



UNIVERSITY OF MALAWI

KAMUZU COLLEGE OF NURSING

Nurse Educators' engagement in research in Christian Health Association of Malawi

Nursing Colleges

A thesis submitted in partial fulfillment of the requirements for the award of Master of

Science Degree in Nursing and Midwifery Education

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Declaration

I, Victoria Nyirenda declare that this research report is my own work. It is being submitted for Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing.

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Date: 3rd December 2018

Dedication

I dedicate this work to the Almighty God for giving me wisdom and courage. I also dedicate this work to my parents, late brother Friday, Isaac Nyirenda, late Agnes Nyirenda, siblings and friends.

Acknowledgement

I would like to thank God Almighty for making it possible that I produced this research project. Special thanks should go to my supervisors (Mr. J Mfuni and Mr.Chikazinga), Dr K Wella, Evelyn Chibwe, Dr Sosten Lankhulani and Isabel Yangairo. Furthermore, I would like to thank my employer Ministry of Health for giving me study leave.

I am also grateful to CHAM for allowing me to conduct the study, Malawi College of Health Sciences lecturers for taking part in pilot study, all lecturers from the CHAM Nursing and Midwifery colleges who participated in the study.

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God bless you!

Abstract

Engagement of nurse educators in research is required to enable students to develop a clear understanding of how to take care of patients. The study aimed at assessing the extent of nurse educators' engagement in research in CHAM Colleges. The study used the quantitative approach. A descriptive research design was used to obtain data from 98 nurse educators in CHAM Colleges. Data was analyzed in SPSS. Data was presented in frequency tables and graphs. The findings revealed that only n=37 (37.8%) respondents have ever conducted research. Majority of the respondents have been involved in research activities in one way or the other though involvement was low. However, a good number of the respondents do apply research findings in the teaching practice n= 68 (69.4%). The results also revealed the two greatest barriers in engaging research which were inadequate research grants n= 52 (53.1%) and n= 43 (43.9%) inadequate training on research methods. The findings suggest increase intakes of post graduate nurse educators, adequate funding, provision of research grants and building research capacity in order for nurse educators to engage in research.

List of abbreviations

CHAM -	Christian Hospitals Association of Malawi
COMREC-	College of Medicine Research and Ethics Committee
KCN-	Kamuzu College of Nursing
MZUNI-	Mzuzu University
NMCM-	Nurses and Midwives Council of Malawi
NMT -	Nurse Midwife Technician
UNIMA-	University of Malawi

Working definitions

Conducting research- carrying out the research study

Engagement in research- conducting research and participating in research activities

Research based practice- is the hallmark of professional nursing and is essential for high quality clinical and cost effective nursing care.

Nurse educator- a nurse-midwife who teaches and prepares student nurses-midwives into workforce.

Nursing college-An educational institution that offers undergraduate nursing programs

Research- systematic inquiry designed to develop knowledge about issues of importance to the nursing profession, including nursing practice, education and administration

Student nurses-people who are studying or training to be nurse-midwives.

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CHAPTER ONE

Introduction

1.1 Introduction

Engaging in research entails two things: conducting research and involvement in research activities (Fredericks, 2014). Conducting research involves carrying out systematic inquiry designed to develop trustworthy information about issues of importance to the nursing profession, practice and education (Polit & Beck, 2010). Forsman (2011) urges nurses to conduct research, critically appraise relevant literature, and put to use new knowledge into practice.

Engaging in research informs practice and facilitates change which makes a difference to the health and well being of humanity (Meleis, 2012). Engaging in research is important because consumers of global health demand research based practices (Melnik, Fineout-Overholt, & Mays, 2008). According to ICN (2009) research based practice is the hallmark of professional nursing and is essential for high quality clinical and cost effective nursing care. Thus research based in nursing education requires the collection and analyzing of traditional teaching practices within the standard of teaching, thus making decisions about the performance of one's role as a teacher and the learning needs of his/her students. Thus, nurses can implement research based practices only if they engage in research.

Nurse educators are the gatekeepers of nursing profession as they determine the required standard of practice (Hunt, McGee, Gutteridge, & Hughes, 2011). As such, they must engage in research in order to provide clinical and theoretical education to student nurses (Polit and Beck, 2010). Engaging in research aids nurse educators to find innovative teaching strategies to effectively prepare new graduates for entering the workforce (Melnik et al., 2008). It is important

to study nurse educators' engagement in research as this is the basis for research based practice. The focus of this study is on CHAM nurse educators because they train majority of nurse-midwife technicians (80%) who are the lowest cadre of nurses and midwives in Malawi (Grigulis, 2010).

1.2 Background of the Study

According to Khalili, Khaghzadeh, Nir, Noor, & Zicker (2015) nurse educators are expected to prepare qualified nurses. These nurses should be capable of identifying individual and collective health needs in the epidemiological transition societies. Such nurses are expected to advocate for patients and provide optimal care on the basis of evidence obtained through research. For nurse educators to perfectly prepare these nurses, they need to engage in research. Studies across the globe have found mixed results about nurse educators' engagement in research.

In United States of America, Higbie (2010) found that nursing faculty engage in research and implement research findings. In California, Broom, Ironside, & McNelis (2012) reported that four of the 21 responding deans accounted that none of their faculty were conducting research, and nine deans reported less than 10% of their faculty were conducting research in nursing education. In the remaining eight schools, nursing education research was more prevalent, with six deans indicating 11% to 25%, one indicating 26% to 50%, and one indicating more than 50% of their faculty was conducting educational research. In Canada, nurse educators had a low level comfort with research utilization due to several personal and organization barriers (Vogt, 2013). The barriers included lack of time, lack of funds and lack of mentors.

A similar trend has been observed among nurse educators in Europe. For example in Slovenia, Brooke et al., (2015) reported that engagement in research among nurse educators is low as only a handful of nurse educators have ever presented research results in scientific conferences.

Similar findings have been reported by Malik, McKenna & Griffiths (2016) in Australia. The findings by Malik and friends showed that there was low engagement in research among nurse educators as very few of them had conducted research, published manuscript and presented research results in scientific conferences.

Studies conducted in Asian countries have found that some nurse educators engage in research and others do not. For example in Philippines, nursing faculty perceived themselves as knowledgeable and skillful in conducting research (Torres et al., 2016). However, in Oman, the Ministry of Health estimated that in 2010 only 2 percent of the nursing faculty who were trained in research design and methodology had conducted research (White, 2013). Among the barriers that deterred these faculty members from engaging in research were time constraints, lack of research knowledge, research support structure and motivation. In Saudi Arabia, only 38.6% of the medical academic faculty members have published a research work (Alghanim & Alhamali, 2011).

In Africa it is not promising either. The studies conducted in some countries like Nigeria and Kenya have shown that nurse educators lack the impetus to engage in research. For example, nurse educators do not read journal articles, do not understand research language, do not publish more research articles in peer reviewed journals, do not utilize research findings and have no skills in conducting research (Emelonye, Pitkäaho, Aregbesola, & Vehviläinen-Julkunen, 2016; Mutisya, KagureKarani, & Kigonde, 2015). And in Egypt, it is a challenge for nurse educators to engage in research despite efforts to increase research engagement (El-shaer & Elhanafy, 2012).

In Malawi, Muula (2007) conducted a study on scholarly productivity among academics at Kamuzu College of Nursing (KCN). Muula analyzed scholarly publications by faculty at the KCN. The publications were indexed in Medline/ PubMed, Psychinfo, and Web of Science

databases, searched between July and September 2006 to identify papers authored by the members of KCN faculty. The study revealed that there was low scholarly productivity at KCN. This means that there was low level of engagement in research among nurse educators at KCN. However, the study did not involve nurse educators from CHAM Colleges.

1.3 Problem of Study

According to anecdotal reports, nurse-midwives in Malawi provide substandard care to patients. For these nurse-midwives to provide quality care to patient, they need to be taught using approaches that entail application of participatory learning experiences and learning methods that will promote a culture of providing acceptable care to patients (Nurses and Midwives Council of Malawi, 2013). In order for this to happen, nurse educators need to engage in research, thus, conducting and participating in research activities because according to Polit & Beck (2010) they to base their teaching practice on emerging evidence from research. Therefore, there is a need to investigate the extent to which nurse educators engage in research in CHAM colleges in Malawi because they are the ones who train majority of nurses in Malawi.

1.4 Broad Objective

The broad objective of the study was to investigate the extent to which nurse educators in CHAM Colleges of Nursing and Midwifery engage in research.

1.5 Specific Objectives

Specifically the study wanted to:

- Determine the extent to which nurse educators in CHAM Nursing and Midwifery Colleges conduct research to influence practice

- Determine the association between nurse educators academic qualification and conducting research
- Assess the involvement of nurse educators in research activities
- Examine factors that act as barriers to nurse educators engagement in research

1.6 Significance of the Study

The findings of the study on nurse educators' engagement in research will help NMCM to inform policy on registration of nurse educators based on research. This is because nurse educators are expected to base their practice on evidence (Polit & Beck, 2010). NMCM is a body who registers nurse-midwives in the country based on continued professional development. NMCM can add the component of research on nurse educators to the reinforce research engagement among nurse educators as it will be a requirement for them to be registered nurse educators in Malawi. The study will also help nurse educators to be doing continuing professional development in order to update knowledge and skills in research.

The findings will also aid training institutions to plan for research in-service education programs. The study will also examine factors which are barriers to nurse educators' engagement in research so that they are addressed. It will also help to identify strategies that can foster nurse educators' engagement in research in order to inform EBP. Furthermore, the findings will contribute to a body of knowledge in nursing education that specifically address issues of research in nursing education from a Malawian perspective.

1.7 Conclusion

This chapter has discussed the nurse educators, engagement in research which informs research based practice. It is very vital for nurse educators to engage in research because it is

through research that they can teach students with innovative ways. This will bring up nurses who will be capable of providing quality care. However, studies across the have shown that few nurse educators engage in research. In Malawi, only one study was discovered which showed that there was low engagement in research by nurse educators at Kamuzu College of Nursing. However, the findings of this study cannot be generalized to CHAM Nursing Colleges. Hence the need for the study on nurse educators' engagement in research in CHAM Nursing Colleges.

CHAPTER TWO

Literature Review

2.0 Chapter Overview

This chapter reviews literature across the globe on the extent to which nurse educators conduct research to influence practice. Research activities by nurse educators and barriers to

engagement in research are also discussed. Search terms for the review were nursing faculty, nurse educators, conducting research, research activities, and barriers to engaging in research. Database used to access literature were Pub Med, MEDLINE, EBSCOM, Google scholar and PANET. The literature was from 2007 to 2017.

2.1. The extent to which nurse educators conduct research and their involvement in research activities

According to Polit & Beck (2010) conducting research involves developing an idea for a study, reviewing a proposed research plan, recruiting potential study participants, collecting research information, providing information and advice to clients about participation in studies and discussing the implications and relevance of research findings with clients. Omishakin & Oyende (2015) contend that conducting research includes coordinating the initiation of research, submitting study proposals for approval, ensuring participants give fully informed consent before participating in research and managing and completing the research. Conducting research is an essential step in the process of research utilization and implementation of research based practice (Chan et al., 2011). According to Tolera & Hui (2016) it is through research that nurse educators can design research based teaching to improve practice. Hence nurse educators need to be investigated on the extent to which they conduct research.

Broome et al., (2012) found that 20 of the 21 respondents reported less than 50% of their faculty conducted research. The study was a cross-sectional survey and 21 deans responded. In an online survey by Kalb, O'Conner-Von, Brockway, Rierson, & Sendelbach (2015) whose purpose was to describe nursing faculty perspectives and practices about evidence-based teaching practice found that many nurse educators do not conduct research but they do utilize research findings. The study employed 551 nursing faculty. In Nigeria, Asuquo et al. (2013) indicated that only 25 % of

the nurses had been involved in research activity as some participated in collaborative research while others in individual research. However, this cannot be compared to nurse educators. In Malawi only one study has investigated the phenomenon by focusing on lecturers from KCN, neglecting CHAM colleges which train the majority of nurses in the health sector. Hence it is imperative to determine the extent to which nurse-midwife educators from CHAM Colleges conduct research to influence practice.

On research activities, Profetto-McGrath, Smith, Hugo, Patel, & Dussalt (2009) conducted a cross-sectional survey to report research utilization practices of nurse educators using the Research Utilization Survey. Participants were 287 nurse educators. The study showed that majority of nurse educators were engaged in a variety of research activities such as, publishing in scientific journals, developing policies and providing technical assistance. On the other hand, a study by (El-shaer & Elhanafy, 2012) which aimed to identify barriers and facilitators to research utilization in Mansoura and Damanhour Universities reported different findings. The sample of the study consisted of all academic staff in nursing faculty in Mansoura university (25) and **Damanhour university** (25) and all head nurses in Mansoura university hospitals (167) and **Damanhour medical institute hospital** (77). Tool for data collection was the Barriers and facilitators to research utilization scale. The study revealed inadequate involvement in research activities among nurse educators. Nurse educators did not see the value of research for practice (97.9%), did not publish research articles (87.5%) and nurse educators do not read research research-based activities. Variations in these studies are due different places, different tools for data collection, and differences in sample size.

These studies therefore suggest that there is relatively little participation on research activities by nurse educators in most countries globally. This compelled this study to assess if this

is also the case among nurse educators in CHAM Nursing and Midwifery Colleges in Malawi. Sometimes some nurse educators do not engage in research because of the barriers they encounter. The following section therefore reviews the factors that act as barriers to research engagement.

2.2 Factors that act as barriers to nurse educators engagement in research

A variety of studies have examined factors that block nurse educators to engage in research. The barriers include insufficient time, inadequate facilities and limited resources, lack of funding, lack of mentors, inadequate training on research methods, lack of authority and interest, and difficult to understand research terms (Alghanim & Alhamali, 2011; Broome et al, 2012; González, Badia, & Font, 2014; Lumanlan & Leynes-Ignacio, 2018; Strickland & O’Leary-Kelley, 2009; White, 2013).

According to Curtis et al (2017) research needs time commitments by researchers. However, various studies have shown that nurse educators lack time to engage in research because of the overload of teaching schedule. For example, Alghanim & Alhamali (2011) conducted a cross section study employing self administered questionnaires to collect data on faculty members’ profile, research activities and obstacles impeding research productivity in Saud Arabia. Respondents of the study were 389 nurse educators. The study revealed four barriers that were mostly perceived. These were lack of time (70.7%); lack of research assistants (69%) lack of financial incentives (66.9%) and overloaded teaching schedule (52.3%). Also, Broome et al, (2012) in a study to assess the educational research currently conducted in U.S. schools of nursing found that the most common barriers were faculty heavy workloads 81% which renders nurse educator no time to partake in research activities. Being cited by more authors, it can be concluded that lack of time is indeed an inhibitor. Nurse educators should know that are not only expected to

teach, but also to engage in research activities (Elliott & Wall, 2008). As such, they need to spare time to engage in research.

Another barrier to research engagement among nurse educators is lack of or inadequate internet and library services. This factor was also identified by Mutisya et al, (2016) who conducted a study to assess research utilization by nurse educators at Kenyatta National Hospital. The study employed a descriptive design that utilized both quantitative and qualitative methods of data collection. Data was collected using questionnaires, focus group discussions and in depth interviews. One hundred and eighty three nurse educators took part in the study. The results showed that amongst the greatest perceived barriers to research utilization was lack of internet and library services (66.4%). Studies in California, Sweden, Nigeria, Nepal and Iran also indicated that inadequate library facilities and internet services are major barriers to engaging in research (Boström, Kajermo, Nordström, & Wallin 2008; Mehrdad, Salsali, & Kazemnejad, 2008; Strickland & O’Leary-Kelley, 2009; Oluwatosin, 2014; Sapkota, 2014). However, these studies were done to clinical nurses, so lack of library and internet may not apply to nurse educators. Lack of library facilities and internet services make access to research resources difficult leading to limited use of research results (Sae-Sia et al., 2008).

Another barrier in engaging in research is lack of funding for research. For example, Alghanim & Alhamali (2011) conducted a cross section study employing self administered questionnaires to collect data on faculty members’ profile, research activities and obstacles impeding research productivity in Saud Arabia. Respondents of the study were 389 nurse educators. The study revealed that lack of financial incentives (66.9%) as one of the barriers in engaging in research. In a qualitative study, employing in-depth semi-structured interviews were conducted with 12 participants to identify and describe the perceptions of nursing researchers,

educators, and graduate students regarding the barriers to, and facilitators for evidence based nursing in Colombia, DeBruyn, Ochoa-Marin & Semenic (2014) cited lack of incentives for nurses to engage in research. Similarly, González et al. (2014), carried out a semi structured interview involving seven nurse educators at a university in Barcelona, Spain to analyze how nurses represent their role as nursing academics and their conceptions, strategies and feelings involved in teaching-learning and research in nursing. González et al. asserted that the cost and lack of research funding are major setbacks in engaging research. Part of the results of the study showed that insufficient money was a barrier to engage in research. Curtis et al. (2017) argue that research involves financial commitments by researchers. Similarly, Broome et al., (2012) and Morton, (2017) contend that limited funding for studies in nursing education discourages the design and conduct of the needed studies.

Lack of mentors is another barrier in engaging in research. Lack of mentors was also identified by many authors (Boström et al., 2008; Bakken, Lantigua, Busacca, Bigger, 2009; Akerjordet, Kristin, Lode & Severinsson, 2012; El-shaer & Elhanafy 2012, Oluwatosin 2014; Sapkota, 2014). Heydari & Zeydi, (2014) found that lack of collaborators, mentors and research experts are also a contributing factor to engaging in research. Lack of mentors makes it difficult for novice researchers to continuously acquire the necessary knowledge and skills in engaging in research.

Some researchers have found that lack of training on research methods is barrier to engage in research. For example, Lumanlan et al. (2018) through focus group discussion, explored the needs of nursing faculty members in their quest towards coming up with research outputs and the reasons behind the limited number of researches in their college. These researchers cited lack of knowledge, skills, and confidence in engaging in research. According to Khader et al., (2015),

lack of ability to do research (83.4%) is the highest barrier. This was found in a descriptive study employing 235 nurses to describe barriers to research utilization in nursing practice in Taif city, Saudi Arabia. Chan & Gardner (2011) reported lack of understanding of critical appraisal and lack of training on undertaking research. Strictland & O’Leary-Kelly (2009) also reported lack of knowledge awareness in research. If nurse educators do not have knowledge in research it is difficult for them to critically appraise research work by others. Nurse educators are likely to be uncertain whether to believe the results of the research if they lack research knowledge and skills. Furthermore, nurse educators are likely not to understand terms used in research if they do not have knowledge in research. Lack of knowledge and skills in research may also make nurse educators think that research reports have conflicting results (Akerjordet et al., 2012 and Buhaid, Lau, & O’Connor, 2014).

According to Bagheri, Khoshab, Rafiee, Abbaszadeh, & Borhani (2016) lack of interest and authority are some of the factors that may affect individual's engagement in research. In a cross section study to determine the factors and obstacles that may influence research productivity among academic staff in medical in Saudi Arabia, Khader, Ibrahim, & Mohammed (2015) argued that some nurse educators underestimate research due to lack of adequate knowledge on evidence based practice, lack of in-service research education, lack of administrative support and lack of involvement in research activities. Strictland & O’Leary-Kelly (2009) also cited lack of authority to change, It can be argued that if nurse educators lack interest in engaging in research even if other factors are positive, they will not engage in research.

CHAPTER THREE

Research methodology

3.0 Chapter Overview

This chapter presents the procedures which were followed in investigating the nurse educators' engagement in research in CHAM Nursing and Midwifery Colleges. This include: the research paradigm, approach, design, study setting, study population, sample size, sampling

method, pretest study, data collection tools and data analysis. The chapter also covers validity, reliability, dissemination of results and ethical considerations.

3.1 Research Paradigm and Approach

This study was rooted in the positivist paradigm. Positivist paradigm is the application of natural science to the study of social reality and beyond (Bryman, 2008). According to Polit and Beck (2010) positivism is rooted in the belief that there is an objective reality which exists independent of human observation or experience. Thus, positivists take a controlled and structural approach by adopting a suitable research methodology. Consistent with the positivist philosophy, the study followed the quantitative approach. Quantitative approach involves quantifying data to address the research questions of the study (Moule & Goodman, 2014). The approach was ideal for the study as the researcher intended to obtain observable numerical data.

3.2 Research Design

The study used the descriptive cross-sectional design which entails the collection of data on more than one case and at a single point in time (Polit & Beck, 2010). This makes cross sectional studies quick to perform (Carlson & Morrison, 2009). Using a cross-sectional quantitative design was appropriate because it enabled the researcher to assess nurse educators' engagement in research at one point in time. The design was also ideal considering the academic and economic constraints of the researcher.

3.3 Setting

This study was conducted in CHAM Nursing and Midwifery Colleges. CHAM is a network of church-owned health facilities and training colleges. CHAM has eleven training institutions of which nine train nurse-midwives technicians. The nine CHAM Nursing Colleges offer a three year education program leading to a Diploma in Nursing Midwifery Technician. CHAM Nursing

Colleges were chosen because they train majority of nurse technicians (80%) who are the lowest cadre of nurses and midwives in Malawi (Grigulis, 2010). The nine colleges were Ekwendeni, Holy Family, Malamulo, Mulanje Mission, Nkhoma, St John's, St Joseph, St Lukes and Trinity.

3.4 Target Population

The population for the study were all nurse educators (N = 172) from the nine CHAM training institutions.

3.5 Sampling Method

The study used the proportional stratified random sampling to select respondents. In stratified random sampling, units are randomly selected from a population that has been divided into strata (Bryman, 2008). In this study, each of the nine CHAM Nursing Colleges formed a stratum and the size of the sample in each stratum was selected in proportion to the population of the stratum. Then nurse educators were randomly selected from each college using a table of numbers. The researcher chose the technique because the nurse educator population was different from each nursing college, so wanted to ensure that each college contributed a sample of nurse educators that was proportionate to the number of nurse educators (Teddlie & Yu, 2007). The technique also allowed generalizing the results of the study to all nurse educators in CHAM colleges.

3.6 Inclusion and Exclusion Criteria for Participants

3.6.1 Inclusion criteria

The study included all nurse educators who were teaching at the nine CHAM Nursing and Midwifery Colleges for more than two years.

3.6.2 Exclusion criteria

The study excluded nurse educators who were less than a year in the teaching practice because according to Martin (2016) those who are new in the teaching practice have limited previous experience with conducting research.

3.7 Sample size

Sample is the portion of the research population selected to participate in a study, representing the research population (Polit & Beck, 2010). Determining a sample size is an act to choose a number of target respondents that will replicate the population (Schwerdt & Wuppermann, 2008). The sample size was determined by Slovins formula because the total population of nurse educators in CHAM Nursing Colleges was known (Tejada & Punzalan, 2012).

$$n = \frac{N}{1 + Ne^2}$$

Where;

n = sample size

N = population size

e = confidence interval

1. Computation of confidence interval

e =100% -95%

$$= 5\% \approx 0.05$$

2. Sample size

$$\begin{aligned} n &= \frac{172}{1 + 172(0.05)^2} \\ &= 120 \end{aligned}$$

One hundred and twenty (120) nurse educators from CHAM Nursing and Midwifery Colleges were the sample size for the study. Nurse educators were randomly chosen to participate in the study. A table of random numbers was used to assigned names of nurse educators. Every third nurse educator from the table was excluded for the study in order to maintain the intended sample size.

Table 1: *Population and Samples of Nurse Educators from CHAM Colleges*

Name of College	Population of Nurse educators	Sample Size
Ekwendeni	28	19
St Johns	18	13
Nkhoma	18	13
St Lukes	21	15
St Josephy	23	16
Mulanje	22	15
Malamulo	14	10
Holy family	16	11
Trinity	12	8
Total	172	120

3.8 Data Collection Instrument

The researcher developed a questionnaire (Appendix H) as an instrument for collecting data. The development of the questionnaire was informed by an extensive review of literature guided by study objectives. The questionnaire had five sections. Section one was on demographic data covering age, sex, academic qualification, experience, and current position and where they were teaching. Section two was on the extent to which nurse educators conduct research. It had 7 items measured by nominal scale. Section three had seven items which elicited information on research utilization among nurse educators. Section four had twelve items that meant to capture the barriers to nurse educators' research engagement. The last section had eleven items. These

focused on strategies that can facilitate research engagement among nurse educators. All the items in sections three, four and five were measured on a five point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). The questionnaire was pretested at Malawi College of Health Sciences- Zomba Campus. Pretesting helped the researcher to reorganize the questions to make them more effective in yielding the intended results (Polit & Beck, 2010).

3.9 Data Collection Procedure

Prior to data collection, the researcher sought permission from the principals of the CHAM Nursing and Midwifery Colleges about the intention to conduct a study at their colleges. Then the researcher went to each of the colleges to meet the respondents. Upon arriving at the college, the researcher met the Deans of Faculty who took the researcher to the conference room and introduced her to the nurse educators. The researcher provided detailed written information preceded by a verbal explanation of the study, the purpose and ethical considerations. The respondents signed the consent form and completed the questionnaire. The researcher waited for some of the respondents to complete to collect on the same day. The rest of the questionnaires left with the nurse educators and collected on a later date. A total of 120 questionnaires were administered. Out of those, 98 were completed by the respondents and returned to the researcher. This resulted into a response rate of 81.7%. The use of the questionnaire by the study helped to ensure anonymity, and prevented bias which was in line with the research approach adopted by the study (Polit & Beck, 2010).

3.10 Data Analysis

The data were entered into the Statistical Package for Social Science (SPSS) version 23 and analyzed by generating descriptive statistics such as means, standard deviation, percentages,

and frequencies. These were used to describe the sample characteristics and answer all the four questions for the study. The findings of the study have been presented in form of frequency tables, pie charts and bar graphs.

3.11 Validity and Reliability

Validity is the extent to which the study data collecting tool measures what it claims to measure (Jack et al., 2010). Validity of the study was ensured in terms of construct and face validity. Construct validity was ensured by developing the study questionnaire based on a thorough review of literature on nurse educators engagement in research, barriers to engaging in research and ways of facilitating research engagement. Face validity was ensured by making the study questionnaire being reviewed by peers, supervisors and research experts to check if it covers all areas of the topic under study. Reliability refers to degree to which the instrument consistently measures whatever it is supposed to measure (Leung, 2015). The reliability of the instrument was established through the pre testing which was done at Malawi College of Health Sciences-Zomba Campus to ascertain its suitability. Pre testing helped the researcher to amend all the sections of questionnaire.

3.12 Ethical Considerations

The research proposal was submitted to College of Medicine Research and Ethics Committee (COMREC) for ethical approval in order to protect the rights of both participants and the researchers (Research & Enterprise Development Centre, 2014). The researcher sought permission from college heads to conduct the study. The researcher ensured ethical considerations in terms of not harming the participants, providing informed consent, ensuring confidentiality and anonymity. The participants were provided with an information sheet (Appendix F) which

explained the purpose, nature, benefits and potential risks of the study (Glickman, McHutchison, Cairns, Harrington, & Calif, 2009). Verbal and written consent was sought from the respondents before taking part in the study to ensure protection and voluntary participation (Appendix F). Confidentiality was ensured by not disclosing information provided by respondents to other people except to research supervisors (Guraya, London, & Guraya, 2014). Anonymity was achieved by using numbers and not participants' names. The research ensured that participants were not harmed by informing participants on the minimal risk which could follow due to their participation in the study like psychological effects if the participant went through a negative experience pertaining to engaging in research (Hugman, Pittaway, & Bartolomei, 2011).

3.13 Limitations

The study was confined to CHAM nursing and midwifery colleges. Nurse educators from universities could have enriched the data and research results. Only a structured questionnaire was used, but individual in-depth interviews could have yielded richer data.

CHAPTER FOUR

Results and Interpretation

4.0 Chapter Overview

This chapter presents findings of the study whose aim was to investigate the extent of nurse educators' engagement in research in CHAM Colleges. Beginning with demographic characteristics of the respondents, the chapter presents the results of the study according to the study objectives which were (1) to determine the extent to which nurse educators conduct research, (2) to determine the association between nurse educators academic qualification and conducting research (3) to assess involvement of nurse educators in research activities, and (4) to examine factors that act as barriers to nurses educators engagement in research.

4.1. Respondent Demographic Characteristics

The descriptive statistics were generated to capture the demographic characteristics of the respondents. Out of the 98 respondents, n= 67 (68.40%) of the respondents were females while N=31 (31.6%) were males. Out of the 98 respondents, n=18 (18.4%) were within the age range of 21-30, n=30 (30.6%) were in the age range of 31-40, while the majority n= 40 (42.9%) was within the age range of 41-50 and very few in range of 51years and above n= 8 (8.2%). Details of other demographic factors are presented in Table 2.

Table 2: *Respondent Demographic Characteristics*

Characteristic	Value	N (%)
Gender of respondent	Female	67 (68.4)
	Male	31 (31.6)
Age of respondent	51-60	8 (8.2)

	41-50	42 (42.9)
	31-40	30 (30.6)
	21 – 30	18 (18.4)
Highest educational level	Diploma	3 (3.1)
	Bachelors Degree	75 (76.5)
	Masters Degree	20 (20.4)
Experience as nurse educator	21 years and above	5 (5.1)
	16 - 20 years	5 (5.1)
	11 - 15 years	7 (7.1)
	6 - 10 years	29 (29.6)
	1 - 5 years	52 (53.1)
Current position	Tutor	15 (15.3)
	Senior lecturer	20 (20.4)
	Lecturer	46 (46.9)
	Clinical instructor	8 (8.2)
	Assistant lecturer	9 (9.2)
CHAM teaching institution	Trinity	7 (7.1)
	St. Luke's	15 (15.3)
	St. Joseph	13 (13.3)
	St. John's	10 (10.2)
	Nkhoma	8 (8.2)
	Mulanje Mission	13 (13.3)

	Malamulo	8 (8.2)
	Holy Family	9 (9.2)
	Ekwendeni	15 (15.3)

4.2. Extent to Which Nurse Educators Conduct Research

Among the 98 respondents in the study only n=37 (37.8%) indicated that they have ever conducted research since they started teaching and the number of studies that they had ever conducted ranged from 1 to 3, with a mean of 1.35 (SD+0.588) per nurse educator. While the rest of the respondents had not been fully involved in conducting research, they were however, involved in some of the elements of research such as developing research ideas assisting in data collection n=48 (53.1%) and interpreting research results n=39 (39.8%).

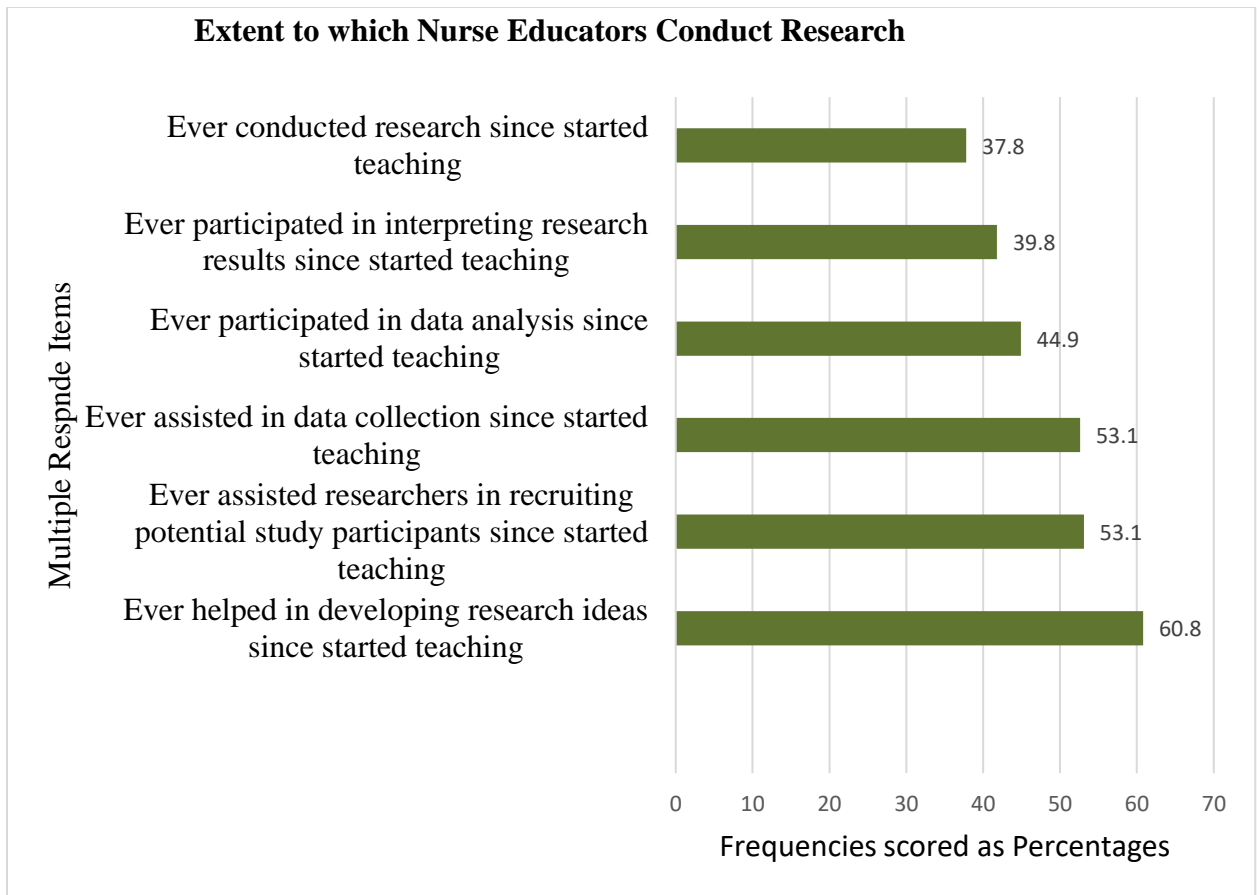


Figure 1: Extent to which nurse educators conduct research

4.3 Association between nurse educators' academic qualification and conducting research

Chi square tests were performed at 5% significance level to determine associations between independent variables (academic qualification, experience) and the dependent variable (whether nurse-midwife educators have ever conducted research since they started teaching). This analysis was done to identify potential predictors (those with p-value < 0.25) for the binary logistic regression analysis. Results of the analysis found that highest educational level ($\chi^2 (3) = 26.782$, $P < 0.001$); experience ($\chi^2 (4) = 12.666$, $p < 0.001$); are significantly associated with nurse-midwife educators' conducting research.

Table 3: Associations between independent variables and whether nurse educators have ever conducted research since they started teaching

Factor	χ^2	df	P-value
Highest educational level ¹	26.782	3	<0.001

4.4. Research activities among Nurse Educators

Nurse educators were also asked to indicate on the multiple response categories the extent to which they participate in research activities. The items were analyzed as nominal variables. Figure 2 presents results of the analysis.

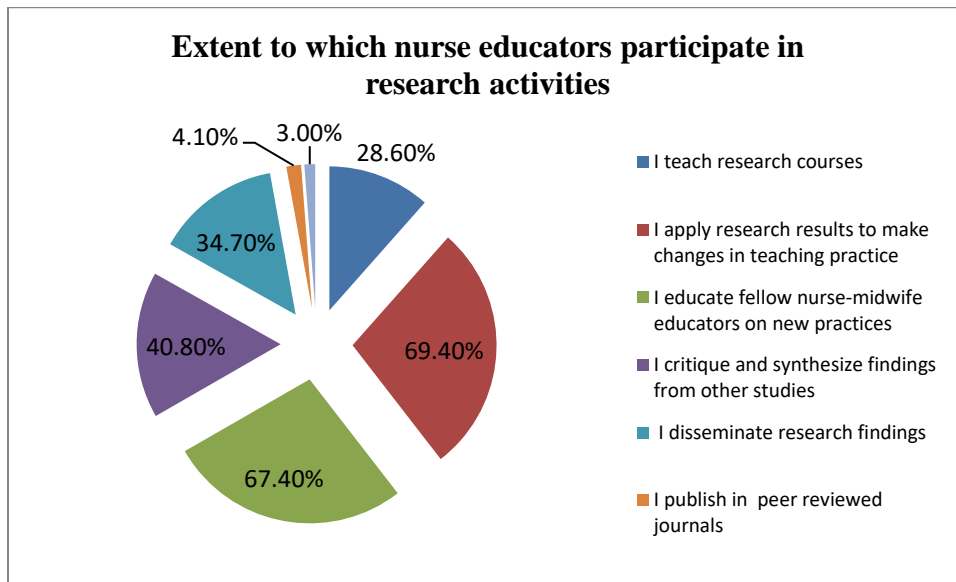


Figure 2: Extent to which nurse educators involve in research activities

¹Pearson Chi square used, otherwise continuity correction was used instead

4.4. Factors that Act as Barriers to Nurse Educators' Engagement in Research

Nurse educators were also asked to indicate the factors that act as barriers to engagement in research. The items were analyzed as nominal variables. Among the respondents, N=52 (53.1%) indicated that there were no research grants, N=43 (43.9%) indicated inadequate training on research methods, N=38 (38.8%) said that there were no research experts to mentor and supervise research.

Table 3: *Factors that act as barriers to engaging in research*

Variable	Frequency	Percentage
There is lack of time to engage in research	n=34	34.7%
There are NO internet and library facilities	n=30	30.6%
There are NO research grants to engage in research	n=52	53.1%
There are NO research experts to mentor and supervise research	n=38	38.8%
There is inadequate training on research methods	n=43	43.9%
I lack interest to engage in research	n=11	11.1%
I do not have the authority to engage in research	n=12.	12.3%

Literature reports conflicting research results	n=12.	12.2)
Research results are not generalizable to our setting	n=18	18.4%
Research uses difficult terms to understand	n=8	8.2%)

CHAPTER FIVE

Discussion of Results, Conclusion and Recommendations

5.0 Chapter overview

This chapter discusses the study findings in relation to available literature. The discussion focuses on major issues that emerged from the study findings based on the study objectives. This chapter will also draw conclusion and recommendations for the study.

5.1 Extent to Which Nurse Educators Conduct Research

The results of this study show that majority (62.2%) of nurse educators do not conduct research. Similar findings were reported in California by Broome et al., (2012) who found that 20 of the 21 respondents reported less than 50% of their faculty conducted research. If nurse educators do not conduct research, there will be no generation, validation and refining of knowledge which may kill the future of nursing (Ertug & Onal, 2014). This might lead to provision of care lacking quality because quality care is supported by evidence through translation from research to clinical practice (Athanasakis, 2013).

If nurse educators do not conduct research, they will not be able to critically think, adapt to situations, utilize informatics and work in interdisciplinary teams (Frantz, 2012). This will lead to poor learning outcomes to students thereby when these students qualify they will provide substandard care to patients. Therefore, nurse educators need to involve themselves in conducting research (Hussein & Hussein, 2014).

If nurse educators do not conduct research, they will not be promoted as most of nurse educators with high positions possess master's degree meaning that they conducted research as partial fulfillment of the masters program. Frantz (2012) and Peterson & Stevens (2013) argue that conducting research helps nursing faculty to be promoted and secure tenure. According to Forbes and White (2012) conducting research is the focus of recognition and rewards for faculty in academia. Forbes and White (2012) add that students also benefit from faculty who are able to combine their research and teaching. However, teaching remains the primary responsibility of the nurse educators (Long, 2014).

5.2 Association between nurse educators' academic qualification research.

From the results of the analysis it was found that highest educational level ($\chi^2 (3) = 26.782, P < 0.001$) is significantly associated with nurse-midwife educators' conducting research. This means that nurse educator with higher education do more research than those with low education. In this study, those with masters degree were n=20 (20.4%). It can be concluded that all the nurse educators who had master's degree had ever conducted research. This is because nurse educators acquired knowledge and skills on how to engage in research through postgraduate studies. According to Chan & Gardner (2011), post graduate students are more competent to expand and refine nursing research than other nurses with lower educational qualifications. This means that academic qualification has an influence on nurse educators' conducting research. So it

can also be concluded that limited nurse educators' conducting research could be attributed to lack of postgraduate studies. Low numbers of masters degree students may be attributed to expensiveness of training itself as such some nurse educator cannot afford to pay on their own hence college heads should source research grant and scholarships so that nurse educators engage in research. Furthermore only KCN trains nurses at Masters and PhD in Malawi. This can also be a limiting factor if more nurse educators are to be trained.

5.3 Research activities by Nurse Educators

The findings of the study revealed that the majority of nurse educators have participated in research activities in one way or the other. However, it seems they are not doing enough. For example, only 3.1% agreed that they write books, 4.1% publish in peer reviewed journals; 28.6% agreed that they teach research courses; 34.7% agreed that they disseminate research findings; 40.8% agreed that they critique and synthesize findings from other studies. Muula (2007) also reported low scholarly productivity at Kamuzu College of Nursing. There can be no change if people and fellow nurse educators are not of aware of the research that has been performed through publications. If nurse educators do no publish their work, then there will be no opportunity to share knowledge, skills and experience (Oernmann, et al., 2007). Equally if nurse educators do not disseminate research findings then there will be no transfer of knowledge Nurse educators in CHAM colleges need to be encouraged to engage in research activities because they have greater responsibility and accountability for teaching nursing students (El-shaer & Elhanafy, 2012). They are supposed to base their teaching practice emerging from research because they are responsible for designing, implementing, evaluating academic and continuing education programs for nurses.

Nurse educators are also required to adhere to accepted standards of practice and professional performance because the standards mandate the integration of research findings into practice (Winters & Echeverri, 2012).

5.4 Barriers to Nurses Educators' Engagement in Research

The study also examined factors that act as barriers to nurse educators' engagement in research. Majority of the study respondents felt that a significant factor that hinders their research engagement was lack of research grants (53.1%). Training institutions in Malawi depend on government subventions which are usually lower than the amounts requested in budgets (Mambo, Meky, Tanaka, & Salmi, 2016). For example in 2010, research allocation for University of Malawi (UNIMA) was 1%, Mzuzu University (MZUNI) was 0% and Malawi Adventist University (MAU) was 0.8% (Mambo et al., 2016). Since the funding is not enough little or no money is allocated to research, it will be difficult for nurse educators to engage in research. Broome et al., (2012) indicated that lack of funding discourages the design and conduct of research. Sae-Sia et al., (2008) add that lack of grants make access to research resources difficulty leading to limited use of research results. Curtis et al., (2017) showed that research involves financial commitments by researchers and funding organizations. This can be addressed by sourcing and increasing funding and research grants. Hence nurse educators and college heads should be responsible to access funding so that they use it to conduct research (Asuquo et al., 2013).

Inadequate training on research methods was the secondly ranked (43.9%). Despite this being not a major barrier, but is not surprising as some of the educators have a bachelor's degree hence may lack advance skills in research. The problem in Malawi is complicated by the fact that these nurse educators in their Bachelors training in most nursing colleges including Kamuzu College of Nursing only end at writing a research proposal without doing a full research study. In

addition due to large numbers the proposal is developed in groups. These lead to inadequate research competences of the graduating nursing students who later become nurse educators in CHAM colleges. However, it seems inadequate training in research methods among nurse educators is not peculiar to Malawi as a similar problem has been reported in studies by so many researchers across the globe (Bakken et al. 2009; Sapkota 2014; Zhou et al., 2015; Asuquo et al 2013; Chan & Gardner, 2011). It is therefore logical that if nurse educators do not have knowledge in research it would be very difficult for them to conduct research, let alone critically appraise research work by others.

It is through in-service training that nurse educators are informed of new knowledge hence continuing to grow and develop professionally (Chimwaza, Chipeta, Kamwendo, Taulo, & Bradly, 2014). However this is a challenge in Malawi because in-service education is not available to all the nurses of which some are nurse educators and is not done on a regular basis (Chopra, Doherty, Mehratu, & Tomlinson, 2009). According to Mangham (2009) the other limitation is that nurse educators desire financial training allowances, meaning that if there are no allowances they will not attend the training. Mangham (2009) adds that some nurses do not attend in-service training because there is no transparency. If nurse educators do not attend in-service training, they will not have up to date knowledge and they will not continue to grow and develop professionally.

The absence of research experts to mentor and supervise research activities also surfaced not as a major barrier to nurse educators' engagement in research (38.8%).. However, other studies across the globe have found that absence of research experts to mentor as a barrier to engage in research (Boström et al., 2008; Bakken et al., 2009; Akerjordet et al., 2012; El-shaer & Elhanafy 2012, Oluwatosin 2014; Sapkota, 2014). If there are no research experts to mentor and supervise research then nurse educators will not be provided with a safe and supportive opportunity to engage

in research in order to raise issues, explore problems, and discover new ways of teaching students and taking care of patients. Nurse educators need support to sharpen their personal and professional skills. Having senior research mentors provide avenue to discuss and establish ways to balance between research, teaching and practice, provide leadership on essential research areas to meet education and health needs.

Thirty four point eight percent reported lack of time to engage in research. However, lack of time was found to be a prominent barrier confirmed by other research studies (Al Ghabeesh, 2015; Ay, Gençtürk, & Miral, 2014; Bakken et al., 2009; Buhaid et al., 2014; El-shaer & Elhanafy, 2012; Jalali et al., 2015; Tan, Sahin, & Ozdemir, 2012). This suggests the need for organizational change towards increasing time availability for nurse educators for conducting, accessing, reading and evaluating research. According to Tawfik et al (2013) time should be provided in order to attend workshops, training sessions, conferences and discussions with professional colleagues. However, this is questionable since staffing is often inadequate to meet the day to day demand with a mismatched nurse/student ratios. In most cases, college principals do not assign nurse to engage in research.

Another barrier is lack of internet and library facilities (30.6%). Studies by other authors have indicated that lack of library and internet facilities is a general challenge which influences engagement of research (Boström et al., 2008; Mehrdad et al., 2008; Strickland & O'Leary-Kelley, 2009; Oluwatosin, 2014; Sapkota, 2014). Lack of internet and library services may lead to limited access of information hence hinders engagement in research. Persistent internet is needed in order for nurse educators to fully partake in research activities. Most of the nursing colleges in Malawi have free internet. Nurse educators need to be trained on usage of internet for better access of information.

Nurse educators' lack of authority was also another barrier to engage in research. This finding is supported by other studies (Bagheri et al., 2016; Heydari & Zeydi, 2014; Khader et al., 2015; Wang et al., 2013). Lack of authority has a negative effect on nurse-midwife educators' self confidence and in turn minimize their ability to function to the full scope of their practice as nurse educators. Nurse educators require legitimate authority that will allow them to create better working conditions, not only for their benefit but also for that of students by providing high quality education to students.

Conclusion

The study findings showed that there is minimal engagement in research. Engaging in research is important to expand the wealth of nursing knowledge to improve patient care and outcomes (Omishakin & Oyetunde, 2015). Nursing as a profession and an academic discipline is concerned with the generation of substantive knowledge and its uses to serve people (El-shaer & Elhanafy, 2012). Presences of barriers hinder nurse educators to engage in research. To enhance engagement in research, nurse educators need to be provided with the support and facilities which includes access to internet, research grants, training on research methods, sending nurse educators to attain post graduate studies.

Recommendations

Based on the finding of the study and conclusion drawn, the study recommends the following;

Nursing education

- The study found that the majority of nurse educators do not conduct research. In order to foster nurse educators' engagement in research, the college authorities should instill the

spirit of engaging in research among nurse educators through research building capacity. Nurse educators need to build research capacity because there is a growing demand for evidence based practice (Edwards & MacDonald, 2009). Building research capacity ensures appropriate dissemination to maximize impact. Research capacity can be built by developing appropriate knowledge and skills through training and conferences. Nurse educators can make linkages, partnerships and collaborations to enhance research capacity building. Nurse educators should ensure of continuity and sustainability of research capacity building.

- In order to facilitate research engagement, nurse educators need to be trained on research methodology and also be informed on new research findings (Heydari & Zeydi, 2014; (Broome et al., 2012). According to Alghanim & Alhamali (2011) & Khader et al. (2015) faculty members who attend training on research methods produce more research than those who do not attend such trainings, suggesting that research education does facilitate their involvement in research. Athanasakis (2013) suggest workshops and conferences as venues where nurse educators could attend trainings on research.
- Another recommendation is to increase intake of post graduate nurse educators considering that post graduate students are more likely to be involved in research than graduate or undergraduate nurses. According to Tawfik et al., (2013) nurses with bachelor degrees do not receive research related courses after their graduation except for those who register for post graduate studies. Athanasakis (2013) concurs that the higher the education level that nurse receive, the more willing are nurse educators to do research. This is because nurse educators with master's and doctoral degrees are more competent to expand and

refine research than other nurses with lower educational qualifications (Chan & Gardner, 2011).

- The study recognized that there are factors that hinder the engagement of research. According to White (2013) facilities and support for research must also be prioritized by the faculty in order to produce nurse educators who can deliver evidence based teaching. Nurse educators need to be supported by the administration so that they are involved in research (Khader et al., 2015). Frantz (2012) concurs that creating an organizational climate that values research and supports nurse educators in participating in research activities is crucial. The support to engage in research would include giving time to engage in research, in-service training on research, access to library and internet, attendance of conferences, workshops (Broome et al., 2012; Sari et al., 2012; Wang et al., 2013; Ay et al., 2014). In addition, full scholarships should be awarded so that nurse educators conduct and participate in research activities. Furthermore, nurse educators also need to be motivated because according to Tawfik et al., (2013) some do not engage in research because they are not motivated. Hence college heads should make sure that nurse educators are provided with resources and are motivated.
- Mentoring is also an important aspect of building the research capacity of nurses in every field in the profession (Omishakin & Oyetunde, 2015). This is because some nurses do not engage in research as they lack mentors (Weston, Bass, Ford, & Segal, 2010). Broome et al., (2012) and Bakken et al., also indicated that mentoring of nurses on research is an important investment as they are likely to generate knowledge related to nursing. Similarly, Akerjordet et al., (2012) recommends that research supervision is one of the most

significant needs to enhance nurses' research skills, management and organization of research activities.

Policy

- Nurse educators need to engage in research to provide evidence based teaching that promotes quality learning outcomes for students. As such NMCM should start registering nurse educators based on prescribed number of research studies they have conducted and research activities they have been involved with. NMCM is a body who registers nurse-midwives in the country bases on continued professional development. NMCM can add the component of research on nurse educators to the reinforce research engagement among nurse educators as it will be a requirement for them to be registered nurse educators in Malawi.
- It is true that successful engagement in research desires sustainability. Hence the training institutions should form a research and quality improvement department to ensure that nurse educators are using evidence based current information to teach students and practicing nurses. Moreover, students who are studying bachelors should be conducting research studies on their own.

Nursing research

- The study on examining nurse educators on extent to which they engage in research is new. The study was just too general as it assessed them on engaging in research. As such, this opens more opportunities for further research to study on nurse educators on how much they are doing on teaching and learning methods.

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Appendices

Appendix A: Letter to CHAM

Victoria Nyirenda
Kamuzu College of Nursing
Private Bag 1
LILONGWE
8th March, 2017

The Director

CHAM Secretariat

Private bag 30378

LILONGWE

Dear Sir,

Re: REQUEST TO CONDUCT RESEARCH ON NURSE EDUCATORS

I am Victoria Nyirenda, a Master of Science in Nursing and Midwifery education student at Kamuzu College of Nursing. In partial fulfillment of the program, am required to conduct a research project. The research is project is titled '**NURSE-MIDWIFE EDUCATORS' ENGAGEMENT IN RESEARCH IN CHRISTIAN HEALTH ASSOCIATION OF MALAWI NURSING COLLEGES**'. The study will require 120 nurse educators at CHAM institutions. Therefore, I would like to seek permission from your office to enable me get COMREC approval and collect data in CHAM Nursing Colleges.

Looking forward for your response.

Yours faithfully,

vyirenda

VICTORIA NYIRENDA

Appendix B: Permission Letter from CHAM



CHAM **CHRISTIAN HEALTH ASSOCIATION OF MALAWI**

P.O. Box 30378, LILONGWE 3, Malawi.
Telephone Office: 01-775 180/404, 01-771 258 Fax: 01-775 406
E-mail: chamsec@cham.org.mw

Ref:

CHAM/COMREC/09/03

9th March 2017

The Chairman
COMREC
P/Bag 360
Chichiri
Blantyre 3

Dear Sir

LETTER OF SUPPORT FOR MS. VICTORIA NYIRENDA'S RESEARCH

I would like to support Ms. Victoria Nyirenda's request to conduct a study entitled "*The quest for evidence-based practice: Nurse Educators in engaging in research in CHAM nursing colleges*" in partial fulfilment of her Master of Science in Nursing and Midwifery.

The study will assist CHAM colleges promoting evidence-based practice.

Yours faithfully


ANDREW CHIKOPA
EXECUTIVE DIRECTOR

All correspondence to be addressed to the Executive Director

Appendix C: Support Letter

University of Malawi
KAMUZU COLLEGE OF NURSING

ACTING PRINCIPAL
Prof. E. Chirwa, DipNurs, MRM,
B.Sc., MN, PhD



P/BAG 1, LILONGWE, MALAWI
TELEPHONE: 265 (0) 1 751 622/200
TELEGRAMS: NURSING
FAX: 265 (0) 1 756 424
EMAIL: principal@kcn.unima.mw
Website: www.kcn.unima.mw

Our Ref.: KCN/DPGSR

29th May, 2017

The Chairperson
COMREC
Private Bag 360
Chichiri
BLANTYRE 3

Dear Sir,

RE: SUPPORT LETTER FOR VICTORIA NYIRENDA

Victoria Nyirenda is a student at Kamuzu College of Nursing pursuing a Masters Degree in Nursing and Midwifery Education. As a requirement for the fulfilment of her Master's degree, she is required to submit a thesis. I am therefore writing to support the submission of her proposal titled: "Nurse/Midwife educators engagement in research in CHAM Nursing Colleges."

Victoria Nyirenda has worked with her supervisor and the proposal is now ready for submission.

Thanking you in advance for considering her proposal.

Yours Sincerely,

Belinda Gombachika, PhD,
DEAN FOR POSTGRADUATE STUDIES

BG/cm

Appendix D: Letter to COMREC

Victoria Nyirenda
Kamuzu College of Nursing
Private Bag 1
LILONGWE
7th June, 2017.

The Chairperson
College of Medicine Research and Ethics Committee
Private Bag 360
Chichiri
BLANTYRE 3.

Dear Sir,

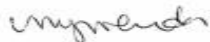
Re: REQUEST FOR ETHICAL APPROVAL OF RESEARCH PROPOSAL

I am Victoria Nyirenda, a Master of Science in Nursing and Midwifery Education student at Kamuzu College of Nursing. In partial fulfillment of the program, am required to conduct a research project. The research is project is titled ' **Nurse/midwife educators engagement in research in Christian Health Association of Malawi Nursing Colleges**

Therefore, I would like to seek ethical approval from your office to enable me conduct research at CHAM nurse/midwife educators.

Looking forward for your response.

Yours faithfully,

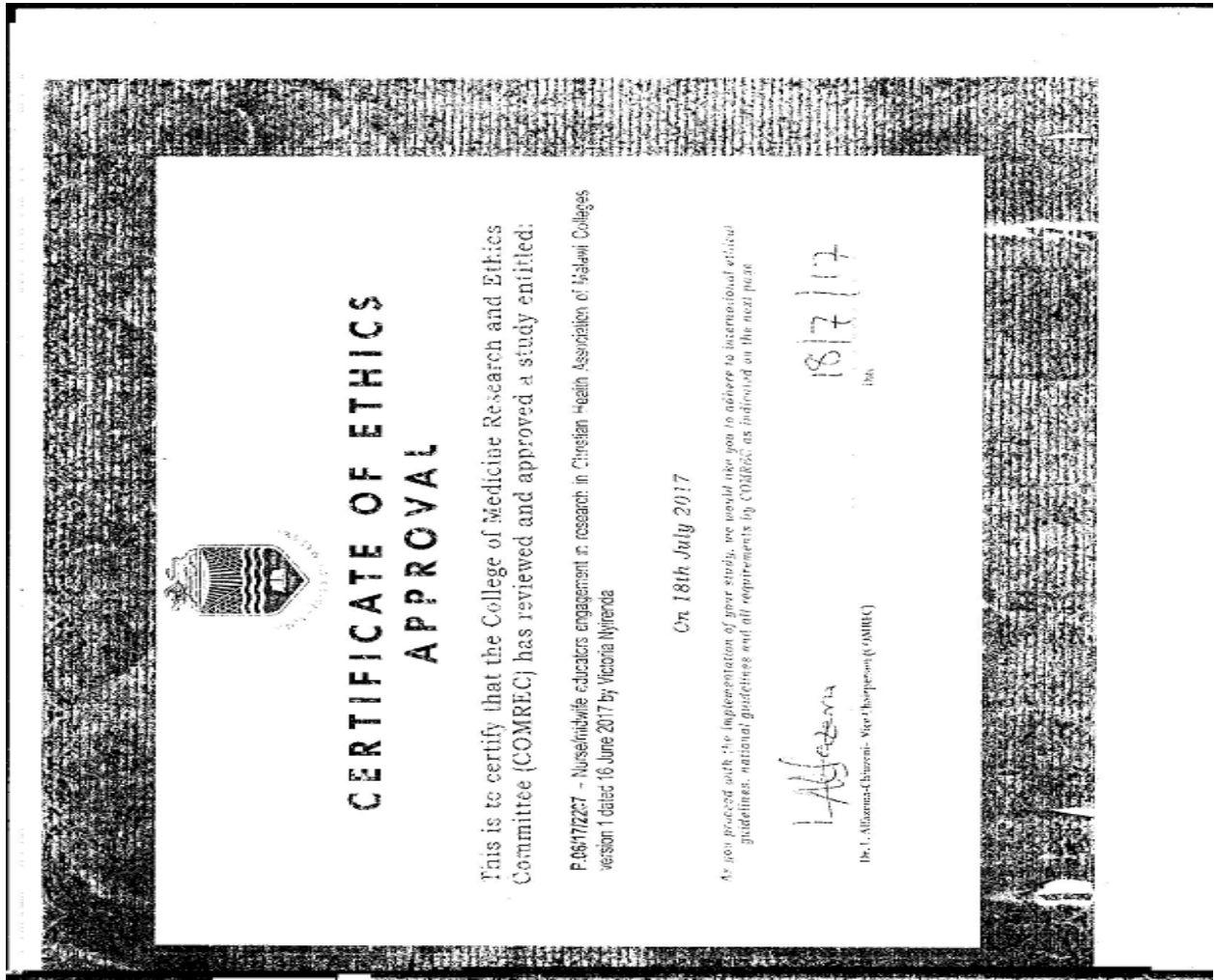


VICTORIA NYIRENDA

Email:nyirenda2016victoria@kcn.unima.mw

Phone: +265 999 688651

Appendix E: Approval Certificate



Appendix F: Participant Information Sheet

RESEARCH TITLE: NURSE EDUCATORS ENGAGEMENT IN RESEARCH IN CHRISTIAN HEALTH ASSOCIATION OF MALAWI NURSING AND MIDWIFERY COLLEGES

Dear participant,

My name is Victoria Nyirenda, studying Master of Science in Nursing and Midwifery Education program at Kamuzu College of Nursing. As partial fulfillment of this program, I am required to conduct a research study. My research title is '**Nurse Educators' engagement in research in Christian Health Association of Malawi (CHAM) Nursing and Midwifery Colleges**'. I am inviting you to participate in this research project because as one of the gatekeepers of the nursing and midwifery profession you base your teaching on evidence based practice which comes due to research.

There are no direct benefits to you that would result from your participation in this research study. The study will benefit patients and students as engagement of nurse educators in research will enable students to develop a clear understanding of how to take care of patients. The study will also help to identify strategies that can foster nurse educators' engagement in research in order to promote use of evidence based practice. The study may affect participant psychologically if the participant went through a negative experience in engaging in research. The researcher or research assistants will counsel the participant who will be affected with negative experiences of research.

Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study. Participation in the study involves

filling a self administered questionnaire that will take almost 10 to 15 minutes. All information gathered during the study will remain confidential and only numbers will be used. The questionnaire will only be accessed by the supervisors and the researcher. The questionnaires will be kept safe in locked cabinets and will be destroyed after five years. If you are interested in participating sign the consent form attached. If you have any questions, problems or concerns, please contact the following;

The Study Investigator:

Victoria Nyirenda

Kamuzu College of Nursing

Private Bag 1

LILONGWE.

Phone: +265 999 688 651

Email: nyirenda2016victoria@kcn.unima.mw

The Study Supervisor:

Mr J Mfuni

Kamuzu College of Nursing

P.O Box 1

LILONGWE

Email: jmfuni@kcn.unima.mw

Phone: +265 881 717 735

The Secretariat

College of Medicine Research Ethics Committee

Private bag 360

BLANTYRE.

Telephone number 01 877 245; Email: comrec@medcol.mw

Appendix G: Participants' Consent Form

I acknowledge that I have read and understood the explanation about this study on '**Nurse Educators engagement in research in Christian Health Association of Malawi Nursing and Midwifery Colleges**' as indicated in the attached Participant Information sheet. I am free to ask questions and discuss the study with the researcher. I have been assured of confidentiality and anonymity. I understand that my participation in this study is voluntary and I have the right to withdraw from this study at anytime without penalty.

Participant's name:

Participant's signature:

Date:

I Victoria Nyirenda confirm that the above participant has been informed of the study and understood fully.

Researcher's signature:

Date:

Appendix G: Questionnaire

**NURSE EDUCATORS ENGAGEMENT IN RESEARCH IN CHRISTIAN HEALTH
ASSOCIATION OF MALAWI NURSING COLLEGES**

Questionnaire number..... Date.....

Instructions

- 1. Please do **NOT** write your name on the questionnaire
- 2. Circle the code that represents the best response

SECTION A: DEMOGRAPHIC DATA

Item number	Item
A1	What is your sex? 1. Male 2. Female
A2	What is your age in years? 1. 21-30 2. 31-40 3. 41-50 4. 51-60 5. 60 and above
A3	What is your highest education level? 1. PhD 2. Masters 3. Degree 4. Diploma 8. Others specify _____
A4	For how long have you been a nurse educator? 1. 1-5 years 2. 6-10 years 3. 11-15 years

	<p>4. 16-20 years</p> <p>5. 21 years and above</p>
A5	<p>What is your current position?</p> <p>1. Assistant Lecturer</p> <p>2. Clinical Instructor</p> <p>3. Lecturer</p> <p>4. Senior Lecturer</p> <p>5. Principal lecturer</p> <p>8. Others specify_____</p>
A6	<p>Which CHAM Nursing and Midwifery College are you teaching?</p> <p>1. Ekwendeni</p> <p>2. Holy Family</p> <p>3. Malamulo</p> <p>4. Mulanje</p> <p>5. Nkhoma</p> <p>6. St Johns</p> <p>7. St Joseph</p> <p>8. St Lukes</p> <p>9. Trinity</p>

SECTION B: EXTENT TO WHICH NURSE EDUCATORS CONDUCT RESEARCH

Instructions

1. Read each of the following questions and circle the code that represents the best response
2. Where no responses provided, please write on the spaces provided

Item number	Item
B1	<p>Have you ever conducted research since you started teaching?</p> <p>1. Yes</p> <p>2. No</p> <p>If no skip to question 3</p>

B2	How many studies have you conducted? _____
B3	Have you ever helped in developing research ideas since you started teaching? 1. Yes 2. No
B4	Have ever assisted researchers in recruiting potential study participants since you started teaching? 1. Yes 2. No
B5	Have you ever assisted in data collection since you started teaching? 1. Yes 2. No
B6	Have you ever participated in data analysis since you started teaching? 1. Yes 2. No
B7	Have you ever participated in interpreting research results since you started teaching? 1. Yes 2. No

SECTION C: RESEARCH ACTIVITIES BY NURSE EDUCATORS

Tick in the appropriate box whether you strongly agree, agree, neutral, disagree or strongly disagree with the statements provided. The scale is presented in an ascending order as follows: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly agree

STATEMENT	1	2	3	4	5
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C1. I teach research courses					
C2. I educate fellow nurse educators on new practices					
C3. I critique and synthesize findings from other studies					
C4. I disseminate research findings					
C5. I publish in peer reviewed journals					
C6. I write books					

SECTION D: FACTORS THAT ACT AS BARRIERS TO NURSE EDUCATORS ENGAGEMENT IN RESEARCH

Tick in the appropriate box whether you strongly agree, agree, neutral, disagree or strongly disagree with the statements provided. The scale is presented in an ascending order as follows: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly agree

STATEMENT	1	2	3	4	5
College related factors					
D1. There is lack of time to engage in research					
D2. There are NO internet and library facilities					
D3. There are NO research grants to engage in research					
D4. There are NO research experts to mentor and supervise research					

D5. There is inadequate training on research methods					
Personal related factors					
D6. I lack interest to engage in research					
D7. I do not have the authority to engage in research					
D8. I have inadequate skills in critical appraisal					
Research related factors					
D10. Literature reports conflicting research results					
D11. Research results are not generalizable to our setting					
D12. Research uses difficult terms to understand					

Thank you very much for completing the questionnaire!!

