Systematic reviews should adhere to recognised standards for reporting (see guidance below and the [Author Checklist](#)).

1.1.3 Letters to the editor – up to 1000 words

Designed to stimulate academic debate and discussion, the Editor invites readers to submit letters that refer to and comment on recent content in the journal, introduce new comment and discussion of clear and direct relevance to the journal's aim and scope or briefly report data or research findings that may not warrant a full paper. Letters are restricted to a maximum of 10 references, from up to 5 authors

1.1.4 Editorials – 1,000–2,000 words

Authors who have ideas for editorials which address issues of substantive concern to the discipline, particularly those of a controversial nature or linked directly to current/forthcoming content in the journal, should contact the Editor in Chief (ijns@kcl.ac.uk).

1.2 General guidance and preferred article types

Selection of papers for publication is based on their scientific excellence, distinctive contribution to knowledge (including methodological development) and their importance to contemporary nursing, midwifery or related professions. We strongly recommend prospective authors to consult our editorial on common reasons papers are rejected, which outlines avoidable pitfalls as well as the types of articles we prefer <https://doi.org/10.1016/j.ijnurstu.2016.03.017>.

We are unlikely to publish studies of new instruments unless the instrument is useful for directly guiding clinical practice (e.g. diagnostic/ screening instruments) and there is validation against a robust criterion. Preliminary instrument development studies indicating the need for further development, translations from one language to another and other pilot studies are unlikely to be accepted. We do not publish studies undertaken on animals.

1.3 Submission system

Submission to this journal is online at <https://ees.elsevier.com/ijns/>.

1.4 Elsevier Researcher Academy

Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

2. Before You Begin

2.1 Ethics in publishing

The IJNS is a supporter of the Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals, issued by the International Committee for Medical Journal Editors (ICMJE), and to the Committee on Publication Ethics (COPE) code of conduct for editors. Our guidelines should be read in conjunction with this broader guidance. The ICMJE requirements can be found at <http://www.icmje.org/> and the COPE's guidelines at <http://publicationethics.org>.

The work to be described in your article must have been carried out in accordance with The Code of Ethics of the World Medical Association for experiments involving humans (Declaration of Helsinki) and research on health databases (Declaration of Taipei) <https://www.wma.net/what-we-do/medical-ethics/>. Further information on Ethics in Publishing and Ethical guidelines for journal publication can be found at: <https://www.elsevier.com/authors/journal-authors/policies-and-ethics>

2.2 Reporting guidelines

The editors require that manuscripts adhere to recognized reporting guidelines relevant to the research design used and require authors to submit a checklist verifying that essential elements have been reported for all primary research and systematic reviews. We suggest that you consult the guidelines at an early stage of preparing your manuscript. You can search for the correct guideline for your study using the tools provided by the EQUATOR network: <http://www.equator-network.org/> The guideline used must be indicated in the journal's [Author Checklist](#), which is to be submitted with every paper.

2.3 Study Registration

We encourage the prospective registration of studies and require it for clinical trials (as defined by the International Committee of Medical Journal Editors). Registration should occur by the time of patient enrolment. Where a study has been registered, please give the registration number within at the end of the abstract and in the body of the paper. Authors seeking to publish a prospective intervention study (other than clinical trials) that has not been registered in advance are encouraged to register at the earliest opportunity before submitting for publication.

2.4 Informed consent and ethical approval

Informed consent must be sought from participants who are able to give it and this should be documented in the paper. Where informed consent is not obtained, consistent with recognised ethical principles and local legal frameworks this must also be documented in your paper. Ethical approval must be stated at an appropriate point in the article. The approving body and approval number should be identified in the manuscript. If the study was exempt from such approval the basis of such exemption and the regulatory framework must be described.

2.5 Patient details

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ADDENDUM Q

Author guidelines



INTERNATIONAL JOURNAL OF AFRICA NURSING SCIENCES

AUTHOR INFORMATION PACK

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DESCRIPTION

International Journal of Africa Nursing Sciences (IJANS) is an international scientific journal published by Elsevier. The broad-based journal was founded on two key tenets, i.e. to publish the most exciting research with respect to the subjects of **Nursing and Midwifery in Africa**, and secondly, to advance the international understanding and development of **nursing and midwifery in Africa**, both as a profession and as an academic discipline.

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Reference List: references should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters 'a', 'b', 'c', etc., placed after the year of publication.

Examples: Reference to a journal publication: Van der Geer, J., Hanraads, J. A. J., & Lupton, R. A. (2010). The art of writing a scientific article. *Journal of Scientific Communications*, 163, 51-59.

Data references

For reference style 5 APA: [dataset] Oguro, M., Imahiro, S., Saito, S., Nakashizuka, T. (2015). Mortality data for Japanese oak wilt disease and surrounding forest compositions. Mendeley Data, v1. <http://dx.doi.org/10.17632/xwj98nb39r.1>.

Reference to a book: Strunk, W., Jr., & White, E. B. (2000). *The elements of style*. (4th ed.). New York: Longman, (Chapter 4).

Reference to a chapter in an edited book: Mettam, G. R., & Adams, L. B. (2009). How to prepare an electronic version of your article. In B. S. Jones, & R. Z. Smith (Eds.), *Introduction to the electronic age* (pp. 281-304). New York: E-Publishing Inc.

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ADDENDUM R

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Author Guidelines

Author Guidelines

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- Include sections on Acknowledgements, Conflict of Interest, Author Contributions and Funding sources. If none is applicable, please state 'none'.
- Abbreviations should be spelt out when first used and thereafter used consistently, e.g. 'intravenous (IV)' or 'Department of Health (DoH)'.
- Numbers should be written as grouped per thousand-units, i.e. 4 000, 22 160.
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If you wish material to be in a box, simply indicate this in the text. You may use the table format –this is the *only* exception. Please DO NOT use fill, format lines and so on.

Preparation notes by article type

Research

Guideline word limit: 3 000 words (excluding abstract and bibliography)

Research articles describe the background, methods, results and conclusions of an original research study. The article should contain the following sections: introduction, methods, results, discussion and conclusion, and should include a structured abstract (see below). The introduction should be concise – no more than three paragraphs – on the background to the research question, and must include references to other relevant published studies that clearly lay out the rationale for conducting the study. Some common reasons for conducting a study are: to fill a gap in the literature, a logical extension of previous work, or to answer an important question. If other papers related to the same study have been published previously, please make sure to refer to them specifically. Describe the study methods in as much detail as possible so that others would be able to replicate the study should they need to. Where appropriate, sample size calculations should be included to demonstrate that the study is not underpowered. Results should describe the study sample as well as the findings from the study itself, but all interpretation of findings must be kept in the discussion section. The conclusion should briefly summarise the main message of the paper and provide recommendations for further study.

- May include up to 6 illustrations or tables.
- A max of 20 - 25 references

Structured abstract

- This should be no more than 250 words, with the following recommended headings:
 - **Background:** why the study is being done and how it relates to other published work.
 - **Objectives:** what the study intends to find out
 - **Methods:** must include study design, number of participants, description of the research tools/instruments, any specific analyses that were done on the data.
 - **Results:** first sentence must be brief population and sample description; outline the results according to the methods described. Primary outcomes must be described first, even if they are not the most significant findings of the study.
 - **Conclusion:** must be supported by the data, include recommendations for further study/actions.
- Please ensure that the structured abstract is complete, accurate and clear and has been approved by all authors. It should be able to be intelligible to the reader without referral to the main body of the article.
- Do not include any references in the abstracts.

[Here](#) is an example of a good abstract.

Scientific letters/short reports

These are shorter length, scholarly research articles of no more than 1500 words. Single-institution, and/or studies with sample sizes <100 are better submitted as short reports.

Guideline word limit: 1500 words

- Abstract: Structured, of about 250 words, with the following recommended headings: Background, Objectives, Methods, Results, and Conclusion.
- May include only one illustration or table
- A maximum of 8 references

Forum articles

Are personal opinion pieces that address an area in health professions education that would be of interest to the readership. Forum pieces while reflecting the authors personal views, should be scholarly, and arguments well-supported.

- They should not exceed 1000 words
- Up to 5 references are allowed.

Short communications

Are very brief articles that share work in progress, lessons learnt or innovations in medical education.

- They should be no more than 500 words in length
- A maximum of 3 references, and 1 table or figure.
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Guideline word limit: 400 words

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- May include only one illustration or table
- Must include a correspondence address.

Obituaries

Guideline word limit: 400 words

Should be offered within the first year of the practitioner's death, and may be accompanied by a photograph.

Illustrations/photos/scans

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- *Chapter/section in a book*: Weinstein L, Swartz MN. Pathogenic Properties of Invading Microorganisms. In: Sodeman WA, Sodeman WA, eds. Pathologic Physiology: Mechanisms of Disease. Philadelphia: WB Saunders, 1974:457-472.
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- Legal references
- Government Gazettes:

National Department of Health, South Africa. National Policy for Health Act, 1990 (Act No. 116 of 1990). Free primary health care services. Government Gazette No. 17507:1514. 1996.

In this example, 17507 is the Gazette Number. This is followed by :1514 - this is the notice number in this Gazette.

- Provincial Gazettes:

Gauteng Province, South Africa; Department of Agriculture, Conservation, Environment and Land Affairs. Publication of the Gauteng health care waste management draft regulations. Gauteng Provincial Gazette No. 373:3003, 2003.

- Acts:

South Africa. National Health Act No. 61 of 2003.

- Regulations to an Act:

South Africa. National Health Act of 2003. Regulations: Rendering of clinical forensic medicine services. Government Gazette No. 35099, 2012. (Published under Government Notice R176).

- Bills:

South Africa. Traditional Health Practitioners Bill, No. B66B-2003, 2006.

- Green/white papers:

South Africa. Department of Health Green Paper: National Health Insurance in South Africa. 2011.

- Case law:

Rex v Jopp and Another 1949 (4) SA 11 (N)

Rex v Jopp and Another: Name of the parties concerned

1949: Date of decision (or when the case was heard)

(4): Volume number

SA: SA Law Reports

11: Page or section number

(N): In this case Natal - where the case was heard. Similarly, (C) would indicate Cape, (G) Gauteng, and so on.

NOTE: no . after the v

- *Other references (e.g. reports) should follow the same format: Author(s). Title. Publisher place: Publisher name, year; pages.*
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From submission to acceptance

Submission and peer-review

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