KAMUZU COLLEGE OF NURSING

FACTORS HINDERING IMPLEMENTATION OF LEARNER-CENTRED TEACHING STRATEGIES IN CHRISTIAN HEALTH ASSOCIATION OF MALAWI NURSING COLLEGES.

BY

MERCY PATRICIA NYIRENDA CHIRWA

BScHSE DipN, UCM

A DISSERTATION SUBMITTED TO THE FACULTY OF NURSING, UNIVERSITY OF MALAWI IN PARTIAL FULFILMENT FOR THE AWARD OF MASTER OF SCIENCE IN NURSING AND MIDWIFERY EDUCATION

DECEMBER, 2015

Declaration

I, Mercy Patricia Nyirenda Chirwa, declare that the thesis titled **Factors Hindering Implementation of Learner-Centred Teaching Strategies at Kamuzu College of Nursing** is my own work and to the best of my knowledge has never been presented for the award of any other degree at any institution of higher learning and all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Mercy Patricia Nyirenda Chirwa

_____

Signature

_____

Date

Certificate of Approval

The undersigned certify that this thesis represents the student's own work and effort and has been submitted with our approval.

Signature _____ Date _____

Belinda Gombachika, PhD (Senior Lecturer)

First Supervisor

Signature _____ Date _____

Betty Mkwinda Nyasulu, PhD (Senior Lecturer).

Second Supervisor

Dedication

I dedicate this piece of work to my late father C.J. Mphavuzamala Nyirenda. You fought a good fight. Thank you very much for devoting your time for me. God bless you eternally.

Acknowledgment

Above all, I would like to thank God, the most gracious and the most generous, for the guidance, compassion, and kindness which He has granted on me throughout my entire life and in particular while working on this thesis.

I am very much grateful to my lovely thesis supervisors, Dr B. Gombachika and Dr B. Nkwinda Nyasulu, for their guidance and support rendered from the very beginning to the completion of the study. I sincerely appreciate their support, critical and constructive comments and tolerance. It was a long walk indeed. My supervisors are the most excellent educators and promoters I have ever met. God bless you for all your devotion.

I also would like to thank the nurse educators in Christian Health Association of Malawi nursing colleges who participated in this study. They generously gave of their precious time to permit classroom observation and complete the questionnaire for the study.

I would also like to express my sincere appreciation to all other people who contributed to the success of this study.

While undertaking my studies, my husband Davie; my sister Gloria; my daughter Alinaya and my son Edward gave me support and sacrifice far more than can simply be stated in these pages. May the Almighty God continue to care and blessing you. I wish to express my gratitude to Nursing Education Programme Initiative through the Management of Kamuzu College of Nursing and Ministry of Health for the financial support it provided me for the study. Finally, I would like to thank all members of the staff of Kamuzu College of Nursing and my colleagues for the support they rendered and ideas shared during this study.

Abstract

Meaningful learning requires learner-centred teaching strategies, which focuses on the needs of the learners. The study therefore, aimed to explore factors hindering implementation of learner-centred teaching strategies. A descriptive cross sectional design was used. A total of 72 nurse educators participated in the study and completed questionnaires. This was complemented by observation checklists for data gathering: eleven lessons were observed while the nurse educators taught their different courses.. The study found that a combination of learner and teacher-centred approaches were used by the nurse educators. However, classroom observation revealed that traditional lecture methods dominated most classrooms. The main challenges were lack of training for nurse educators in learner-centred teaching strategies; negative nurse educators and students attitudes towards the learner-centred teaching strategies and large numbers of students per class. It is assumed that training and support may improve educators' attitudes and teaching methods. Therefore, the study recommended that a policy should be in place that promotes learner-centred teaching and learning strategies, adequate resources and ongoing support to educators for instance training in learner-centred teaching strategies. Furthermore, the results showed that there was a significant relationship ($p<0.05$) between nurse educators and students attitudes towards learner-centred teaching strategies. In addition, there was a significant correlation ($p=0.01$) on lack of resources to implement learner-centred teaching strategies and lack of orientation to these teaching strategies in the training. Nonetheless, the study showed no significant correlation ($p>0.05$) between years of experience; educational level and knowledge of learner-centred teaching strategies as well as its use.

Table of Contents

List of Figures

List of Tables

List of Appendices

Abbreviations

CHAM:	Christian Health Association of Malawi
LCT:	Learner-Centred Teaching
MESA:	Malawi Education Support Activity
MTTA:	Malawi Teacher Training Activity
SHOPS:	Strengthening Health Outcomes through the Private Sector
SPSS:	Statistical Program for the Social Science
TCT:	Teacher-Centred Teaching

Operational Definitions

Factors: Circumstances or facts or influences that contribute to a result or outcome

Knowledge: Capacity to acquire, retain and use information; a mixture of comprehension, experience, discernment and skill

Attitudes: inclinations to react in a certain way to certain situations; to see and interpret events according to certain predispositions; or to organize opinions into coherent and interrelated structures

Practice: Application of rules and knowledge that leads to action

Learner-centred teaching:Refers to a wide variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students and groups of students (Blumberg, 2008; Weimer, 2012)

Teacher-centred teaching:Instructional approaches whereby students put all of their focus on the teacher; the teacher talks, while the students exclusively listen; during activities, students work alone, and collaboration is discouraged (Blumberg, 2008).

Teaching strategiesare method used to deliver information in the classroom, online, or in some other medium (Boundless, 2015).

Teaching styles: These are attributes of a teacher that define their style, methads and behaviour in the classroom (Barrett et al., 2007).

Methods:Series of related and progressive acts performed by a teacher and students to achieve the objective of the lesson (Weimer, 2012).

Chapter One

Introduction

Introduction

Learner-centred teaching (LCT) is an approach in which students influence the content, activities, materials, and pace of learning (Alliance for Excellent Education, 2012). Weimer (2002) defines learner centered teaching as a strategy that describes what and how the student is learning, under what circumstances learning takes place and what the student is retaining and applying to facilitate future learning. This learning model, places the student at the centre of the learning process, allowing their needs, abilities, backgrounds, and interests to shape teaching strategies, gives learners and demands them, a relatively high level of active control over the contents and processes of learning (Schweisfurth, 2013; MacHemer et al., 2007; Hall, 2006)

These strategies have repeatedly been shown to be superior to the traditional teacher-centred approach to instruction, as they provide long-term retention and deep understanding of course material. Additionally they enhance acquisition of critical thinking or creative problem-solving skills and formation of positive attitudes toward the subject matter or level of confidence in knowledge and skills (Collins & O'Brien, 2003). Furthermore, the teacher use teaching styles that are applicable to him or her for example delegator, facilitator; demonstrator or personal model. He or she also uses a variety of teaching strategies to achieve meaningful learning for instance collaboration.

Emenyeonu (2012) contend that training institutions that promote learner-centred teaching should among other things provoke independent reasoning, problem solving and

critical thinking. This can only be achieved if teachers have excellent ideas, knowledge and examples about how to create an environment that is more active, interactive, and communicative. Nonetheless, there is an outcry that new graduate nurses often lack the critical thinking and problem solving skills which are crucial in managing patients' problems and life-threatening conditions (Deyoung, 2011). This is believed to stem from the teaching strategies that are instructor-centred as observed that nursing education has been teacher-centred with faculty often taking the role of "dispenser of knowledge". The focus has mainly been on the transmission of content from the tutor, seen as the expert, to the student seen as more or less "empty barrels" or passive absorbers of knowledge (Dalley et al., 2008). Basing on the recommendations of the report by Tveit, Wasili, Kollstrom, Mwenye-Phiri (2009) that nurse educators need to be trained in learner-centred teaching strategies**,** it is evident that the strategies are not or partially practiced hence there is need to find out what stops them from implementing the learner-centred teaching strategies.

In view of this the researcher intended to explore the factors that hindered use of these teaching strategies by looking unto their knowledge, attitudes and practice. To properly utilize these terms to describe factors that hinder implementation of learner-centred teaching strategies, it is critical to establish a basic premise and provide definitions for each word: Factors are circumstances or facts or influences that contribute to a result or outcome. Knowledge is a set of understandings or the capacity to acquire, retain and use information; a mixture of comprehension, experience, discernment and skill (Lakhan & Sharma, 2010). In other words it refers to one's capacity for imagining, one's way of perceiving. Knowledge of innovative teaching strategies considered to be beneficial,

however, does not automatically mean that it is put into use. The degree of knowledge of nurse educators on learner-centred teaching strategies assessed by this study would help to uncover areas of improvement. Attitudes refer to inclinations to react in a certain way to certain situations; to see and interpret events according to certain predispositions; or to organize opinions into coherent and interrelated structures (Lakhan & Sharma, 2010). In other words attitude is defined as a way of being; a position or it is an intermediate variable between the situation and the response to the situation. It helps explain that among the possible practices for a subject submitted to a stimulus, that subject adopts one practice and not another. Attitudes are not directly observable as are practices, thus it is a good idea to assess them. Practices are observable actions of an individual in response to a stimulus or it is an application of rules and knowledge that leads to action (Lakhan & Sharma, 2010). This is something that deals with the concrete with actions.

This study concentrated on knowledge, attitudes and practices of nurse educators. Understanding the levels of knowledge, attitudes and practices will enable a more efficient process of awareness creation, as it will assist to unveil if teaching or learning focuses on the needs of the learners if not then solicit the challenges of not engaging in the learner-centred teaching strategies.

Hindrance to use of learner-centred teaching strategies in Christian Health Association of Malawi nursing colleges in Malawi is not known. The study therefore aims to explore factors that hinder use of learner-centred teaching among nurse educators in all CHAM nursing colleges in Malawi. The anticipated outcome of the study would help nurse educators and policy makers to come up with strategies of enhancing use of learner-centred teaching which in the long run will promote student nurses to achieve critical

thinking and problem solving skills that are central in the provision of quality care to patients. The study findings would also contribute to the existing body of knowledge on the use of the learner-centred teaching which at the moment is scanty in Malawi.

Background of the study

Learner-centred teaching has historical roots that extend back to the time of Socrates in 400 B.C. but it was the influence of continental philosophers of the late 19th and early 20th centuries who questioned the nature of childhood and how children should be taught who helped to spread its influence in North America and the United Kingdom. Another major influential thinker and writer on the subject in the early 20th century was American philosopher and educationist John Dewey (1916), who linked 'progressive' pedagogy to the development of democratic skills and dispositions in learners. In the more recent past, the Brazilian Paulo Freire (1972) helped to shape the international landscape of adult education in particular with his notion of conscientisation. He linked this to pedagogies for literacy which promoted questioning of the status quo as an antidote to the prevailing 'banking' model of teaching based on the depositing of knowledge from teacher to student. Also contributing to the rich foundation literature for LCT are writers such as Vygotsky (1978) and Bruner (1966) who have understood learning in a constructivist paradigm meaning that knowledge can be co-constructed by learners and teachers, with teachers playing a social, interpersonal and facilitative rather than whole-class instructive role.

In view of this, educators need to be re-oriented in instructional approaches that emphasize thinking. They will learn how to plan teaching strategies that involve problem solving, creative thinking, exploration and decision-making (Ginsburg, 2010). They are

also expected to accept that in the learner-centred environment, they will have to play the role of a guide on the side rather than their traditional role of a sage on the stage. In other words, an educator is no longer the sole knowledge provider in the classroom, but he or she has to also play the role of a facilitator and coach. Hence, they must encourage students to be active learners by adopting elements of the learner-centred learning approach in their learning practices (King, 1993).

According to Mizrachi, Padilla and Banda (2010)**,** Malawi started committing itself to learner-centred teaching approaches since 2001 because they are aligned with democratic principles and they foster critical-thinking and decision-making skills. Actual implementations of these strategies became effective in 2007 in the primary school and primary teacher education curricula. International, intergovernmental organizations and international non-governmental organizations also contributed a lot to learner-centred pedagogies through technical assistance and training projects. Such projects included two complementary USAID-funded and Ministry-coordinated reform initiatives focused on enhancing teachers' pedagogical practices: the Malawi Education Support Activity (MESA, 2003-2006) and the Malawi Teacher Training Activity (MTTA, 2004-2008). Their main focus was mainly to increase student enrollment, reduce dropouts and improve performance.

Over the past few decades, nursing education has evolved a shift from this teacher-centred education to a more learner-centred education (Yildirim, 2011; De Young, 2011; Banning, 2006; Biggs & Tang 2007, Billings & Halstead 2009).

In Malawi, Christian Health Association of Malawi nursing colleges trains approximately 70 percent of all nurses (Strengthening Health Outcomes through the

Private Sector (SHOPS) project, 2012. However, according to Tveit, Wasili, Kollstrom, Mwenye-Phiri (2009) report on curriculum implementation in CHAM Colleges in Malawi observed that the nursing education has been teacher-centred with faculty often taking the role of "dispenser of knowledge". Currently, in Malawi, literature on use of LCT in nursing colleges is very scanty and the little available literature is based on old studies. This study will therefore provide up to date information on learner-centred teaching strategies in nursing education as well as add to the body of knowledge on LCT in nursing colleges in Malawi and the world over. It will also act as a base line for future research on LCT in nursing education.

Problem statement

New graduate nurses often lack the critical thinking and problem solving skills needed to recognize and manage patient problems and life-threatening conditions, (Deyoung, 2011). It was evident that curriculum implementation in CHAM Colleges in Malawi has been teacher-centred with faculty often taking the role of dispenser of knowledge (Tveit, Wasili, Kollstrom, Mwenye-Phiri, 2009). Therefore, this study aimed at investigating the factors that hinder implementation of learner-centred teaching strategies in Christian Health Association of Malawi nursing colleges.

Rationale for the study

Research studies that were reviewed, confirm positive influences of learner-centred teaching strategies to teaching on academic performance, attitudes toward learning, and persistence in programs. In light of the growing evidence of the effectiveness of learner-centred teaching approaches, this study will help to generate information that will assist nurse educators both at operational and management levels in coming up with strategies and policies for promoting LCT in classroom and clinical teaching. The study findings

will also contribute to the body of knowledge and act as a baseline for researchers to conduct studies on the LCT in Malawi.

Broad Objective

The broad objective of this study was to describe factors that hinder implementation of learner-centred teaching strategies in Christian Health Association of Malawi nursing colleges.

Specific Objectives

The specific objectives of this study were to:

- Assess *knowledge* of nurse educators on learner-centred teaching strategies.
- Assess *attitudes* of nurse educators on the learner centred teaching strategies
- Assess the *practice* of nurse educators on teaching strategies in Christian Health Association of Malawi nursing colleges

Research Questions

The study intends to answer the following questions:

- What is the knowledge of nurse educators in Christian Health Association of Malawi nursing colleges on learner centred teaching strategies?
- What are the attitudes of the nurse educators on the learner centered teaching strategies in Christian Health Association of Malawi nursing colleges?
- What are the practices of nurse educators on teaching strategies in Christian Health Association of Malawi nursing colleges?

Chapter Two

Literature Review

Introduction

Nursing education would be deficient if it only concentrated on knowledge acquisition and technical skills. The most frequently cited skills identified as requiring attention have been communication, both verbal and non-verbal, information technology skills, critical thinking, problem-solving skills and the ability to extract and analyze information from a variety of sources (Paisey, 2009).

Learner-centred teaching or learning is an approach to learning that emphasizes student engagement with real life problems or situations, involving learners in active decision making processes and in using theory to inform practice (Edward & Hammer, 2006). The aim of nursing education programmes is to prepare competent professional nurses and midwives who will successfully make transition to the professional practice (Williams, 2001 as cited by Van Wyngaarden, 2008). Society also demands continued professional accountability for competence. One way in which to meet this demand is for every professional nurse to engage in lifelong learning which stem from the teaching strategies that encourage learner involvement. It was Florence Nightingale who first wrote, “We should be learning all our lives” (Williams, 2001: 86). Lifelong learning implies that continuing professional learning needs to be self-directed and nursing education programmes should be designed to encourage the development of these abilities. She noted that student-centred teaching strategies like problem based learning enhances the development of abilities to become self-directed (Williams, 2001 as referenced in Van Wyngaarden, 2008). The nursing profession has a long history of recognizing the need for continuing learning which can be enhanced through student-

centred teaching in nursing colleges. It promotes problem solving, critical thinking, facilitates learning and aids to adopt self-directed learning skills.

The Malawian education system is currently undergoing a transition in teaching and learning approaches at all levels of education. Malawi Government policy is requiring teaching and learning to be shifted to paradigms, which will require teachers and students to adopt different responsibilities and roles. The traditional paradigms where teachers focused on transmitting information formats, such as lectures, have begun to be criticised in most countries. This debate has paved the way for a widespread growth of new paradigms of teaching and learning as an alternative approach.

This chapter looks at comparisons between teacher-centred and student-centred approaches, benefits of LCT/L and empirical evidence regarding student-centred approaches to teaching. Finally what others have said as obstacles to use of learner-centred teaching strategies.

Teacher-centred teaching (TCT) versus learner-centred teaching (LCT)

Today, a lot of institutions of higher education shift from traditional TCT approach to LCT approach which emphasize on students' learning style. These two approaches are different in a few perspectives. According to Sablonniere, Taylor and Sadykova (2009), TCT approach is characterized by the predominant use of traditional methods of teaching such as formal lectures. The teacher provides structured material during lectures, while students listen and take notes. It concludes that the teacher is the main source of knowledge or acts as gatekeeper of knowledge, controlling students' access to information (Napoli, 2004). The student is expected to follow the instructions and information provided by the teacher.

By contrast, in LCT approach, education should be centred on the needs and abilities of the learner. The teacher's role is that of a facilitator in the learning process rather than a provider of information (Sablonniere et al. 2009). According to Segers, Bossche and Teunissen (2003) the teacher coaches the group by monitoring the group process and helping the students to identify the knowledge that is needed to resolve the problem. LCT/L requires the teacher to function as a facilitator rather than a transmitter of information. Teaching approaches of this nature pay due respect to the contributions of both teacher and student and result in a shared learning process.

According to Napoli (2004), students become passive recipient of information in TCT approach. They expect teachers to teach them what is required to pass a series of assessments and simply reconstructs knowledge and information, without necessarily understanding it.

In a study carried by O'Neill and McMohan (2005) LCT approach allows for some choice within a program of area that students may study. Students can set their own learning objectives or outcomes dependent on prior knowledge. Another study by Sablonniere et al. (2009) indicates that the students becomes more active participant in LCT approach because they have the responsibility to accommodate the learning process to their own unique learning style in order to structure their own learning. In addition, it is claimed that, in teacher-centred teaching approach, course priority is given to content based only, where usually; there is extensive involvement in the technical details of analysis, which allows teachers to be portrayed as smart people (Ardalan, 2008). Teachers expect students to go through detailed numerical calculations. While in LCT/L approach, course priorities are both process and content based. Focus is on the learning process. It

involves constant reinforcing, discussing together, working together, and over time arriving at a cohesive central understanding (Ardalan, 2008).

Benefits of learner-centred teaching/learning

Prior studies claim that LCT/L approach has various benefits to students in improving their learning processes. A study by Tsou, Cho, Lin, Sy, Yang, Chou and Chiang (2009) which examined the impact of LCT/L approach in learning attitude found that, students are more active in raising questions, expressing their opinions, and more eager to discuss the things they do not know. Students can identify their area of deficiency and take remedial action. This is supported by another study which claims that LCT/L approach promotes reactions, arouses questions, and allows the sharing of resources and knowledge in a group setting (Tseng, Chiang & Hsu, 2008). Students also learned how to learn and how to work co-operatively and constructively within their own group and with other study groups. By focusing upon a realistic problem, students develop a greater depth of knowledge about the subject (Kivela & Kivela, 2005).

In addition, LCT/L approach is also claimed to help students enhance their abilities to self-direct themselves in learning and improved their ability to solve problems. If students can develop self-direction ability, it will help them have positive attitudes towards lifelong learning in the future (Tseng et al., 2008). Furthermore, LCT/L approach helps to develop their abilities in data collection, analysis, summary and understanding. This gives them more confidence in oral presentations (Tsou et al., 2009). Other findings by Horne, Woodhead, Morgan, Smithies, Megson and Lyte (2007) found that LCT/L encourages self-awareness, confidence, self-direction and independent learning skills. A study by Carlisle and Ibbotson (2005) found that the students feel that the learning process and the topics are more interesting, and that they would be able to remember what they

had learnt. Finding by Horne et al. (2007) indicates that LCT/L aids the development of independent learning skills and encourages deeper exploration, helps to develop team working and peer support; learn to accept individual styles or values, and train to manage conflicts and share experiences.

According to Azer (2009) students enjoyed their LCT/L process and case discussion. They felt that the case added to their understanding and learning about the topic discussed, they worked effectively together as a group, and used a wide range of resources in their self-directed learning. They also perceived LCT/L as an interesting method of learning. This is supported by another study by Segers et al. (2003) which indicated that the students perceive the learning environment of LCT/L as of good quality. They managed to understand the subject matter in the course better and encouraged participation in group discussions. Students also have highly intrinsic motivation in their own learning.

Learner-centred teaching methods also help students develop a strategy for dealing with problems, give them a mental framework for evaluating alternative methods of analysis, and motivate them to take responsibility for their own learning (Boyle, 1999). Through this approach, students were able to open their eyes to multiple view points and hear contrasting opinions. Through communicating, arguing, and interpreting ideas they were able to develop a higher level of dialogue. This helped students to reflect on and enhance their critical thinking (Tseng et al., 2008). In addition a study by Chan (2009) found that LCT/L approach enables the students to share their different understandings. When the teacher asks questions, it is the students who arrive at their own answers through self-directed learning which is facilitated by the teacher. In addition, when

students work in teams, peer discussion and teaching occur, which enable the concepts to be remembered and allows them to transfer and apply their learning to real-life situations (Tan & Frank, 2008).

In nursing, student may acquire basic technical knowledge including facts about patient or client care, this basic knowledge is linked with experience-based knowledge. According to Johnstone and Biggs (1998) teaching technical concepts in the context of realistic cases allows students to develop experience-based knowledge structures and appreciate the practical complexity of the theoretical concepts that they learn. General problem-solving skills enable students to learn expert approaches to problem solving. As LCT/L emphasizes the application of knowledge, students are expected to exercise their creativity and think out of the box when solving problems (Tan & Frank, 2008). Kivela and Kivela (2005) reported that students learned through a combination of group work and the application of knowledge to practice, and they also had to accept responsibility for their own learning. And by learning this way, students also realized how important operational, managerial and customer relations skills are once they graduate and face the world of work. However, since LCT/L is quite newly practiced, there are also obstacles in using this approach. According to Tseng et al. (2008), when students learned using LCT/L approach for the first time, they needed time to adapt to the new ways such as team-work and learn how to solve it. Other findings by Carlisle and Ibbotson (2005) found that the adjustment to LCT/L approach can be a difficult experience. For some, initially it was both threatening and confusing, although over time they realized that this was a normal reaction to learner-centred teaching or learning.

Learner-centred teaching or learning may require students to investigate and study an exceeding amount of information that is not part of the intended content but is required for solving the problem. LCT/L also does not clearly guide students to research and study the intended content knowledge (Hung, 2009). Students may perceive that the assignment did not enable them to demonstrate the full range of knowledge that they had acquired (Carlisle & Ibbotson, 2005). In addition, in LCT/L environment, students may develop inappropriate organized knowledge structures and may rely too heavily on backward reasoning and there is a greater likelihood that students reasoning errors or misconceptions may occur and remain undetected (Johnstone & Biggs, 1998).

According to Walker, Bridges and Chan (1996), there appeared to be a lack of group cohesiveness. Initial reactions from most groups exhibited a mixture of confusion, shock and overconfidence. The groups who did not know each other well before the exercise appeared generally to have difficulty in dealing with the problem. Students found difficult in challenging any member of the group who was not participating at a level they expected (Carlisle & Ibbotson, 2005).

A study by Boyle (1999) found none of the students had enough free time to assume complete responsibility for investigating all the learning issues associated with each case. Thus, lectures were needed to complement those learning issues that the students developed in the group discussions. Pang (2005) found that students reacted anxiously to the uncertainty associated with the given activity or they did not come up with a specific idea. In those cases, teacher provided a crucial hint that might change the nature of the given task or introduced their own solution strategies, instead of letting students invent them. In larger classes, several students hampered group discussion by

habitually failing to review the case materials before coming to class. It was a formidable task for the instructor to draw those students into the discussion and prevent them from being passive note-takers (Boyle, 1999).

Empirical evidence on learner-centred teaching strategies

Several studies have been carried out in higher education institutions in an attempt to investigate the teaching approach of teachers and the learning approach of students, that is, whether they are, student-centred or teacher-centred for instance in Malaysia by Luan, Bakar and Hong (2006); Mahamood et al. (2009); Sidin (1999) and Zubir (1988). A number of these studies indicated that Malaysian lecturers use teacher-centred approaches or a mixture as their teaching practice. For example, a quantitative study conducted by Mahamood et al. (2009) who investigated the perceptions of 218 students at private higher learning institutions in Sarawak revealed that the lecturers adopted both traditional teacher-centred and student-centred approaches. This finding was similar to the research findings of Sidin (1999) found that lecturers at higher institutions employed various teaching methodologies, involving teacher-centred and students-centred methods such as direct lectures, discussions and tutorials in their teaching. All the findings from the above studies suggest that the participants viewed both approaches as a continuum, and not as a binary distinction.

However, there are studies which are contradictory by Luan et al. (2006); Neo and Neo (2002), (2003), (2009) and Zubir (1988). Zubir (1988) conducted a quantitative study among 225 teacher trainees to explore the impact of two teaching methods that is the teacher-centred teaching (lecture) and student-centred (individualised learning methods). The study focused on several facets of learning from the lecture to individualized learning. The findings revealed that over half the students expressed a preference for individualized

learning; this is contrary to the accepted view that Malaysian students cannot learn independently (Mustapha, 1998).

This is aligned with another qualitative study conducted by Neo and Neo (2009) among education students. The study created a constructivist learning environment using integrated multimedia courses, where the students were exposed to student-centred notions requiring them to construct their own knowledge, determine their own learning outcomes, and work in a collaborative and cooperative way. It was found that student-centred learning helped students in several ways, including in their ability to be creative and became critical thinkers, the motivation to learn, in finding learning to be more challenging, and also in the ability to learn more from each other when working as a team. Students were found to be willing to seek and digest information on their own.

Similarly, Luan et al. (2006) conducted a qualitative study examining the effect of the student-centred learning approach to teach a discrete information technology (IT) course for Malaysian pre-service teachers. The study revealed that infusing student-centred learning into a discrete IT course can help promote and enhance positive attitudes toward IT, create opportunities for students to work and collaborate, and enable students to be active participants in their own learning process. From this study, the student feedback also indicated that they became more independent, more creative, and developed collaborative learning skills as they did not fully rely on the course instructor to solve problems they faced.

The reviewing of the relevant literature from Islamic countries indicated that constructivist learning theories and student-centred principles have been accepted by many Muslim teachers and students (Brosseau, 2000; Lubis et al., 2011; Salimi &

Ghonoodi, 2011; Zarei & Esfandiari, 2008). Studies have been conducted to examine Muslim teacher perceptions of student-centred approaches for example by Lubis et al. (2011) and Salimi and Ghonoodi (2011). Lubis et al. (2011) conducted a quantitative study to 83 African teachers to study their perception of effectiveness strategy and technique in teaching and learning in Islamic Education. The findings showed that the teachers agreed with the principles of student-centred learning, such as student engagement in classroom discussion and student responsibility for their learning. The teachers also agreed with their suggested roles to advise and motivate students in their learning.

Similarly, another study by Salimi and Ghonoodi (2011) in Iran also found that Muslim teachers agreed with constructivist student-centred approaches. The study was conducted with the purpose of integrating curriculum along with information communication technology (ICT) and emphasized constructivist notions of learning in Smart Schools and its advantages in comparison with traditional schools. The findings showed that using ICT in smart schools has resulted in advantages such as the increase in the importance and reliability of curriculum contents, making the curriculum content more flexible, promoting learner interest, and enhancing curriculum usefulness, with the possibility of exploiting a combined curriculum.

However, the above findings are in contrast with other studies. Iqbal, Azam and Rana (2009) conducted a quantitative study in Pakistan to explore the views of 200 secondary schools science teachers concerning the Nature of Science, whether traditional or contemporary, and their approach to teaching science. The overall results of this study indicated that the teachers hold traditional views about the Nature of Science prefer

teacher-centred didactic teaching approaches. Similarly, a quantitative study conducted by Mustafa and Cullingford (2008) in Jordan among 98 Islamic Education teachers also showed that Muslim teachers were using only one teaching method, which was lecturing. Findings from these two studies suggest their preference for a teacher-centred approach instead of student-centred one.

There were also studies that focused on students' learning perceptions and outcomes (Ann Brosseau, 2000; Zarei & Esfandiari, 2008). Zarei and Esfandiari (2008) conducted a study in Iran to investigate university students' learning outcomes in a general English course. They were randomly assigned to two classes; one constructivist and the other conventional. Results showed that student learning best occurred within the constructivist student-centred learning environment.

In another study, Brosseau (2000) conducted an exploratory research to study seven Moroccan university students to examine their preferences of teachers and teaching styles. They were interviewed and asked to describe their best and worst teacher according to questions designed to identify teaching styles. The "best" and the "worst" teachers teaching styles were evaluated according to their perceptions. The study found that the best teachers chosen by the students tend towards a student-centred teaching styles, while worst teachers more towards teacher-centred teaching styles.

Conversely, a study by Sajjad (n.d.) in Pakistan found that undergraduate students rated the teacher-centred method as in a lecture as the best teaching method. Reasons included; teachers provide all the knowledge relating to the topic, the method is time saving; students listen to lectures attentively and take notes. This supports other literature which revealed that the concepts of student-centred and active learning have not been well

accepted in some Islamic countries, asserting instead that Muslim teachers and students prefer teacher-centred approaches for example Ahmad (1990); Azhar (2006); Hashim & Langgulung (2007); Zakaria (2008); Zia (2006). The literature suggests that the dominant pedagogical mode in many Islamic institutions today is listening, memorization, and regurgitation within a teacher-centred learning environment. The review of the literature also shows that, historically, in the Arabic world, all subjects were taught by means of book-centred methods in the majority of schools (Al-Saif, 1996; Jallad, 1997; Mustafa & Cullingford, 2008). Muslim Arabic teachers were found to be fully dependent on textbooks and the teachers to rely on "chalk and talk" in preference to methods that use student-centred learning (Al-Saif, 1996). Jallad (1997) concludes that teaching approaches that emphasize student-centred learning such as group discussion, projects, and acting were very rarely used in teaching practice. Findings from the above studies exemplified the teachers' philosophy of teaching as a knowledge transmission, and students' understanding of learning as being an acquisition of knowledge

There have been several studies conducted in teacher education programmes focused on teaching approaches for example Bansberg (2003); Brindley (1996); Quaintance (2006). Brindley (1996), conducted a qualitative study to examine to what degree pre-service teachers acquired a constructivist student-centred perspective in their teacher education coursework, which aspects of constructivism were manifest in their classroom practice, and which factors influenced their decision to utilize constructivism. Research findings indicated that the pre-service teachers in this study were able to build an understanding of constructivism. The participants were able to use constructivism in their classroom practice. The findings are congruent with a study conducted by Quaintance

(2006) that revealed that pre-service teachers valued the characteristics of constructivism. The findings also revealed that the students developed an appreciation for constructivist practice, realized the importance of student-centred environments, came to value collaborative learning and social interaction, and moved away from the view that learning is acquiring facts towards the view that learning is constructing knowledge. The students indicated that the course content was interesting and relevant. Similarly, Bansberg (2003) also discussed the success of the implementation of Learner-Centred Principles (LCP) to pre-service teachers. Bansberg's study revealed that LCPs supported active student learning, connecting new learning to prior learning, stimulating interest, providing student choice and control, and adaptation to individual developmental differences.

However, despite successful student-centred approaches, the Western literature also revealed some debate in regard to this issue. Some educational researchers did have criticisms of the student-centred approach to teaching. A number of studies have found that teacher-centred instructional methods are more efficient because these approaches may not lead to confusion or misconceptions in regard to material, in comparison to the student-centred approach (Chall, 2000; Moreno, 2004; Schauble, 1990; Singley & Anderson, 1989). Other researchers present a case for a teacher-centred approach and against student-centred instruction. For example, previous research findings present the case of student-centred education that may bring about early misconceptions in regard to information (Cronbach & Snow, 1977; Klahr & Nigam, 2004; Mayer, 2004; Shulman & Keisler, 1966). These misconceptions may prompt students to become frustrated and confused (Schauble, 1990).

The other criticism is that the student-centred approach provides minimally guided instruction which hinder students from getting effective learning (Cronbach & Snow, 1977; Klahr & Nigam, 2004). There are some researchers who suggest that learners are more successful with direct instruction related to the concepts and procedures required for various subject matter domains (Klahr & Nigam, 2004; Mayer, 2004; Shulman & Keisler, 1966). Direct instructional guidance is described as the provision of explicit information that fully explains the concepts and procedures that students are required to learn (Kirschner, Sweller, & Clark, 2006). Several studies have revealed that student-centred instructional methods are less efficient than direct, teacher-centred instruction (Chall, 2000; Moreno, 2004; Schauble, 1990; Singley & Anderson, 1989). For example, a recent study carried out by Klahr and Nigam (2004) found that science students learn better when their teacher had employed teacher-centred direct instruction instead of minimally guided instruction. Consistent with this finding, Cronbach and Snow (1977) assert that direct instruction is superior to minimally guided instruction. More specifically, they found that highly organized learning environments that include lecture and explicit provision of information produce a higher level student achievement than do minimally guided classrooms (Cronbach & Snow, 1977). Clark (1989) went one step further and proved that minimally guided instruction not only results in less positive student outcomes, but also causes measurable loss of learning.

Factors affecting implementation of learner-centred education (LCE) in training institutions

The purpose of this section is to reflect on the problems that hinder implementation of student-centred teaching in other disciplines. Literature from other studies reveal that attitudes of the lecturers and students; the training of lecturers; support from department

heads and deans; the classroom condition; class size; and instructional material are some the factors that affect implementation of learner-centred teaching (Vavrus, Thomas &Bartlett, 2011; Tengku Kasim, 2012; Mtika & Gates, 2010).

Attitudes of lecturers and students towards the implementation of learner-centred

Observation and informal interviews in Ethiopia have indicated that in most classes in universities, traditional teaching methods seem to be favored in teaching and learning. Research conducted on attitudes and views on teaching approaches showed that lecturers' and students' beliefs and attitudes influence their teaching and learning behaviors' respectively (Gruber & Boreen, 2003). They contend that comprehending attitudes and beliefs of lecturers and students would facilitate implementation of active learning in education. Consequently, researchers have pointed out that accepting and changing the attitudes and belief structures of lecturers and students is crucial to progress their professional preparation and teaching-learning processes (Peterson, 2004; Zan & Martino, 2007).

Attitudes are psychological constructs composed of emotional, cognitive and behavioral components. Attitudes have social, value, utilitarian, and defensive functions for the students who hold them (Newbill, 2005). Successful implementation of learner-centred teaching strategies enables students to acquire deep understanding of concepts and problem-solving skills which are vital to recognize and deal with real problems employing appropriate teaching methods. This approach has positive effects on students' academic achievement. Besides from promoting academic achievement, students should be inculcated with attitudes and values that are appropriate to their lives as students and for career development. If active learning is properly implemented in education institutions,

students become successful in their learning. On the other hand, ineffective use of this approach brings academic failure. This in turn affects students' attitudes-towards active learning methods and the subject. Thus, student's attitude towards any course could be enhanced by using effective student-centred learning and teaching methods (Olowojaiye, 2000).

Other researchers who studied learner- centred teaching strategies have also shown that implementation of these methods develop positive attitudes in students towards the approach. For instance, the study conducted by Zan and Martino (2007) indicates that students in the experimental group held positive attitudes towards active learning in mathematics education. Similarly, Vaughan (2002) and Niess (2005) had the same findings in their studies. Students' interests and attitudes towards active learning affect their learning, National Council of Teachers of Mathematics (2000). Students with positive attitudes to the teaching and learning methods and those who show interest in the subject will score high grades and succeed.

The view of educators towards teaching and learning has an impact on their beliefs and attitudes towards learning approaches in general and the implementation of these strategies in any field of education (Petrosino e*t al.,* 2007).

A lecturer-centred approach is directive and characterized by lecturers' belief that lecturers, should control decisions and processes related to education rather than students, and the basic elements of this dimension are firm discipline, attention to order, procedure, and lecturer-centred curricula (Petrosino *et al.,* 2007). Educators assert that dean and academic department heads' attitudes towards a teaching and learning approach is a determinant variable for effective implementation of /learner-centred approach in

education. Those educators who strongly support positivist epistemology assume that knowledge exists separated from the student fixed in the world and it is made up of discrete and irrefutable pieces of information or facts. The assumption is that the lecturer is the source of knowledge and knows best whereas students are "empty vessels" to be filled by the lecturer (Petrosino *et al.,* 2007). Thus, those lecturers who are in favor of positivist epistemology could have negative attitude towards student-centred learning.

Since the attitudes and beliefs of lecturers vary; copying the teaching and learning methods employed at one university to another may not be successful. Thus, it is necessary to inculcate positive attitude in lecturers towards teaching and learning methods which the lecturers need to adopt. They should also accept their own and the students' appropriate roles and put them into practice in the instructional processes to facilitate students learning. Active learning approaches put the students at the centre of the teaching and learning process to construct knowledge by themselves through interaction with the material, their teacher and peers. Thus, in this approach students are active participants. Hence the lecturer should be willing to employ active learning methods such as cooperative learning method that give students opportunities to interact and he or she should encourage students to actively participate in the teaching-learning process that focus on higher order thinking as much as possible (Lea *et al.,* 2003).

A student-centred approach is characterized by attitudes and beliefs of lecturers' regarding the importance of empathic, supportive relationships which free students to discuss their feelings and experiences. They believe that students should be "actively involved in learning through opportunities to predict, infer, generalize, and evaluate" (Duffy & Kirkley, 2004). As indicated, a lecturer-centred approach contrasts to this, is

directive and is characterized by lecturers' beliefs and attitudes that it is the lecturer, rather than the students, that should control decisions and processes related to education. The basic elements of this approach are "firm discipline, attention to order and procedure and lecturer-centred curricula" (Duffy & Kirkley, 2004).

The training of educators

Zan and Martino (2007), state that good and effective teaching and learning in the classroom demands a well-prepared and academically and pedagogically competent educator and the selection of teaching strategies, activities and appropriate materials to achieve the designed educational objectives for different levels. The way students were trained has an effect on their future work. If they learned mainly through the student-centred methods, they prefer to use these methods in their own future teaching. Becker and Watts (2001) point out that educator should be taught by the same methods which they will be expected to use in their future career. Therefore, for effective implementation of student-centred approach in higher education, educators should take academic and professional courses founded on active learning methods in their pre-service or in-service training. However, scholars (Child & Heavens, 2003) have found that the trainers themselves failed to relate theory with practice.

Support from departmental heads and deans

The deans and academic department heads are responsible for both academic and administrative affairs in any educational institution. They can be considered prominent figures in the institutional system as they are assigned to lead the activities in the teaching and learning environment. Thus, implementation of educational programmes is dependent upon the effectiveness of the deans and academic department heads. They are expected to have dedication, commitment, the necessary training and positive attitudes towards their

profession, and implementation of active learning in particular. According to Weimer (2002) for the effective implementation of student-centred approaches the deans and academic departmental heads of the institution need to recognize active learning approaches as building blocks for lifelong learning.

The classroom conditions

Alexander (2002) and National Council of Teachers of Mathematics, (2000) claim that students' understanding of mathematics education will be improved through effective implementation of active learning approaches in classrooms. According to the National Council of Teachers of Mathematics (2000) lecturers are facilitators of students' learning and they should create conducive learning environments. That is an environment in which there is free lecturer- student, and student-student interactions and adequate material resources including the required curricula. Thus, appropriate classroom conditions must be facilitated. Lecturers can establish and nurture an environment conducive to an active learning approach in teaching through the decisions they make, the conversations they devise, and the physical setting they create. Lecturers' actions towards implementation of active learning approaches are what encourage students to think, question, solve problems, and discuss their ideas, methods, and solutions. The lecturer is responsible for creating an intellectual environment where critical thinking is the norm. More than just a physical setting with desks, bulletin boards, and posters, the classroom environment communicates subtle messages about what is valued in the active learning and doing of any course. Students' discussion and cooperation are encouraged, and students are expected to justify their thinking. If students are to learn to make conjectures, experiment with various active learning methods to solving problems, construct critical arguments and respond to others'

arguments, then creating an environment that fosters these kinds of activities is essential (Mupinga, Nora & Yaw, 2006; National Council of Teachers of Mathematics, 2000).

The classroom condition is one of the most significant factors that should be considered in the teaching-learning process in general and active learning in teaching in any educational institution. Burns and Myhill (2004) contend that the physical environment in classrooms can make or break active learning approaches. Thus, to engage students in learning activities the classroom should be well equipped with furniture. There should be a movable desk for every student to use different lay outs in the classroom. In another study, Silberman in Zweck (2006) suggested 10 different types of classroom layouts, which facilitate active learning approaches. These layouts include a U-shape; team style; conference table; circle; group on group; work station breakout grouping; traditional classroom and auditorium arrangements. Generally, in an active learning approach in any course teaching in universities the act of the student is learning by doing. Thus, it may be necessary for the students to move around the classroom (McCombs, 2003).

Class size

Class size refers to the number of students regularly scheduled to meet in the administrative and instructional unit, usually under the direct guidance of a single lecturer. It has its own impact on the teaching-learning process in general and on the implementation of student centred learning in particular. Hence the idea of class size is becoming a concern and an essential point of discussion among scholars in implementing active learning. These scholars assume that as the class size increases, students face any or all of the following problems: lack of clarity of purpose; knowledge about progress; advice on improvement; lack of opportunity to discussion; inability to support independent

study and inability to motivate students. According to McKeatchie and Svinicki (2005) in a large class individualization of instruction become a great challenge. Thus, the instructional method most frequently used is the lecture-centred approach, without group participation; oral communication within the classroom from student to lecturers is minimized; written work is assigned less frequently and when assigned, receives less lecturer attention and students are also less known to lecturers as individuals.

In contrast to the above, Jarvis in Slavin (2005), suggests that class size is not a significant factor in students' achievement. He found that individual lecturers varied in their effectiveness in different class sizes. Some were more effective in large classes than in small ones, while others were less effective in large classes than in small ones. Other researchers have taken middle position. As stated by McKeatchie (1999), whether a large or a small group is appropriate depends on the following factors: learning objective that are to be realized; nature of the subject to be taught; pupil attention and learning resources.

Curricular and instructional material

The organization of the curriculum material (course catalogue and course outline) has an impact on lecturers' and students' practices and roles played by them in the teaching-learning process. The course outline is only one of the many media through which lecturers and students communicate with each other and it is prepared by experts to achieve the desired educational objectives. Hence, the course catalogue and course outline should be available to interested parties (Eison, 2010).

Feden and Vogel (2003), indicate that active learning and teaching materials should contain plenty of exercises and samples of work. They should also be flexible for students to allow the chance to work at their own speed and by their own methods. The

university curriculum materials (course catalogue and course outline) are designed towards achieving the ideals of a national citizenry whose members are wholesome and balanced in all dimensions of human development, and who can contribute to the well-being of fellow members and to the nation. One of the premises of these curriculum materials is that the teaching and learning process should allow for the developmental growth of students in both affective and cognitive dimensions through active leaning. This is clearly visible in the curriculum materials prescriptions at the university level where lecturers are to adopt an active learning/student-centered approach in the classroom (Taylor, 2000). A well-prepared lecturer's curriculum materials provides him or her with a variety of learning and teaching methods that promote active learning or student-centered learning corresponding to each topic (Alexander, 2002; Mierson & Freiert, 2004).

However, at the college level, lecturers have been given much freedom to choose the way they teach and to what extent lecturers adopt an active learning or student-centered approach has been a concern to curriculum material developers. The emphasis on examination results and the paper-chase culture has in fact resulted in lecturers resorting to the teaching methods that are more lecturer-centered. Lecturers who produce better student examination results are generally perceived as more effective than others. Various studies on curriculum implementation have painted a dismal scenario. Although educators are delivering the content, there is concern as far as the process is concerned (Taylor, 2000). Instructional materials, which are categorized into visual aids, audio aids and audio-visual aids, are any materials used as media of communication by the educators or students to advance learning (Felder & Brent, 1996). They are instruments with which an educator to facilitate the teaching and learning process. For this reason, teaching without

instructional materials boils down to teaching without technology (Ainsworth, 2006). International experiences have shown that modest teaching tools such as course catalogues, libraries, laboratory equipment and classroom instructional material are significant determinants of student achievement (Ainsworth & Th Loizou, 2003). Instructional material enable students to use more than one sense and to facilitate active learning, relate theory to practice, encourage creative thinking and effective student skill development, hence make learning more functional (Ainsworth, 2006).

Summary

In this literature review, few studies were identified that were relevant to the topic under study for instance student-centred learning. What it means to students and lecturers by O'Neill and McMohan (2005); navigating the bumpy road to student-centred instruction (Felder & Brent, 1996). In addition, the study Azer (2009) titled problem based learning; applying the learner-centred principles to the special case of literacy by Bansberg; culture shift: teaching in a learner-centred environment by Alliance for Excellent Education (2012) and university student preferences for a teacher and teaching style by Ann Brosseau (2000). Nonetheless, other literatures were taken from studies relating to education from other disciplines. In general, the problem of instructional materials may involve a shortage of lecturer-guidance, pedagogical centres, libraries, laboratory equipment, reference books, and audiovisuals, among others. The presence or absence of these materials may facilitate or hinder the implementation of an active learning approach. The author is therefore interested to find out what hinders nursing educators in CHAM nursing colleges to implement the student-centred teaching strategies.

Chapter Three

Methodology

Introduction

Research methodology is a systematic way to solve a problem. It is a science of studying how research is to be carried out. It involves the procedures by which researchers go about their work of describing, explaining and predicting phenomena. It is also defined as the study of methods by which knowledge is gained. Its aim is to give the work plan of research (Rajasekar et al., 2013).In this chapter the research design and methods used to conduct the investigation are explained. The chapter also give details of setting, sampling, study population, sample size, data collection methods, methods of data analysis, data storage, validity and reliability and ethical considerations.

Study design

The study used a descriptive cross sectional design that utilized quantitative approach to data collection and analysis on factors that hindered implementation of learner-centred teaching strategies in Christian Health Association of Malawi nursing colleges. The study sought to assess the knowledge of nurse educators. In addition, it also tried to identify the attitudes of nurse educators on the learner centred teaching strategies. Furthermore, it tried to assess the practice of nurse educators on the teaching strategies in Christian Health Association of Malawi nursing colleges.

The study setting

The study was conducted in all the nine CHAM nursing colleges in Malawi. The colleges were: Holy Family, Mulanje Mission, St Joseph, Malamulo, St Lukes and Trinity in the Southern region; Nkhoma in the Central region and St Johns, Ekwendeni in the

Northern region (see appendix 4). Permission to conduct the study was obtained from Management of those CHAM nursing colleges.

Sampling methods

This study did not utilize any sampling technique since all nurse educators available at the teaching institution during the study period were taken as a sample.

Study population

In this study, the target population were nurse educators in the nine CHAM nursing colleges because they are directly involved with teaching. According to Christian Health Association of Malawi Annual Report of February (2013) there were about one-hundred and twenty-six nurse educators in these nine nursing colleges.

Sample size

Christian Health Association of Malawi Annual Report of February (2013) indicated that there were about one-hundred and twenty-six nurse educators in all the nine CHAM nursing colleges. Therefore for very small populations the study required almost the entire population in order to achieve accuracy (LoBiondo-Wood & Haber, 2013).

Data collection

Data was collected for a period of one month. Data was collected by the researcher and two research assistants who were trained for a period of two days on the tools. Research assistants were trained on the objectives of the study, data collection process, how to handle respondents by respecting their rights and how to handle documents.The areas that were discussed were; ethical issues concerning involvement of human subjects in research, the methodological approach of the study, use of codes in identifying the participants.

The data collection tools were developed following the study objectives. The tools had sections capturing demographic data; knowledge attitudes and practice of nurse educators on learner-centred teaching strategies (see appendix 1 and 2). The questionnaire took approximately twenty minutes to be completed by a participant. The researcher also conducted classroom observations of some participants.

Prior to actual data collection, the questionnaire and the checklist were pre-tested on six nurse educators from Holy Family College of Nursing who meet the inclusion criteria. However, those nurse educators did not participate in the actual study. This aided to measure feasibility of the study (Polit & Beck, 2006) and assisted in examining the reliability of the data collection tool (Burns & Grove, 2001). In addition, spelling mistakes were corrected and some items which were on knowledge section were better placed on attitudes. The participants were provided with refreshments both during pre-testing of the data collection tool and actual data collection.

Data analysis.

After data collection, data was checked, cleaned and coded manually. Then coded data was entered into the computer by the researcher. Analysis of data was done using Statistical Program for the Social Science (SPSS). Descriptive statistics were computed for the socio-demographic data. The results were presented in tables in the form of frequencies, percentages and means. Analysis of respondents' knowledge, attitudes and practice were done using the means of scores from all the responses given by the participants.

Data storage

All printed tools that were used in data collection and analysis were kept in a lockable cupboard while electronic data were saved with pin code known by the researcher only. The data both printed and electronic would be destroyed after five years following completion of the study.

Validity

Validity is defined as the degree to which a test or measuring instrument actually measures what it purports to measure or how well a test or instrument fulfills its function (Anastasi& Urbina, 1997 as cited in Ayodele, 2012). However, recent views of validity seem not to be on the instrument itself but on interpretation and measuring of the scores derived from the instruments. For example, Ary, Jacobs and Razavieh (2002) conceptualize validity as the extent to which theory and evidence support the proposed interpretation of test scores for an intended purpose. Relatedly, Whiston (2005) views validity as the degree to which evidence and theory support the interpretation of test scores entailed by proposed uses of tests. Similarly, Kaplan and Saccuzzo (2005) view validity as the evidence for inferences made about a test score. Further, McBurney and White (2007) view validity as an indication of accuracy in terms of the extent to which a research conclusion corresponds with reality. The foregoing suggests that validity hinges on the extent to which meaningful and appropriate inferences or decisions are made on the basis of scores derived from instrument used in a research. In this study the tool used was valid because it was able to isolate factors that hindered nurse educators to implement learner-centred teaching strategies.

Reliability

Reliability is one of the most desirable technical merits in any educational research though it's meaning differ in quantitative and qualitative research. Quantitative research assures the possibility of replication. That is within a certain limit of experimental error or random error, if the same methods are used with the same sample, the results should be the same (Cohen, Manion & Morrison, 2008). In a more explicit way, Bowling (2009) views reliability in quantitative research as synonymous to dependability, consistency, reproducibility or replicability over time, over instruments and over groups of respondents. Indeed, for research to be reliable, it must demonstrate that if it were to be carried out on a similar group of respondents and similar context, similar results would be obtained. Therefore to ensure that the data collection tool was valid and reliable pre-testing was done on few participants at Holy Family College of Nursing. The results showed that educators felt these innovative teaching strategies were useful for students to develop critical thinking and problem solving skills. Nonetheless they could not utilize them because they were time consuming meaning that they could not finish the syllabi, resources were not adequate for instance classrooms were small and its arrangement not favoring these innovative teaching strategies. The tool was reliable because the results found in both pre-testing and actual study were similar and to other studies that were carried in similar topic in other disciplines for example in education.

Ethical considerations

The research proposal was submitted to College of Medicine Research Ethics Committee (COMREC) for review and approval. Consent was sought from the principals of all the nine Christian Health Association of Malawi nursing colleges. Participants in this study were informed in detail about the study to obtain their consent to participate in

the study. These ethical considerations were based on ethical principles of research as stipulated below by Helsinki Declaration.

The Declaration of Helsinki is the cornerstone statement of ethical principles in biomedical research involving human subjects. It has several principles with emphasis to medical research but can be applied to other studies hence every researcher needs to adhere to these principles. The present study also adhered to the following principles: It is the duty of physicians or researchers who participate in medical research to protect the life, health, dignity, integrity, right to self-determination, privacy, and confidentiality of personal information of research subjects.

Medical or any other research involving human subjects must conform to generally accepted scientific principles, be based on a thorough knowledge of the scientific literature, other relevant sources of information, and adequate laboratory and, as appropriate, animal experimentation, the welfare of animals used for research must be respected.

The design and performance of each research study involving human subjects must be clearly described in a research protocol. The protocol should contain a statement of the ethical considerations involved and should indicate how the principles in this Declaration have been addressed. The protocol should include information regarding funding, sponsors, institutional affiliations and other potential conflicts of interest, incentives for subjects and provisions for treating and/or compensating subjects who are harmed as a consequence of participation in the research study. The protocol should describe arrangements for post-study access by study subjects to interventions identified as beneficial in the study or access to other appropriate care or benefits.

The research protocol must be submitted for consideration, comment, guidance and approval to a research ethics committee before the study begins. This committee must be independent of the researcher, the sponsor and any other undue influence. It must take into consideration the laws and regulations of the country or countries in which the research is to be performed as well as applicable international norms and standards but these must not be allowed to reduce or eliminate any of the protections for research subjects set forth in this Declaration. The committee must have the right to monitor ongoing studies. The researcher must provide monitoring information to the committee, especially information about any serious adverse events. No change to the protocol may be made without consideration and approval by the committee. In this study the following ethical principles were observed; privacy, and confidentiality of personal information of research subjects, the design and performance of each research study involving human subjects must be clearly described in a research protocol, the research protocol must be submitted for consideration, comment, guidance and approval to a research ethics committee before the study begins and that no change to the protocol may be made without consideration and approval by the committee. The committee was independent of the researcher, the sponsor and any other undue influence. It took into consideration the laws and regulations of the country or countries in which the research was to be performed as well as applicable international norms and standards but these must not be allowed to reduce or eliminate any of the protections for research subjects set forth in this Declaration. The committee had the right to monitor ongoing study.

Summary

This chapter mainly spelt out the research design and methods used to conduct the investigation. In addition it also highlighted details of setting, sampling, study population, sample size, data collection methods, methods of data analysis, data storage, validity and reliability and ethical considerations.

Chapter Four

Results

Introduction

This chapter presents the data which was collected using questionnaires on the knowledge, attitudes and practices of nurse educators on the learner-centred teaching strategies in Christian Health Association of Malawi nursing colleges. The results were supplemented by data which was obtained by classroom observation using checklist. The findings will be presented using descriptive statistics, tables, charts and narrative form for easy interpretation

Demographic characteristics of respondents

Four biographical variables were selected on the basis of their potential to hinder respondents' use of learner-centred teaching strategies, gender, age, teaching experience and educational qualification.

Age and gender of the respondents

A total of 72 respondents completed the questionnaire; (31.9%, n=23) were males and (68.1%, n=49) were females and their ages ranged from 29 to 61 years, with a standard deviation of 8 years and their mean age was 38 years and the majority of them were between 40 and 49 years as presented in Figure 1.

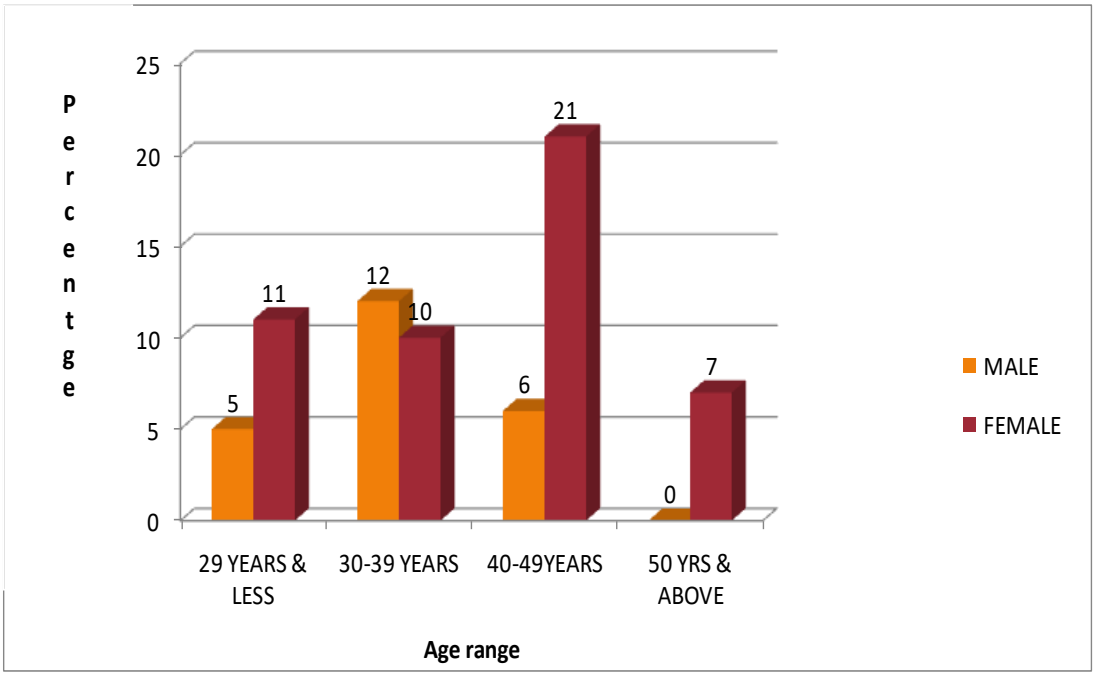


Figure 1*: Age versus gender of respondents*

Work experience of the respondents

The study also found that respondents had varied work experience for instance, 69.4% taught for five years and less. About 23.6% of the respondents served as nurse educators for six to 10 years, while 5.6% of the respondents worked as nurse educators for 11 to 15 years and only 1.4 % served for more than sixteen years. It was also found that the greatest number of the respondents (79.2%) had attained a Bachelor's degree, 15.3% had a Master's degree and only 5.6% had a diploma. The results are summarized in Figure 2.

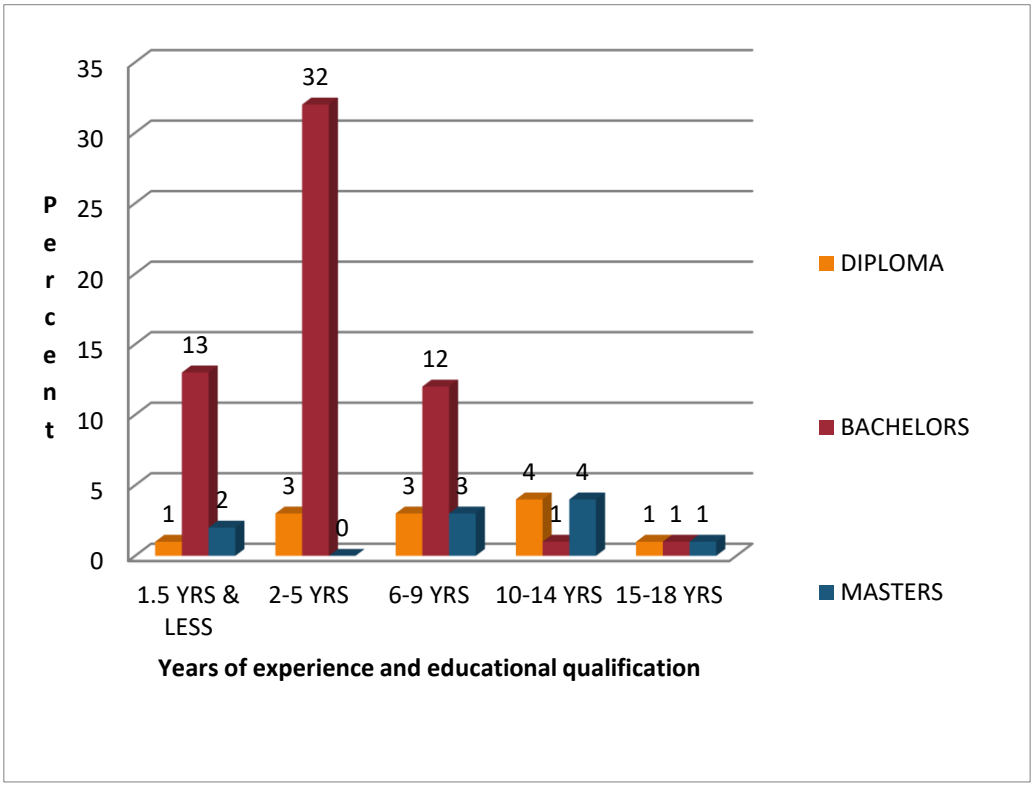


Figure 2*: Teaching experience versus educational qualification*

Knowledge of nurse educators about learner-centred teaching

A total of 15 items were used to assess knowledge of the respondents about learner-centred teaching strategies (Figure 3). The study found that all respondents were in agreement that learner- centred teaching or learning promotes students' critical thinking and problem solving skills representing 100%.

The respondents were also asked to give their stand if teachers need to encourage students to communicate effectively and if learner-centred teaching prepares students for lifelong learning, the results revealed that in both items (98.6%, n=71) of the respondents agreed with these statements and only 1.4% was not decided.

In addition, the results indicated that (97.2%, n=70) agreed that learner- centred teaching is intellectually more stimulating whereas 1.4 % disagreed and another 1.4% was not sure.

The study further found that students learn better when there is interaction with (94.4%, n=68) of the respondents agreed with this statement and 5.6% were not sure. Once more, (94.4%, n=68) of the respondents thought that learner-centred teaching/ learning enhances the development of sense of responsibility though 1.4% disagreed and (4.2%, n=3) were undecided. In addition, the study found that learner-centred teaching or learning makes students responsible for their own learning representing (91.6%, n=66). Following statistical analysis using Pearson technique to see if work experience and educational level of the respondents have relationship with knowledge of learner-centred teaching strategies; the results indicated that there was no significant relationship ($p>0.05$).

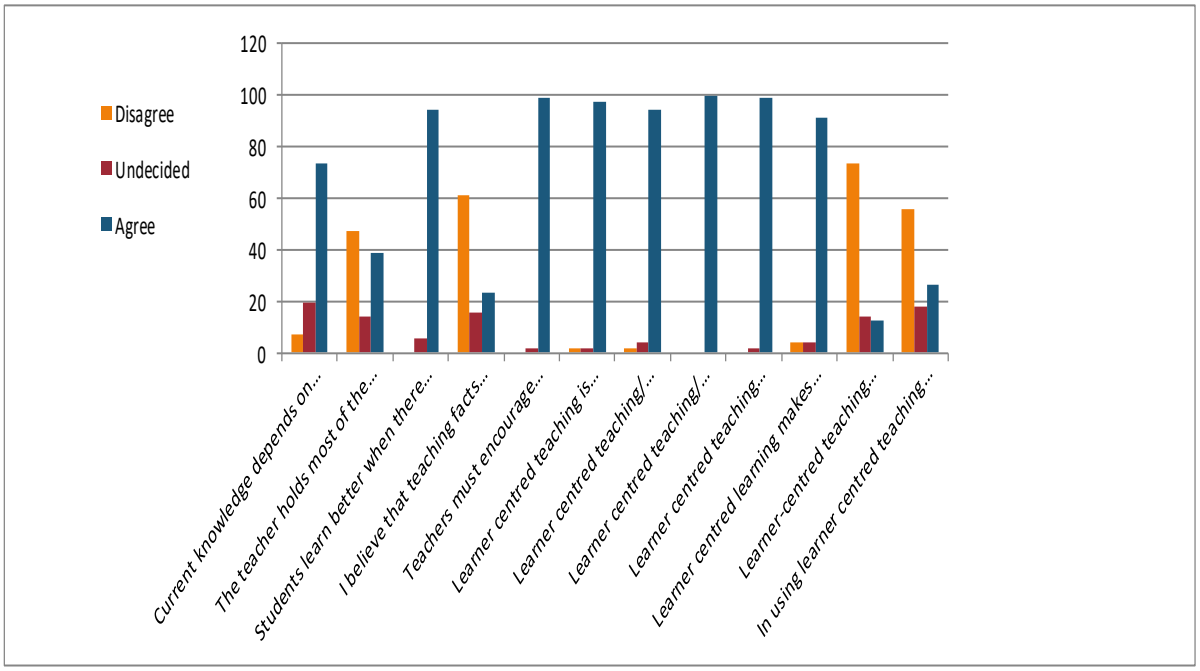


Figure 3*: Knowledge of nurse educators about learner-centred teaching strategies*

On the other hand the study revealed that implementation of learner-centred teaching strategies requires good training with (83.3%, n=60). Likewise, it found that learner-centred teaching requires a lot of support from those in managerial positions (50%, n=36) and utilizing learner-centred teaching requires a lot of time the majority of the respondents were in agreement (47.2%, n=34), however, (38.9%, n=28) disagreed and (13.9%, n=10) were not sure as shown in Table 1.

Table 1: ***Knowledge of nurse educators versus use of learner-centred teaching strategies***

Knowledge of educators	Frequencies	Percentage
Utilizing learner centred teaching requires a lot of time.		
Strongly agree	15	20.8
Agree	19	26.4
Disagree	21	29.2
Strongly disagree	7	9.7
Undecided	10	13.9
Learner centred teaching requires a lot of support from those in managerial positions.		
Strongly agree	19	26.4
Agree	17	23.6
Disagree	12	16.6
Strongly disagree	4	5.6
Undecided	20	27.8
Implementation of learner centred teaching strategies requires good training in both pre-service.		
Strongly agree	32	44.5
Agree	28	38.9
Disagree	6	8.3
Strongly disagree	0	0
Undecided	6	8.3

Attitudes of nurse educators towards learner-centred teaching

The respondents were assessed on 27 items to solicit attitudes that would prevent them to use learner –centred teaching strategies. The investigator chose ten items which

were presented in the results section based on what the respondents felt would hinder effective implementation of learner-centred teaching.

The respondents were asked to indicate whether it is just instructors' tendency to use traditional lecture method; the results indicated that (93%, n=67) agreed with this statement and (7%, n=5) disagreed (Figure 4).

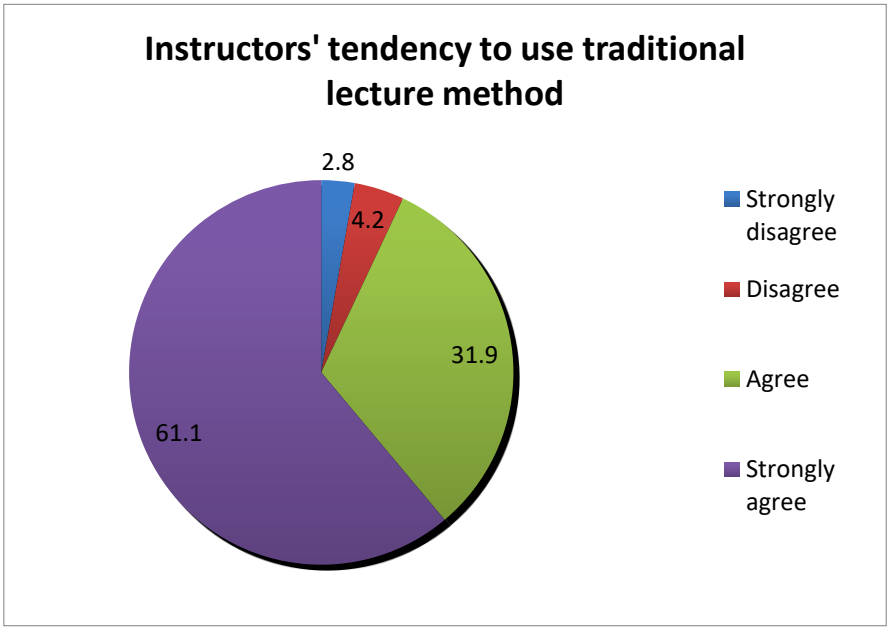


Figure 4: ***Tendency to use lecture method***

The respondents were also asked to comment if students participate in activities in some of the classroom sessions; the results showed that (90.3%, n=65) agreed whereas (9.7%, n=7) disagreed (Table 2). In addition, the respondents had to express their feelings on whether large classes are effectively managed by lecturing method. The findings revealed that majority of the respondents agreed with this clause 57 (79.1%, n=57) and (20.9%, n=15) disagreed (Table 2).

Table 2: ***Learner-centred teaching versus large classes and activities***

Attitudes of educators	Frequencies	Percentage
Students participate in activities in some of my classroom session.		
Strongly agree	35	48.6
Agree	30	41.7
Disagree	5	6.9
Strongly disagree	2	2.8
Large classes are effectively managed with lecturing method		
Strongly agree	41	56.9
Agree	16	22.2
Disagree	9	12.5
Strongly disagree	6	8.3

Moreover, the respondents were asked to indicate whether they preferred classes in which students were active listeners, the findings revealed that (77.8%, n=56) agreed and (22.2%, n=16) disagreed. Again, the respondents were asked to rate whether students have beliefs that instructors' need to provide them with enough information to achieve their objectives. The results were that (77.8%, n=56) were in agreement whereas (22.2%, n=16) were in disagreement. Likewise respondents were asked to indicate whether some students' dominate during group activities. The findings showed that (76.4%, n=55) agreed while (23.6%, n=17) disagreed. Furthermore, respondents were asked to rate if there was too much content to be covered within a specific period of time and the findings were (70.9%, n=51) agreed while (29.1%, n=21) disagreed. The results are summarized in Figure 5.

The results demonstrated a significant correlation (p=0.02) of nurse educators and students' attitudes to be more specific on items that stated there is too much content to be covered within a specific period and students beliefs and perception that instructors need to provide enough information for them to achieve their objectives.

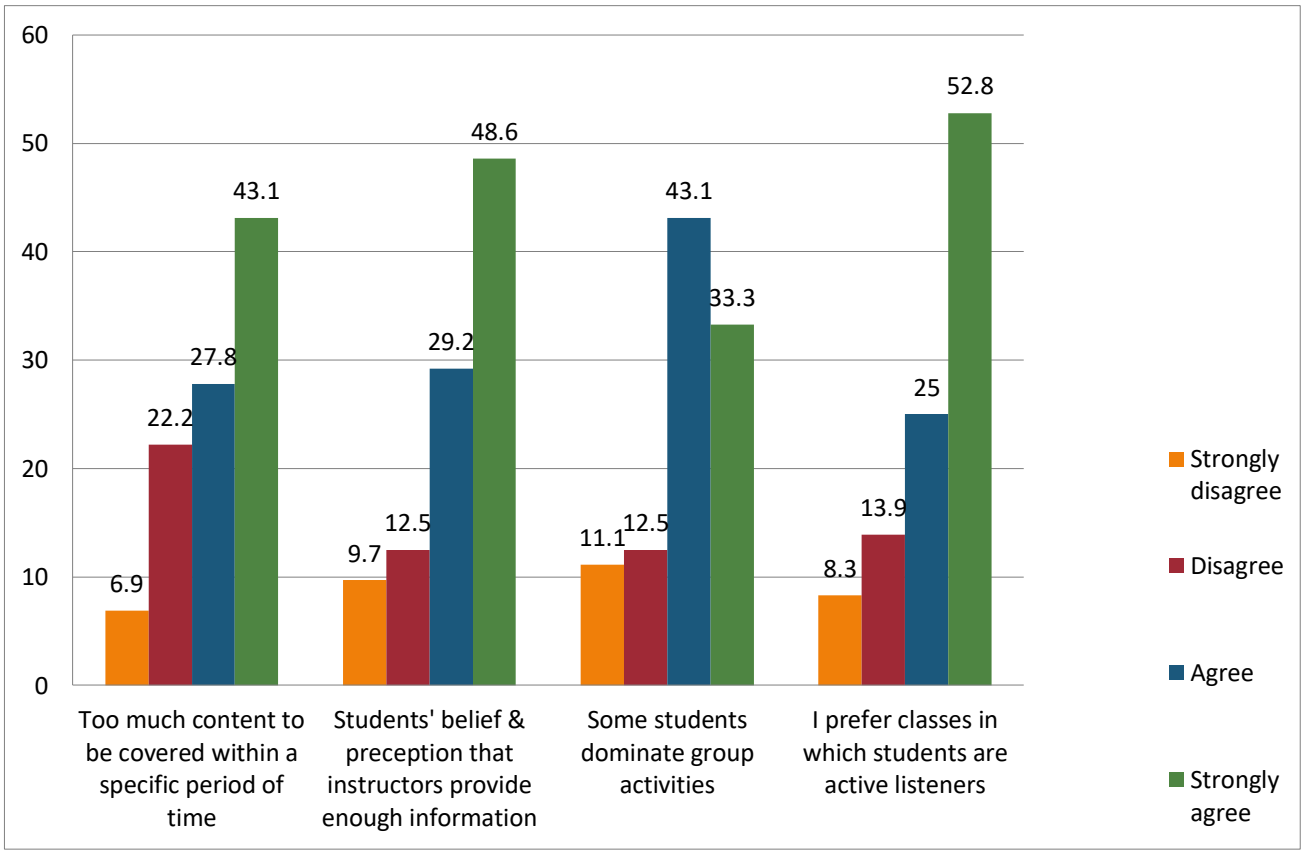


Figure 5: ***Learner-centred teaching strategies versus teacher and student behavior***

Furthermore, the respondents were asked to indicate whether they experienced shortage of time to practice active learning in classroom and if they felt that good lectures enhance students' sense of commitment respectively. The findings demonstrated that

(70.8%, n=51) of the respondents agreed while (29.2%, n=21) disagreed that they had less time to use learner-centred teaching strategies and (65.3%, n=47) agreed whereas 34.7%, n=25) disagreed that good lectures enhanced students' sense of commitment (Figure 6).

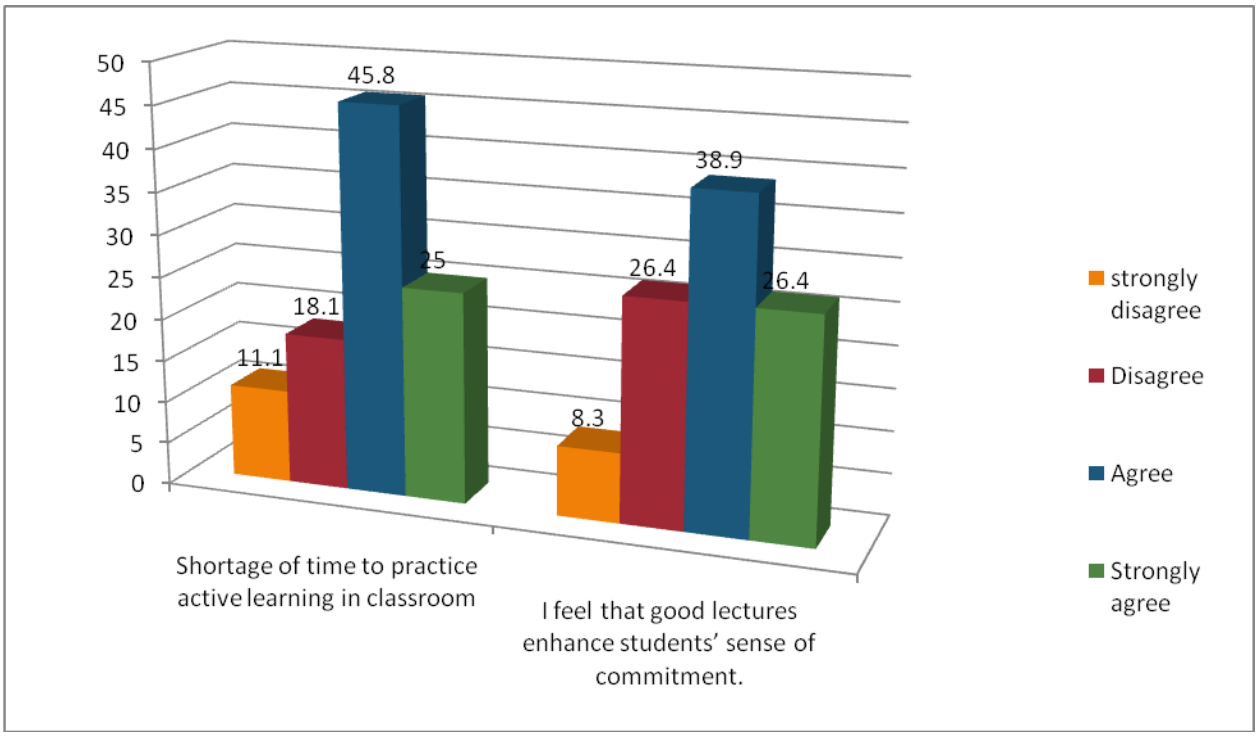


Figure 6: ***Good lectures and shortage of time versus learner-centred teaching strategies***

Besides these the respondent were asked to comment whether lack of resources was one of the reasons that prevented them to implement learner-centred teaching strategies. The results are summarized in Figure 7 showed that (62.5%, n=45) agreed and (37.5%, n=27) disagreed.

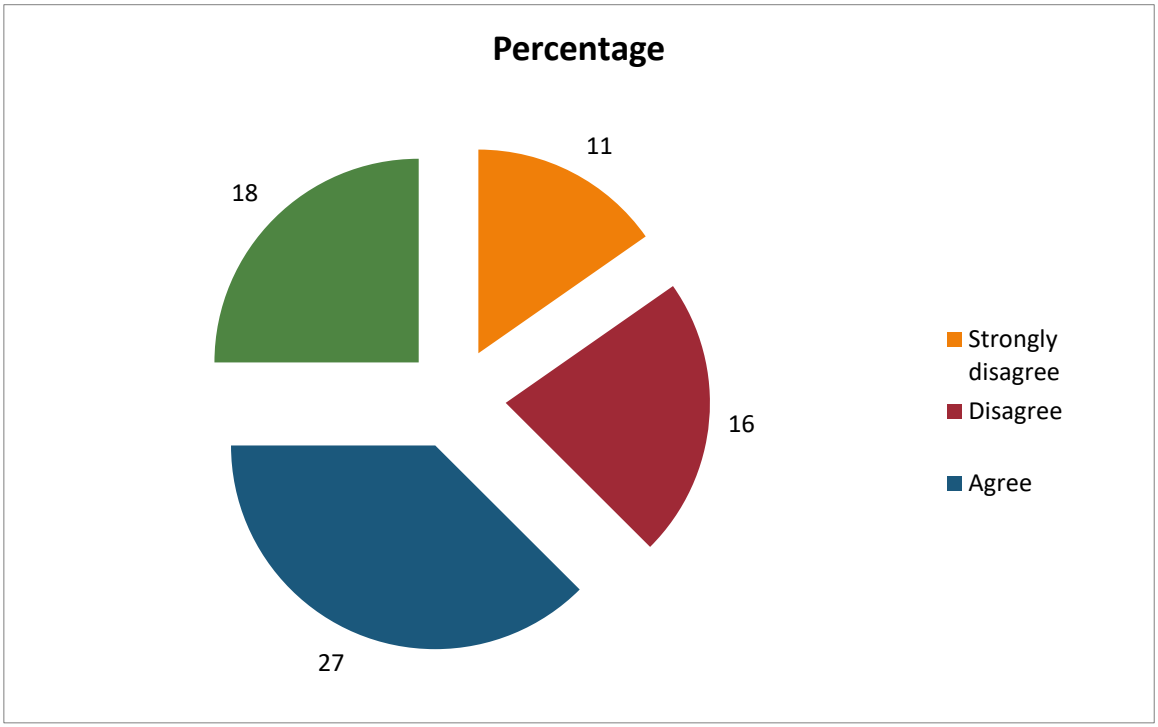


Figure7: ***Resources versus implementation of learner-centred teaching strategies***

The practice of nurse educators (teaching strategies)

The respondents were asked to choose the teaching strategies that they use frequently. The study found that the most used strategies of teaching were question and answer; group work; group discussion because all the respondents showed that they use it thus representing a (100%, n=72). These were followed by demonstration and brain storming with a 98.6% each. Lecture method came third with (97.2%, n=70). Furthermore, the findings clearly showed that the majority of the respondents also use problem solving (94.4 %, n=68); role playing (90.3%, n=65); peer teaching (88.9%, n=64) and other as indicated in Figure 8. Furthermore, the study demonstrated no significant correlation ($p > 0.05$) between educational qualification and use of different teaching strategies that were selected on this study.

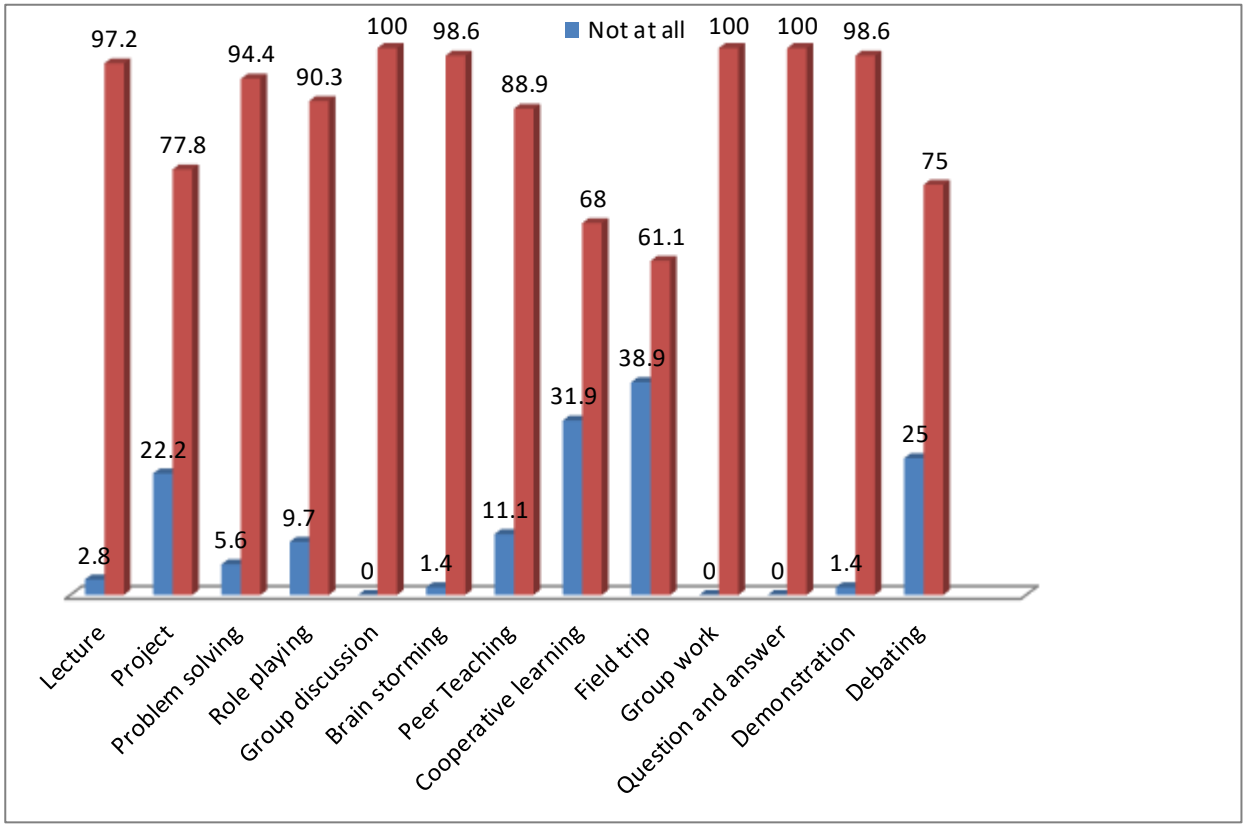


Figure 8: ***Situation of teaching strategies***

The practice of nurse educators on assessments

The respondents were expected to rate their practice regarding assessments of students. The results on item that stated I often assess students' understanding through questioning showed that (95.8%, n=69) were in agreement with this statement. In addition, the respondents were to comment whether giving exercise to students was their practice. The findings established that they provided exercises on some of their lessons with a (90.2%, n=65). Moreover, the study sought to hear their practice on assessing students' understanding. It was revealed that they often assessed them during group work (86.1%,

n=62). Furthermore, the respondents were to rate if in a learner-centred teaching or learning they took a responsibility to facilitate students' learning through formative assessment. The results demonstrated that (86.1%, n=62) agreed with this item.

Nonetheless, the respondents showed that providing ongoing meaningful feedback to students is too time consuming (75%, n=54) and that lack of orientation on learner-centred teaching affected them how they assessed the students with (75%, n=54). It was also found that (86%, n=62) responded that it is impossible to follow students' participation in learning whereas (84.7%, n=61) responded that students become too noisy if they are asked many questions. The study further statistically demonstrated that there were a significant correlation of lack of resources to implement LCTS and lack of orientation of LCTS on student assessment as evidenced by p=0.01

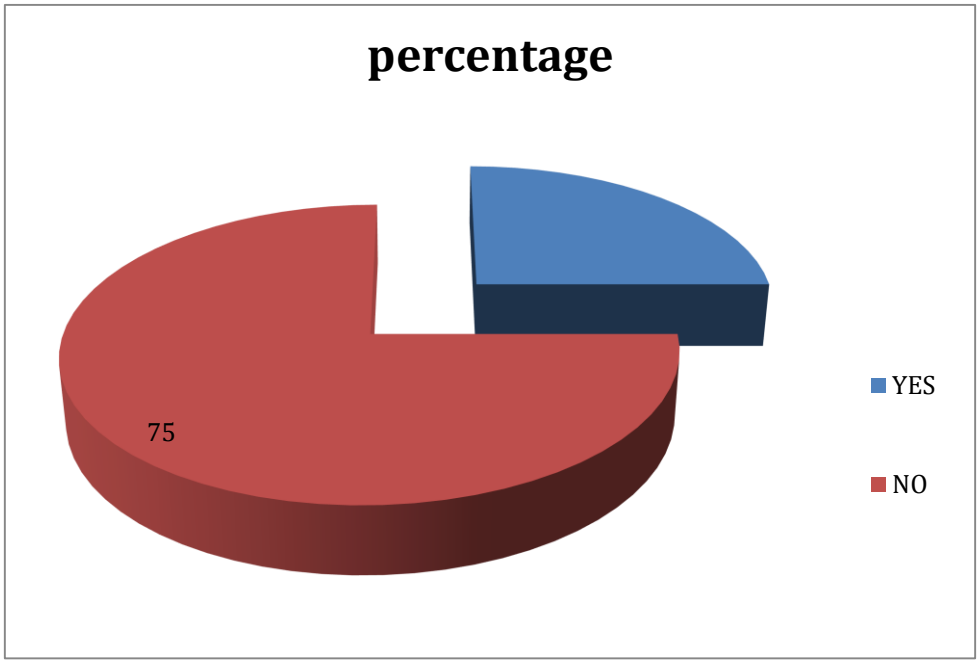


Figure 9: ***Lack of orientation to LCTS and failure to assess effectively***

Classroom observations

The researcher also did classroom observations to supplement information on the questionnaires. A checklist was used and it targeted five areas that are classroom condition; instructors' activity; activities of students during lesson delivery; use of instructional materials and classroom evaluation. The researcher targeted to observe two classes from each college of the nine CHAM nursing colleges. During data collection two colleges had no students in class and three other colleges classroom observations were done in one class only because other classes were writing examinations. As a result eleven classes out of eighteen were observed. The findings of these classroom observations were as stipulated below.

Classroom conditions

All classrooms that were observed all students were able to sit and the chairs were movable. However, there was no enough space for movement between desks in ten classes. In addition it was noted that the class size was not appropriate meaning that students were more than fifty in ten classes observed. Furthermore, it was observed that the desks were arranged in rows that does not promote learner-centred learning. The results of the condition of the classrooms that were observed are shown in Figure 10.

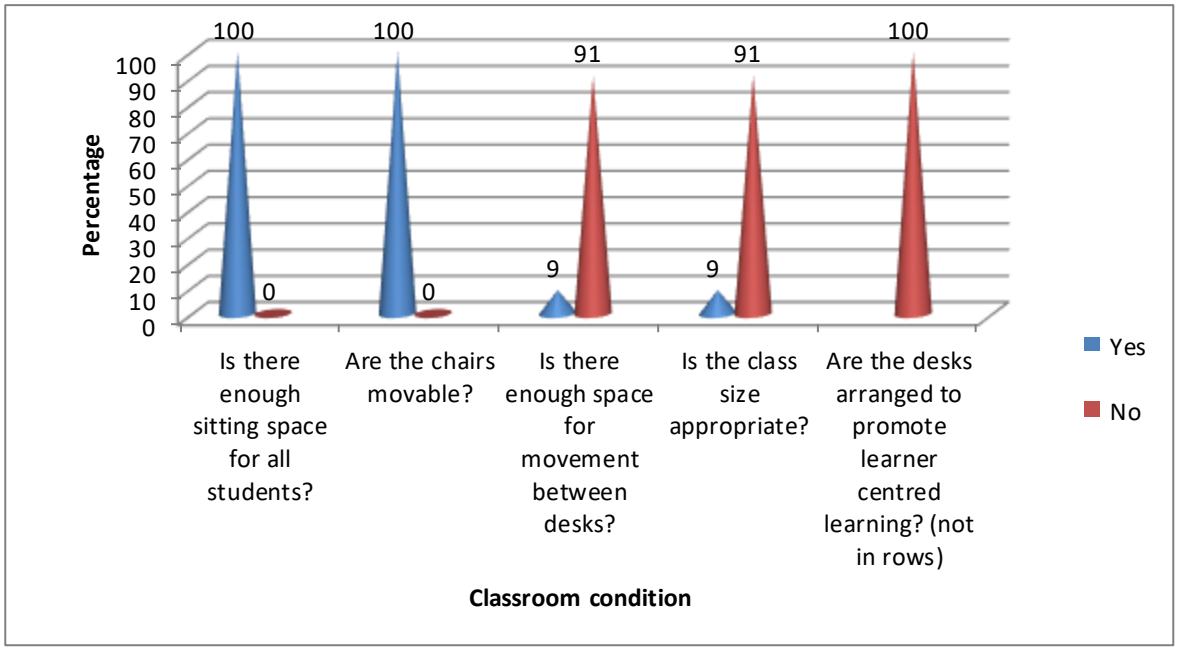


Figure 10: ***Condition of classrooms***

Educators activities during lesson delivery

The study also found that the nurse educators were able to clarify the learning objectives as evidenced by (100%, n=11). In addition it was noted that all instructors that were observed were active in explaining, monitoring and describing all concepts. On the other hand some instructors were more active than students (45%, n=5) and (55%, n=6) were not. Furthermore, it was observed that students were not given activities as part of the learning process. As a result educators were not involved in giving direction to the activities. Moreover, observations revealed that educators mostly used lecturing method as evidenced by (82%, n=9) and only (18%, n=2) used a combination of teaching strategies (Figure 11).

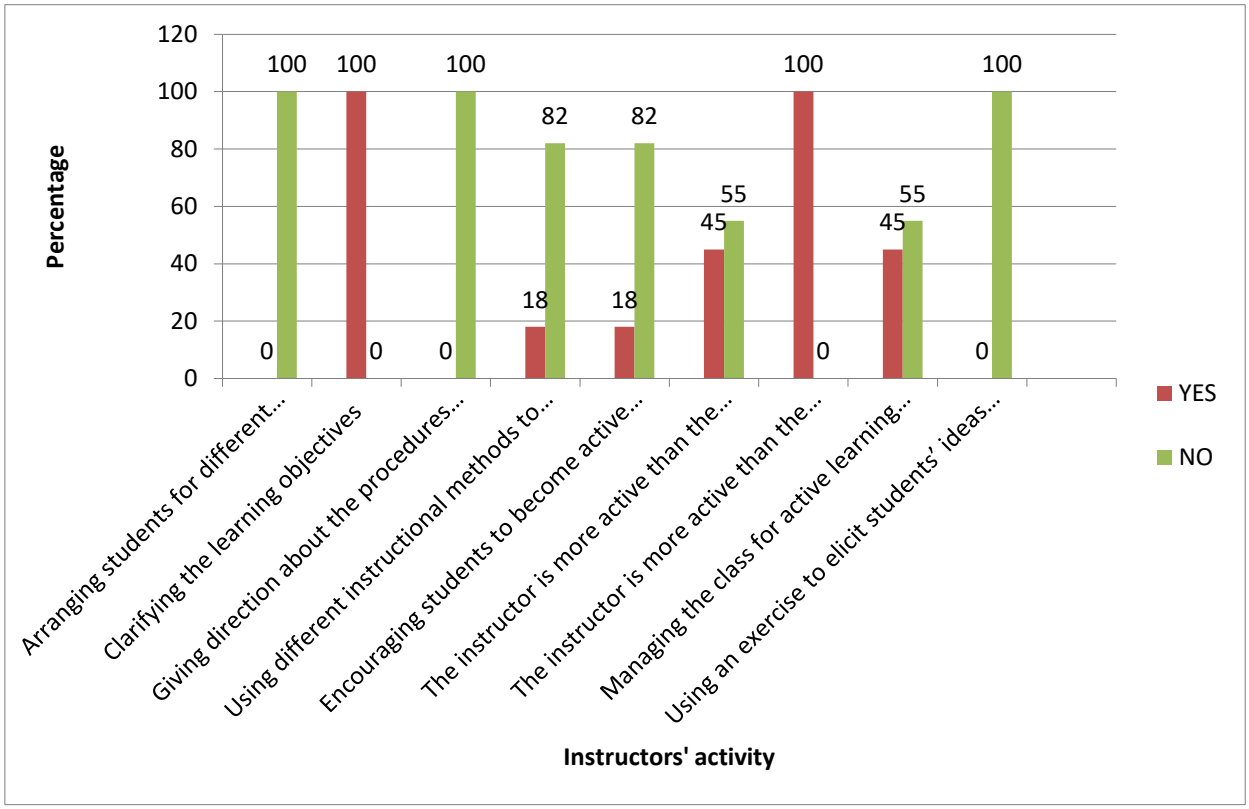


Figure 11*: Activities during lesson delivery by educators*

Student involvement during lesson delivery

The findings of the study on classroom observations on student involvement during lesson delivery showed that in five classes students took active roles (45%, n=5). While in other six classes students were only active when asked (55%, n=6). Nonetheless students did not participate in problem solving activities; peer teaching; group work; exercises and there was no demonstration of any skill in all eleven classes observed (Table 3).

Table 3*: Activities of students during the lesson*

Characteristics	Frequencies	Percentage
Students are participating in problem solving activities		
Yes	0	0
No	11	100
Students are playing active roles during lesson delivery		
Yes	5	45
No	6	55
Students are discussing issues in groups		
Yes	0	0
No	11	100
Students are taking part in peer teaching		
Yes	0	0
No	11	100
Students are practicing demonstration		
Yes	0	0
No	11	100

Utilization of instructional material during lesson delivery

Classroom observations revealed that there were no instructional materials that would aid to explain complex concepts as evidenced by 100% negative response. The results are shown in Figure 12.

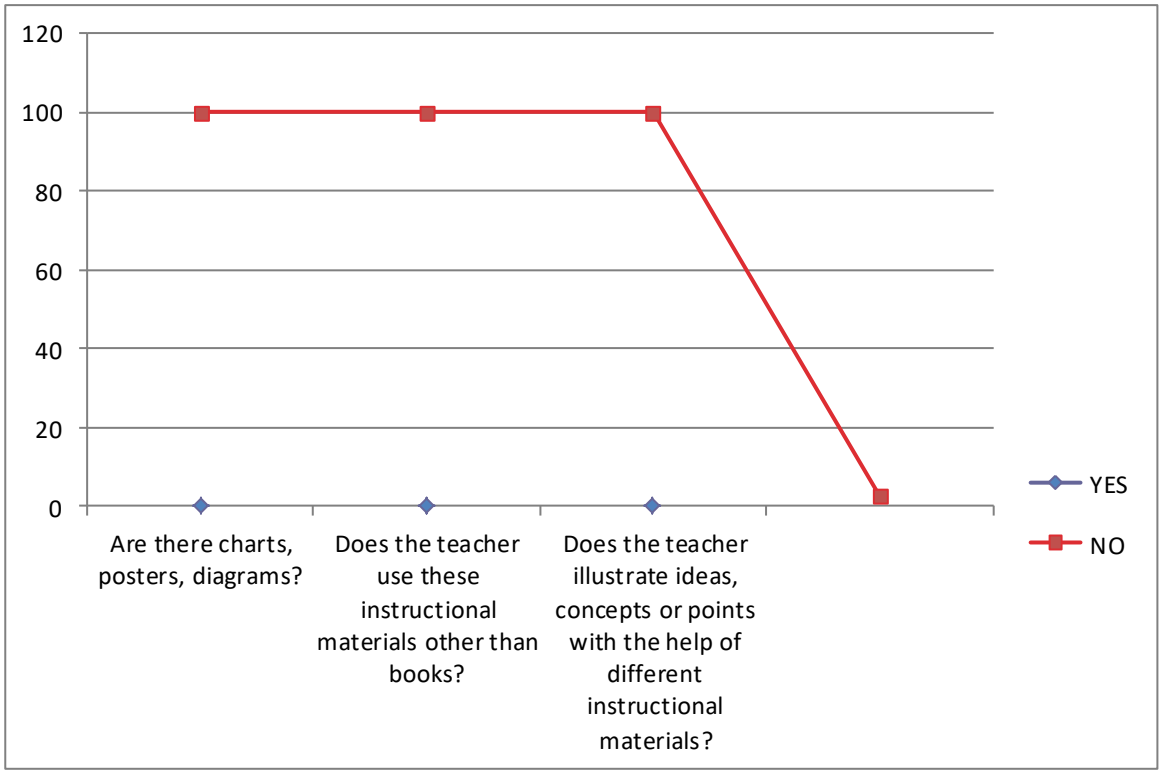


Figure 12: ***Use of instructional materials***

Classroom evaluation

The study furthermore found that the most used strategy of class evaluation was asking questions whereby the students gave the responses and not the instructors supplying answers as evidenced by (100%, n=11) positive response. However, the educators did not gave students group work, exercise as part of evaluation as stipulated in Table 4.

Table 4*: Classroom evaluation*

Characteristics	Frequencies	Percentage
Instructor gives group work,		
Yes	0	0
No	11	100
Ask questions		
Yes	11	100
No	0	0
Gives exercises to the learners		
Yes	0	0
No	11	100
Instructor follows up students' participation and activities		
Yes	0	0
No	11	100
Instructor elicits response from learners instead of supplying answers		
Yes	11	100
No	0	0
Instructor evaluates students group cooperation		
Yes	0	0
No	11	100
Instructor checks and gives constructive feed back to the students' work		
Yes	5	45
No	6	55
Students are listening passively during the lesson.		
Yes	5	45
No	6	55

Summary of results

This chapter has presented findings for this study. The study has shown that lack of training or orientation on learner-centred teaching strategies affected its implementation by the nurse educators. The findings are also showing that lack of resources and support from those in managerial positions prevented use of the learner-centred teaching strategies. In addition, the results also revealed that too much to be covered within a specific period of time and the mindset that it was time consuming to practice learner-centred teaching strategies affected implementation of these strategies. The study further showed that large class size; students' resistance to non-lecture strategies and instructors beliefs that they are more knowledgeable hence they are to supply all information to the students also hindered the nurse educators to implement the learner-centred teaching strategies. Furthermore, statistical analysis of the results showed that there was a significant relationship ($p<0.05$) between nurse educators and students attitudes towards learner-centred teaching strategies. In addition, the significant correlation ($p=0.01$) was also revealed on lack of resources to implement LCTS and lack of orientation to these teaching strategies in the training as it affected how assessment was done to students. Nonetheless this study showed no significant correlation ($p>0.05$) between years of experience; educational level and knowledge of the learner-centred teaching strategies as well as its use.

Chapter Five

Discussion of Results

Introduction

The purpose of this study was to explore factors that hinder implementation of learner-centred teaching strategies in Christian Health Association of Malawi nursing colleges. In this section, the results of the study are discussed regarding nurse educators' knowledge, attitudes and practice of learner-centred teaching strategies and factors that hinder implementation of these strategies. Considering that the topic under study is more of education than health related literature backing up various views included other fields outside health.

Demographic characteristics versus use of learner-centred teaching strategies

The study demonstrated that majority of nurse educators in the colleges that participated in this study were inexperienced as evidenced by 69.4% taught for less than five years. This lack of experience contributed to low utilization of the learner-centred teaching strategies. In addition, these nurse educators had first degree (79.2%) straight from school with little knowledge to educational background. Nonetheless, this study found that neither work experience nor educational level of the respondents were important determinants of the participants' knowledge of LCTS. This is because the study determined that statistically there was non-significant relationship ($p>0.05$) between both years of work experience and educational level of the respondents and knowledge of LCTS. These findings suggest that the two factors have not been effective in providing the research participants with information regarding LCTS. This may further suggest that work experience had not prioritized as an in-service training package. Similarly the findings may close gaps in curricula of different cadres of nurses. The reported knowledge

gaps may be addressed through deliberate policy strategies in the training institutions to assist those with knowledge gaps of LCTS and enhance its implementation. This study is similar to the findings of Kallison (1986); Feldman,(1989); Murray (1991) as cited by Henard and Leprince Ringuet (2008) that good organization of the subject matter and planning the course are critical to student learning rather than educational qualification or experience on the knowledge of innovative teaching strategies. Similarly, Yair (2008) observed that work experience and educational level are not the only determinants of awareness to learner-centred teaching strategies. Nonetheless, the findings of this study are in contrast with assertion of Chalmers (2007) that experience matters and specific teaching qualification are significantly correlated to better student achievement which stem from different teaching strategies. This is enhanced by the observation by Kember and Kwan (2000) that professors when teaching tend to employ different teaching strategies which stem from their experience on the knowledge of varied teaching strategies.

Knowledge of nurse educators about learner-centred teaching

The study revealed that nurse educators are knowledgeable that learner-centred teaching or learning promotes students critical thinking and problem solving skills as evidenced by a 100% positive response. This is in line with the observations of Paisey (2009) that central in learner-centred learning are communication, information technology, critical thinking, problem solving and ability to extract and analyze information from a variety of sources. He added that students are able to view issues differently. Similarly Tseng et al. (2008) observed that learner-centred teaching helps students to reflect on and enhance their critical thinking through communicating, arguing, and interpreting ideas.

The study also found that nurse educators are aware that they need to encourage students to communicate effectively if meaningful learning has to take place as shown by a high score of 98.6%. This is similar to the findings of Azer (2009) that students enjoyed LCT/L and case discussion because they worked and communicated effectively as a group and utilized a wide range of resources in self-directed learning. In addition, nurse educators realize that students learn better when there is interaction with 94.4% positive response. Learner-centred teaching or learning aids the development of independent learning skills and encourages deeper exploration, helps to develop team working and support; learn to accept individual styles or values, and train to manage conflicts and share experiences (Horne et al., 2007).

Nurse educators also responded positively that learner-centred teaching prepares students for lifelong learning representing 98.6%. This is in line with an observation by Bogdan (2011) that learner-centred teaching or learning environment encourages student to become independent learners and ultimately to be in charge of their own education. Lifelong learning is a continuous supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity; enjoyment in all roles, circumstances, and environments (Collins, 2009). These can only be acquired through teaching strategies that are learner-centred (Tengku Kasim, 2010a)**.** In a learner-centred environment students' feel that the learning process and the topics are more interesting and are able to remember what they had learnt (Carlisle and Ibbotson, 2005; Azer, 2009; Segers et al., 2003). Moreover, Learner-centred teaching methods help students develop a strategy for dealing with problems, give them a mental framework for

evaluating alternative methods of analysis, and motivate them to take responsibility for their own learning (Boyle, 1999).

Nonetheless the study found that some nurse educators had limited knowledge regarding LCT for instance they responded positively that the teacher holds most of the knowledge necessary for the students. This is in line with the assumption made by Petrosino *et al.* (2007) that the lecturer is the source of knowledge and knows best whereas students are "empty vessels" to be filled by the lecturer. Suggesting that, some nurse educators are not well equipped with active learning strategies.

In addition, nurse educators clearly showed that lack of support from those in managerial positions prevented them to utilize learner-centred teaching strategies effectively. Confirming this finding Weimer (2002, 2012) stated that education systems should provide support (training, commitment, feedback and continuous professional support) on learner-centred teaching strategies and resources to help them succeed in the teaching-learning process. Therefore, I suggest that for the proper implementation of learner-centred teaching, departmental heads and deans should supervise the effectiveness of the teaching strategies employed by nurse educators, give feedback, provide ongoing training to enable them to support student learning. This to become a reality and there is need to include on their budget. The nurse educators should also be supported to evaluate the success of their educational programmes. All these activities require educators' training in active learning/learner-centred teaching strategies and the commitment of deans and departmental heads.

The study also found that lack of proper training prevented them to use learner-centred teaching. Statistical analysis also showed significant association of lack of proper

training on LCTS and low utilization of the strategies (p=0.01). According to Stead (2005) for education to be successful, educators' training is of special significance. Since educators' training has a great effect on instructional activities, educators in higher learning institutions require training on how to implement instructional strategies in general and learner-centred approaches in particular. Good and effective teaching and learning in the classroom demand well-prepared, academically and pedagogically competent educators to select and implement appropriate teaching strategies, activities and materials to achieve the desired educational objectives for different levels (Zan & Martino, 2007).

Furthermore, nurse educators indicated that it is time consuming to use learner-centred strategies and that if they were to use these strategies they could not cover the prescribed syllabus. Sunzuma et al. (2012) also identified that teachers thought it was time consuming to allow students to make meaning to what they learn, through student based activities.

Nurse educators attitudes towards learner-centred teaching

This study revealed that attitudes of nurse educators prevented use of learner-centred teaching strategies. This is in line with the findings of Gruber and Boreen (2003) that lecturers and students' beliefs and attitudes on teaching approaches influence the teaching and learning behaviours respectively. Furthermore, demonstrated a significant relationship (p=0.02) that too much content to be covered within a specific period and students beliefs and perception that instructors need to provide enough information for their objectives to be achieved.

Lack of resources to implement learner-centred teaching strategies also came out clearly as one of the factors that prevented them to use active teaching strategies. There was a significant relationship of p=0.01 between lack of resources and low implementation of learner-centred teaching strategies. Absence of learning materials may hinder the implementation of active learning approaches (Ainsworth, 2006). Instructional material enable student to use more than one sense and to facilitate active learning, relate theory to practice, encourage creative thinking and effective student skill development hence make learning more meaningful (Ainsworth, 2006).

Similarly, Sunzuma et al. (2012) highlighted that effective teaching and learning is highly dependent on availability of teaching and learning resources because they give confidence to teachers by serving as a secure base from which content, teaching strategies and techniques are drawn. Shortage of these resources has negative implications for adoption of learner-centred methods (Ainsworth, 2006).

In addition, the participants unveiled that too much content to be covered within a specific period of time hindered them to implement learner-centred teaching strategies. Literature also indicates that where teachers are required to cover specific material within a given period of time; they find it difficult to pursue lessons to their satisfaction, (Abiodun, 2008).

Large class sizes affected them to practice learner-centred teaching. Class size refers to the number of students regularly scheduled to meet in the administrative and instructional unit, usually under the direct guidance of a single educator (Kornfeld, 2010). It has its own impact on the teaching-learning process in general and on the implementation of student-centred learning in particular (Pascarella & Terenzini, 1991;

Cross, 1998; Carbone & Greenberg, 1998; Ratcliff, 1992; Kuh, Schuh, Whitt & Associates, 1991). Different researchers have found that as the class size increases, students face any or all of the following problems: lack of clarity of purpose; knowledge about progress; advice on improvement; lack of opportunity to discussion; inability to support independent study and inability to motivate students (Light, 2001; Schnell in Barefoot, 1993; Carbone & Greenberg, 1998). For example McKeatchie and Svinicki (2005) Abiodun (2008) elaborated that in a large class individualization of instruction become a great challenge. The instructional method most frequently used is the lecture-centred approach, without group participation; oral communication within the classroom from student to educators is minimized; written work is assigned less frequently and when assigned, receives less lecturer attention and students are also less known to educators as individuals. Contrary to the findings of this study McKeatchie (1999) argue that large or small class size is not a significant factor on teaching strategies rather depends on the following factors: learning objective that are to be realized; nature of the subject to be taught; students' attention and learning resources.

Furthermore, the study found out that nurse educators believe that they are sole sources of information hence they could not give the students full ownership of their learning. This is congruent with the findings of Eison (2010) who found that students resisted non-lecturing approaches because active or learner-centred approaches provide a sharp contrast to the very familiar passive listening role to which they have become accustomed. These findings contradicts with Knight and Wood (2005), results of a study that was completed in a large, upper-division Biology course, they compared students' performance when the course was taught using a traditional lecture format and students

who were taught with in-class activities; collaborative work in student groups; increased in-class formative assessment and group discussion. It was noted that students who were taught with active learning alternatives had achieved deeper learning and better conceptual understanding.

Nurse educators practice

It is known that learning is an active process when students take initiative and responsibility for their own learning. In learner-centred classrooms, students are engaged in activities like dialogue, debate, writing, discussion and problem solving as well as higher order thinking such as analysis, synthesis and evaluation (Zepke & Leach, 2010; Leyendecker, Ottevanger & Van den Akker, 2008)**.** Learning includes students' mutual construction of knowledge and their interaction with each other and with their educators (Zweck, 2006).

Nurse educators in the study use both traditional and learner-centred teaching strategies. Similarly, Sidin (1999) and Long et al. (1999) found that lecturers at higher institutions employed various teaching methodologies, involving teacher-centred and students-centred methods such as direct lectures, discussions and tutorials in their teaching. All the findings from the above studies suggest that the participants viewed both approaches as a continuum, and not as a binary distinction.

Classroom observation and use of learner-centred teaching strategies

Then classroom observation found that classroom size, arrangements of desks do not promote learner-centred teaching. The classroom condition is one of the most substantial aspects that should be considered in the teaching-learning process in general and active learning in particular in any educational institution (Alemu, 2010; Bodgan, 2011). The physical environment can promote or hinder learner-centred teaching approaches (Tengku Kasim, 2010a, 2010b: Burns & Myhill, 2004). Thus, to engage students in learning activities the classroom should be well equipped with furniture meaning that there should be movable desks for students to use different lay outs in the classroom (Burns & Myhill, 2004). Different types of classroom layouts, which facilitate active learning approaches such as U-shape; team style; conference table; circle; group on group; work station breakout grouping; traditional classroom and auditorium arrangements (Zweck, 2006). Contrary to the findings in this study, the desks were arranged in rows very close to each other. In a learner-centred learning environment student learning is by active involvement in the learning process meaning that it may be necessary for the students to move their desks for peer teaching or group discussion hence the classroom need to be spacious (McCombs, 2003). Suggesting that, the arrangement of desks should allow movement and communication whenever necessary so that it is appropriate for the learning experiences that educators have planned.

It was clear during classroom observation that the set up really did not promote learner-centred. In addition, it was observed that nurse educators did not utilize instructional material to enhance learners' comprehension of concrete or abstract

information which are central in active learning because learners use different senses apart from hearing as evidenced in Figure 12 of results section.

Nurse educators did not know how to assess in a learner –centred teaching. The results support the findings of Alemu (2010) in Oromia in Ethiopia that many teachers were not sure how to assess in a learner-centred environment. Chauraya and Mholo (2008) in Zimbabwe observed that current teacher preparation programmes seem to have little impact on actual implementation of problem solving in instructional situation which is evident that are not adequately prepared for student-centred techniques. Hence confirming quotes Bonwell and Eison (1991) as cited by Sunzuma et al. (2012) that traditional teaching strategy to student learning in which lecturers talk and students listen predominates in institutions of higher learning despite the call for lecturers to actively involve and engage students in their own learning. Implying that; nurse educators' might have the theoretical aspects of learner-centred teaching which they could not put into practice. The results also demonstrated a significant association of lack of orientation on learner-centred teaching strategies and not being aware how to assess in learner-centred environment as evidenced by ($p=0.01$). In other words, if lecturers are not oriented to active teaching methods they have problems to employs effective ways of assessing students. For instance students would benefit from peer assessment which reflects learner-centred teaching (Gielen, Dochy & Onghena, 2011). They contend that peer assessment is an arrangement in which individuals consider the amount, level, value, worthy, quality and success of the products of learning of peers of similar status. It was also noted that the way the peer assessment is enacted and how students are prepared for such practices can

lead to very effective results, (Topping, 2010). This entails that it is central that teachers be oriented to learner-centred teaching strategies so that they employ varied ways to assess the students effectively.

Conclusion

The study was conducted with the aim to describe factors that hindered implementation of the learner-centred teaching strategies in Christian Health Association of Malawi nursing colleges. The study sought to solicit these factors by taking close review of the nurse educators' knowledge, attitudes and actual practice. It was noted from the study that the majority of the respondents were of the view that learner–centered teaching strategies realize meaningful learning in student nurses and midwives. It also established several challenges hindering implementation of the learner–centered methods, for instance lack of time; inadequate resources; lack of training that prepares the educators with adequate knowledge and skills to implement the learner–centered strategies. In addition, lifelong learning is a continuous supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity; enjoyment in all roles, circumstances, and environments, it was noted that learner-centred strategies added workloads; large class size and beliefs of educators that they hold more knowledge and students beliefs that educators had to provide information for their objectives to be achieved hindered its implementation. Furthermore, statistical analysis of the results found that there was a significant relationship ($p<0.05$) between nurse educators and students attitudes towards learner-centred teaching strategies. In addition, the significant correlation ($p=0.01$) was also revealed on lack of resources to implement

LCTS and lack of orientation to these teaching strategies in the training as it affected how assessment was done to students. Nonetheless this study showed no significant correlation ($p>0.05$) between years of experience; educational level and knowledge of the learner-centred teaching strategies as well as its use.

Recommendations

This study demonstrated that implementing learner-centred teaching strategies in Christian Health Association of Malawi nursing colleges is low as evidenced by findings by Tveit, Wasili, Kollstrom, Mwenye-Phiri (2009) report on curriculum implementation in CHAM Colleges in Malawi observed that the nursing education has been teacher-centred with faculty often taking the role of dispenser of knowledge. Hence, the following are recommended:

Colleges

Adequate resources should be available by including in their budgets. Relatively small class sizes are required as recommended by the Nurses and Midwives Council of Malawi that lecturer- student ratio in class should be 50. Desks in the classroom should be arranged in a way to make classroom conditions conducive for the effective implementation of learner-centred/ active learning approaches.

Nurse educators' on-going support for the implementation of learner-centred teaching strategies should be addressed as a priority. The nursing colleges should provide nurse educators with adequate active learning guides and other instructional materials by working closely with other stakeholders. Students should be oriented to the benefits of learner-centred teaching strategies.

Deans and departmental heads

Nurse educators who are confident and innovative users of active learning approaches be developed so that they also encourage the colleagues to do the same. In addition, institutions need to have teaching and learning policy that promotes learner-centred teaching and learning strategies.

Deans and departmental heads can help, stimulate and support nurse educators' efforts to change their teaching by highlighting the instructional importance of active learning/learner-centred teaching in the newsletters and publications.

Recommendations for Further Research

Based on the conclusions of this study, the researcher recommends the following for further investigation: External factors hindering the implementation of learner-centred teaching strategies which are not covered by this study should be identified through further research. Practical ways to overcome the obstacles should also be investigated. In-depth case studies of individual nurse educators in nursing colleges in Malawi who have been successful in implementing learner-centred teaching/learning in their respected courses, may throw further light on the issue of how hindering factors may be overcome. To replicate a similar study in institutes of higher learning like CHAM Universities, or public and private universities.

Limitations of the study

During data collection it was difficult to find all nurse educators at the institution. This affected the achievement of a generalizable sample. As a result the accessible sample size for the study was 72 nurse educators.

References

Abiodun, A. P. (2008). Focus conversational methods and students' mathematics achievement in Secondary schools. *Journal of Social Sciences,* 5(8), 820-826.

Ahmad, M, Yusof, F., Meseran, H., Abdullah, H., Man, N., Kamaruddin, W., & Omar, D (2006). *Bulletin of Academic Center, 2nd Ed.* Retrieved from: http://cadenet.upm.edu: Accessed on August 08, 2013.

Ahmad, M. (1990). *Islamic education: redefinition of aims and methodology.* New Delhi, India: Qazi Publishers & Distributors.

Ainsworth, S. (2006). A conceptual framework for considering learning with multiple representations. *Learning and Instruction*, 16, 183-198.

Ainsworth, S. & Th Loizou, A. (2003). The effects of self-explaining when learning with text or diagrams. *Cognitive Science*, 27, 669-681.

Alexander, S. (2002). Making the most effective use of homework. *Mathematics teaching*, 178, 36-38.

Alliance for Excellent Education (2012).*Culture shift*: *teaching in a learner-centred environment powered by digital learning.* Retrieved from: http://gosa.georgia.gov. Accessed on October 15, 2013.

Al-Saif, A. (1996). *Islamic education in Saudi secondary schools*. The University of Manchester, United Kingdom.

American Nurses Association 2006). *Assuring patient safety: registered nurses responsibilities in all roles and settings to guard against working when fatigued*. Silver Spring. Retrieved from: www.nursingworld.org: Accessed on October 15, 2013.

Ann Brosseau, M. J. (2000). *University students' preferences for a teacher and teaching style: A case study of Moroccan students.* (Master's thesis), Concordia University.

Ardalan, K. (2008). The philosophical foundation of the lecture-versus-case controversy. *International Journal of Social,* 35 (1/2), 15-34.

Ary, D.,Jacobs, L. C. & Razavich, A. 2002). *Introduction to research in education* (6th Ed.). Belmont: Wadsworth Thomson

Ayele, D., Schippers, K., & Ramos, M.A. (2007). Student-centred teaching and learning experience from the external world. *Ethiopian Journal of Education and Science* 2(2), 113-141

Ayodele, O.J. (2012). Validity and reliability issues in educational research. *Journal of Education and Social Research,* 2(2), 391-395

Azer, S.A. (2009). Problem-based learning in fifth, sixth and seventh grades: assessment of students perceptions. *Teaching and Teacher Education*, 25, 1033-1042.

Azhar, I. (2006). *An evaluation of madrasah education: perspectives and lessons from the experiences of some Muslim societies :seeking integrated knowledge and success in madrasah education in Singapore.* Singapore: Marshall Cavendish.

Banning, M. (2006). Measures that can be used to teach critical thinking in nurse prescribers: critical thinking skills in nurse prescribers. *Nurse Education in Practice*, 6 (2), 98-105

Bansberg, B. (2003). Applying the learner-centred principles to the special case of literacy. *Theory into Practice.* 42 (2), 142-150.

Barefoot, B. O. (Ed.). (1993). *Exploring the evidence: reporting outcomes of freshman seminars*. (Monograph No. 11) Columbia, SC: National Resource Center for the first year experience and student in Transition, University of South Carolina.

Barrett, K.R., Bower, B.L. & Donovan, N.C. (2007). Teaching styles of community college instructors. *The American Journal of Distance Education*, 21(1), 37-49.

Becker, W.E., & Watts, M. (2001). Teaching methods in the U.S. undergraduate economics courses. *Journal of Economic Education*, 32(3), 269-279.

Biggs, J., & Tang, C. (2007). *Teaching for quality learning at university*: Open University Press

Billings, D.M., & Halstead, J.A. (2009). *Teaching in nursing: a guide for faculty*. Missouri: Saunders Elsevier

Blumberg, P. (2008). *Developing learner-centered teaching: a practical guide for faculty*. San Francisco: Jossey-Bass.

Bodgan, P. (2011). *Student-centred learning strategies for mathematics and other subjects*. Retrieved from: www.edutopia.org: Accessed on February 06, 2014

Bodgan, P. (2011). *Student-centred learning environment: How and Why*. Retrieved from: www.edutopia.org: Accessed on February 06, 2014

Bonwell, C., & Eison, J. (1991). *Active learning: creating excitement in the classroom* (ASHE- ERIC Higher Education Report No. 1). Washington, DC: George Washington University. Retrieved from http://www.ed.gov: Accessed on February 24, 2013

Boundless Education (2015).“*Effective teaching strategies*.” Retrieved from https://www.boundless.com/edu: Accessed on July 15, 2015

Bowling, A. (2009). *Research methods in health: investigative health and health services* (3rd Ed.). New York: McGraw-Hill.

Boyle, C.R. (1999). A problem-based learning approach to teaching biostatistics. *Journal of Statistics Education*, 7(1), 3-5.

Brindley, R. N. (1996).*The extent to which student teachers develop a constructivist epistemology and use it to guide their classroom practice.*(ProQuest dissertations and theses), University of Georgia.

Burns, N., & Grove, S. K. (2001).*The practice of nursing research: conduct, critique and utilization*. Philadelphia: W.B. Sanders Company

Burns, C. & Myhill, D. (2004). Interactive or inactive? A consideration of the nature of interaction in whole class instruction. *Cambridge Journal of Education*, 34(1), 35-49.

Carbone, E., & Greenberg, J. (1998). *Teaching large classes: unpacking the problem and responding creatively: to improve the academy* (Paper 399). Retrieved from: http://digitalcommons.unl.edu: Accessed on December 04, 2013

Carlisle, C., & Ibbotson, T. (2005). Introducing problem based learning into research methods teaching: student and facilitator evaluation. *Nurse Education Today,* 25, 527-541.

Cassum, S.H., Joanne, P., Begum, G.R., Dilshad, A. & Syeda, K. (2013). Multidimensionality of critical thinking: a holistic perspective from multidisciplinary educators in Karachi Pakistan. *Journal of Nursing Education and Practice*, 3 (7), 935-950

Chall, J. S. (2000). *The academic achievement challenge*. New York, NY: Guilford.

Chalmers, D. (2007). *A review of Australian and international quality systems and indicators of learning and teaching.* Carrick: Australia

Chauraya, M., & Mhlolo, M. K. (2008). An analysis of in-service mathematics teacher's conception of problem solving in the subject at Midlands State University in Zimbabwe. *African Journal of Research in SMT,* 12(1), 75-86.

Chan, E.A. (2009). Reflecting on the essence of four problem based learning discussions: the importance of faculty development and our continuous quest for application of problem based learning. *Kaohsiung J Med Sci*, 25 (5), 276-281

Child, J. & Heavens, S.J. (2003). *The social constitution of organizations and its implications for organizational learning*: h*andbook of organizational leadership and knowledge.* New York: Oxford University Press, Inc.

Christian Health Association of Malawi Annual Report (2013). *Situation of nurse educators in the CHAM nursing colleges.* Lilongwe: Malawi.

Clark, I., Moran, G., Skolnik, M. & Trick, D. (2009).*Academic transformation: the forces reshaping higher education in Ontario*. Montreal & Kingston: McGill-Queen's University Press.

Clark, R. E. (1989). When teaching kills learning: research on mathematics. Learning and Instruction. *European Research in an International Context,* 2, 1-22.

Cohen, L.; Manion, L. & Morrison, K. (2008). *Research methods in education* (6th Ed.). London: Rutledge

Collins, J. W. & O'Brien, N. P. (Eds.). (2003). *Greenwood Dictionary of Education*. Westport, CT: Greenwood.

Cronbach, L. H., & Snow, R. E. (1977). *Aptitudes and instructional methods: A handbook for research on interactions*. New York, NY: Irvington.

Cross, P. K. (1998). What Do We Know About Students' Learning and How Do We Know It? *Innovative Higher Education*, *23*(4), 255-270.

Dalley, K.,Candela, L.,Benzel-Lindley, J. (2008). Learning to let go: the challenge of decrowding the curriculum. *Nurse Education Today* 28, 62-69.

De Young, K. (2011). *Differences in new graduate critical thinking skills using concept- mapping. (A research paper).* Muncie, Indiana : Ball State University

Duffy, T.M. & Kirkley, J. (2004). *Learner-centred theory and practice in distance education: Cases for higher education.* Mahwah, NJ: Lawrence Erblaum.

Edwards, S., & Hammer, M. (2006). Laura's story: using problem based learning in early childhood and primary teacher education. *Teaching and Teacher Education*, 22, 465-477.

Eison J. (2010). *Using active learning instructional strategies to create excitement and enhance learning. (Presentation)*. University of South Florida. Retrieved from: http://www.cte.cornell.edu**:** Accessed on March 02, 2013

Emenyeonu O.C. (2012). Student-centered learning in Oman: challenges and pitfalls. *International Journal of Learning & Development*, 2 (5), 243-254

Feden, P. & Vogel, R. (2003). *Methods of teaching*: *applying cognitive science to promote student learning*: Implementing active learning. McGraw Hill Higher Education.

Felder, R. M., & Brent, R. (1996). Navigating the bumpy road to student- centered instruction. *The College Teaching, 44*(2), 43-47.

Gielen, S., Dochy, F., & Onghena, P. (2011). An inventory of peer assessment diversity. *Assessment and Evaluation in Higher Education* 36, 137-155

Ginsburg, M.B. (2010). Improving educational quality through active-learning pedagogies: a comparison of five case studies. *Journal of Educational Research:* 1(3), 62-74.

Gruber, S. & Boreen, J. (2003). Teaching critical thinking: Using experience to promote learning in middle school and college students. *Teachers and Teaching: Theory and Practice*, 9(1), 5-19.

Hall, B. (2006). Student centered Learning: *A blog on writing and learning* Retrieved from: http://secondlanguagewriting.com, accessed on 8/20/2013.

Hashim, C. N., & Langgulung, H. (2007). The Muslim world and the West: the potential of educational institutions in building bridges in the context of Malaysia. *Bulletin of Education and Research, 29*(2), 1-17.

Henard, F., & Leprince-Ringuet, S. (2008). *The path to quality teaching in higher education* (Research paper), London: *School of Economics and Political Science*

Horne, M., Woodhead, K., Morgan, L., Smithies, L., Megson, D., & Lyte, G. (2007). Using enquiry in learning: From vision to reality in higher education. *Nurse Education Today*, 27, 103-112.

Huba, M., & Freed, J. (2000). *Learner-centred assessment on college campuses.* Needham Heights, MA: Allyn and Bacon.

Hung, W. (2009). The 9-step problem design process for problem-based learning: application of the 3C3R model. *Educational Research Review,* 4, 118–141.

Iqbal, H. M., Azam, S., & Rana, R. A. (2009). Secondary school science teachers' views about the 'nature of science. *Bulletin of Educational and Research, 31*(2), 29-44.

Jallad, M. (1997). *The Islamic studies curriculum in Jordan.* (ProQuest dissertations and theses), University of Manchester.

Johnstone, K.M., & Biggs, S.F. (1998). Problem-based learning: introduction, analysis and accounting curricular implication: 10 Student Centred Learning: Students Perspectives. *Journal of Accounting Education,* 16 (3/4), 407-427.

Kaplan, R. M.,& Saccuzzo, D. P. (2005).*Psychological testing: principles, applications and issues* (6th Ed.). Thomson: Wadsworth.

Kember, D., & Kwan, K.P. (2000). "Lecturers' approaches to teaching and their relationship to conceptions of good teaching," *Instructional Science,* 28, 469-488

King, A. (1993). From Sage on the Stage to Guide on the side. *College Teaching* 41 (1), 30- 35

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006).Why minimal guidance during instruction does not work: an analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist,* 41(2), 75-86

Kivela, J. & Kivela R.J. (2005). Student perceptions of an embedded problem-based

learning instructional approach in a hospitality undergraduate programme. *Hospitality Management* 24, 437-464

Klahr, D., & Nigam, M. (2004). The equivalence of learning paths in early science instruction: Effects of direct instruction and discovery learning. *Psychological Science, 15*(10), 661-667.

Knight, J., & Wood, W. (2005).Teaching more by lecturing less. *Cell Biology Education*. 4, 298-310

Kornfeld, M. (2010). *The Effects of Class Size on Student Academic Achievement in a Rural State*. (Doctoral dissertation, University of Vermont).

Kuh, G., Schuh, J., Whitt, E., & Associates (1991). *Involving Colleges: Successful Approaches to Fostering Student Learning and Development outside the Classroom*. San Francisco: Jossey-Bass.

Lakhan, R & Sharma, M. (2010). A study of knowledge, attitudes and practice (KAP) survey of families toward their children with intellectual disability in Barwani India. *Asia Pacific Disability Rehabilitation Journal,* 21(2) 1

Lemeshow, S., Hosmer, D.W. Jr. Klar, J., & Lwanga, S.K. (Eds). (1990). .*Adequacy of sample size in health studies.* Chichester: John Wiley & Sons.

Lea, S.J., Stephenson, D & Troy, J. (2003). Higher education students' attitudes to student-centred learning: beyond 'educational bulimia." *Studies in Higher Education*, 28(3), 321-334.

Leyendecker, R., Ottevanger, W., and van den Akker, J. (2008).*Curricula, examinations and assessment in secondary education in Sub-Saharan Africa*: SEIA Thematic Study. Washington, DC, World Bank.

Light, R. J. (2001). *Making the most of college: Students speak their minds*. Cambridge, Mass.: Harvard University Press.

LoBiondo-Wood, G., & Haber, J. (2013). *Nursing research: methods, critical appraisal and utilization.* (8thEd.). Mosby Company, St. Louis.

Luan, W. S., Bakar, K. A., & Hong, T. S. (2006). Using a student-centred learning approach to teach a discrete information technology course: the effects on Malaysian pre-service teachers' attitudes toward information technology. *Technology, Pedagogy and Education, 15*(2), 223-238.

Lubis, M. A., Yunus, M. M., Diao, M., Muhamad, T. A., Mustapha, R., & Ishak, N. M. (2011). The perception and method in teaching and learning Islamic education. *International Journal of Education and Information Technologies, 1*(5), 69-78.

MacHemer, P.L., & Crawford, P. (2007) 'Student perceptions of active learning in a large cross-disciplinary classroom." *Active Learning in Higher Education,* 8(1), 9-30

Mahamood, Z., Lasan, C., Nik Yusoff, N. M. R., & Embi, M. A. (2009). Teaching and learning the Malay language in the private higher institutions in Sarawak, Malaysia. *European Journal of Social Sciences, 9* (4), 573-585.

Mayer, R. (2004). Should there be a three-strike rule against pure discovery learning? The case for guided methods of instruction. *American Psychologist, 59* (1), 14-19

McBurney, D. H. & White, T. L.(2007). *Research methods,* (7th Ed.). Thomson: Wadsworth.

McCombs, B.L. (2003)**.** *Applying educational psychology's knowledge base in educational reform: From research to application to policy: comprehensive handbook of educational psychology*. New York: Wiley.

McKeatchie, W.J. (1999). *Peer learning, collaborative learning, cooperative learning, in teaching tips: strategies, research, and theory for college and university teachers,* (10th Ed.). Boston: Houghton Mifflin.

McKeatchie**,** W.J. & Svinicki, M. (2005).*Teaching tips: strategies, research, and theory for college teachers*. (12th Ed.). Boston: Houghton Mifflin.

Mierson, S., & Freiert, K. (2004). *Fundamental: Problem-based learning ASTD.* Available at http://www.astd.org: Accessed on March 02, 2013

Mizrachi, A., Padilla, O., & Banda, W.S. (2010). Active-learning pedagogies as a reform initiative: *The Case of Malawi*.1-16

Moreno, R. (2004). Decreasing cognitive load in novice students: effects of explanatory versus corrective feedback in discovery-based multimedia. *Instructional Science, 32*(1), 99-113.

Mtika, P., & Gates, P. (2010). "Developing learner-centred education among secondary trainee teachers in Malawi": he dilemma of appropriation and application. *International Journal of Educational Development* 30 (4), 396-404

Mupinga, D.M., Nora, R.T. & Yaw, D.C. (2006). The learning styles, expectations, and needs of online students. *College Teaching*, 54, 185-189.

Mustafa, M., & Cullingford, C. (2008). Teacher autonomy and centralized control: the case of textbooks. *International Journal of Educational Development, 28*(1), 81-88.

Mustapha, Z. (1998). *Malaysian postgraduate students learning style at Lancaster University*. Unpublished master's thesis. Lancaster University.

Napoli, R.D. (2004). *What is student centered learning. An EIC Guide. Education Initiative Centre, University of Westminster*. Retrieved from: http://www.wmin.ac.uk. Accessed on 17 August 2014.

National Advisory Council on Nurse Education and Practice (2008). *Meeting the challenge of the new millennium: challenges facing the nurse workforce in a changing health care environment*. Retrieved August 10, 2013, from http://ftp.hrsa.gov

National Council of Teachers of Mathematics (2000). *Principles and standards for school mathematics.* Reston, VA: National Council of Teachers of Mathematics.

Neo, M., & Neo, T. K. (2009). Engaging students in multimedia-mediated constructivist Learning, students perceptions. *Educational Technology and Society, 12*(2), 254-266.

Neo, M., & Neo, T. K. (2003). Developing a student-centred learning environment in the Malaysian classrooms- A multimedia learning experience. *The Turkish Online Journal of Educational Technology, 2*(1), 13-21.

Neo, M., & Neo, T. K. (2002). Building a constructivist learning environment using a multimedia design project. A Malaysian experience. *Journal of Educational Multimedia and Hypermedia, 11*(2), 141-153.

Newbill**,** P.L. (2005). Instructional Strategies to Improve Women's Attitudes Towards Science. (Doctoral dissertation, Virginia Polytechnic Institute). Blacksburg: VA

Niess, M. L. (2005). Preparing teachers to teach science and mathematics with technology: Developing a technology pedagogical content knowledge. *Teaching and Teacher Education, 21*, 509 -523.

Nurses & Midwives Council of Malawi (2008). *Monitoring and evaluation tool for nursing colleges,* Lilongwe: Malawi

Olowojaiye, F.B. (2000). *A comparative analysis of students' interest in and perception of teaching/learning of mathematics at senior secondary schools levels*. A paper presented at MAN conference. 'EKO 2000". Retrieved from: http://www.impactjournals. Accessed on 17 August 2014.

O'Neill, G., & McMohan, T. (2005). *Student-centred learning: What does it mean for students and lecturers?* Retrieved from: http://www.jfn.ac.on 18 March, 2014.

Paisey, C., & Paisey, N. (2009). Development skills via work placement in accounting: Student and employer views. *Accounting Forum*, 1-20.

Pang, J.S. (2005).Transforming Korean elementary mathematics classroom to student-centred instruction. *Proceedings of the 29th Conference of the International Group for the Psychology of Mathematics Education*, 4, 41-48.

Pascarella, E., & Terenzini, P. (1991). *How college affects students: findings and insights from twenty-years of research*. San Francisco: Jossey-Bass.

Peterson, T. (2004). So you're thinking of trying problem-based learning? Three critical success factors for implementation. *Journal of Management Education*, 28(5), 630-647.

Petrosino, A., Martin, T., & Svihla, V. (2007). *Developing student expertise and community: lessons from how people learn*: *new directions for teaching and learning*. San Francisco: Jossey-Bass.

Polit, D. F., & Beck, C. T. (2006).*Essentials of nursing research: methods appraisal and utilization*. Philadelphia: Lippincott.

Quaintance, J. L. (2006). *Constructivist pedagogy in teacher education: a case study. (ProQuest* Dissertations and Theses).The University of Kansas.

Rajasekar, S., Philominathan, P., & Chinnathambi, V. (2013). Research methodology. (Research paper). Retrieved from: http://www.ctan.org: Accessed on 17 March 2015.

Ratcliff, J. L. (1992). *Learning to teach in higher education: what they took and what they learned: learning from assessment and transcript analysis*. New York: Routledge

Sablonniere, R., Taylor, D.M., & Sadykova, N. (2009). Challenges of applying a student-centred approach to learning in the context of education in Kyrgyzstan. *International Journal of Educational Development*, 29, 628-634.

Sajjad, S. (n.d.).*Effective teaching methods at higher education level. (Research paper)* Pakistan: University of Karachi. Retrieved from http://class.web.nthu.edu.tw on May, 18, 2014.

Salimi, L., & Ghonoodi, A. (2011). The study and comparison of curriculum in smart and traditional schools. *Procedia Social and Behavioral Sciences,* 15, 3059-3062

Saville, B.K., Zinn, T.E. & Elliot, M. P. (2005). Inter-teaching versus traditional methods of instruction: A preliminary analysis. *Teaching of Psychology*, 32, 161-163

Schauble, L. (1990). Belief revision in children: The role of prior knowledge and strategies for generating evidence. *Journal of Experimental Child Psychology*, *49*, 31-57

Strengthening Health Outcomes through Private Sector (2012). *Malawi Private Health Sector Assessment.* Retrieved from: http://abtassociates.com/AbtAssociates/files: Accessed on 17 August 2014.

Shulman, L., & Keisler, E. (1966). *Learning by discovery: a critical appraisal.* Chicago, IL: Rand McNally.

Schweisfurth, M. (2013).*Learner-centred education in international perspective: whose pedagogy for whose development?* London: Routledge.

Segers, M., Bossche, P.V., & Teunissen, E. (2003). Evaluating the effect of redesigning a problem-based learning environment. *Studies in Educational Evaluation*, 29, 315-334.

Sidin, R. (1999). The development in higher education and issues of teaching and learning. *Proceedings of the National Seminar of Education Issues,* 1, 66-75.

Singley, M. K., & Anderson, J. R. (1989). *The transfer of cognitive skill*. Cambridge, MA: Harvard University Press.

Slavin, R. (2005). *Educational psychology. (*7th Ed.). Boston: Allyn & Bacon.

Starke, D. (2007). *Professional development module on active learning*. Retrieved from: http://www.info@texascollaborative.org: Accessed on 17 July 2013.

Stead, D.R. (2005).A review of the one-minute paper. *Active Learning in Higher Education*, 6(2), 118–131

Sunzuma, G., Ndemo Z., Zinyeka G., & Zezekwa N. (2012). The challenges of implementing student-centred instruction in the teaching and learning of secondary school mathematics in a selected district in Zimbabwe. *International Journal of Current Research*, 4(5), 145-155

Tan, S.S., & Frank, C.K. (2008). A problem based learning approach to entrepreneurship education. *Education & Training*, 48 (6), 416-438.

Taylor, P.G. (2000). Changing Expectations: Preparing students for Flexible Learning. *The International Journal of Academic Development*, 5(2), 107-115.

Tengku Kasim, T.S.A. (2012). Teaching and Learning Experiences in Malaysian Higher Education. *A case study of teacher education programme,* (Doctoral dissertation, Auckland University of Technology). Retrieved from: http://aut.researchgateway.ac.nz. Accessed on April 07, 2014

Tengku Kasim, T. S. A., & Furbish, D. (2010a). Creating lifelong learning environment through student-centred learning. *Paper presented at the 3LlnC' 10- Lifelong Learning International Conference.* Kuala Lumpur: Malaysia.

Tengku Kasim, T. S. A., & Furbish, D. (2010b). Transforming Malaysian teacher education for a sustainable future through student-centred learning. *Paper presented at the Annual Conference of the Australian Teacher Education Association (ATEA).* Queensland: Australia.

Tseng, K.H., Chiang, F.K., & Hsu, W.H. (2008).Interactive processes and learning attitudes in a web-based problem-based learning (PBL) platform. *Computers in Human Behavior*, 24, 940–955.

Tsou, K., Cho, S., Lin, C., Sy, L, Yang, L., Chou, T., & Chiang, H. (2009). Short-term outcomes of a near-full PBL curriculum in a new Taiwan Medical School. *Kaohsiung J Med Sci*, 25 (5), 282-293.

Tveit, B., Wasili, R., Kollstrom, M.L. & Mwenye-Phiri, G.T. (2009). *Improved health training education in Malawian nursing colleges. Curriculum Implementation in CHAM/NMT Colleges in Malawi. Final report submitted to CHAM and Norwegian Church Aid.* Lilongwe: Malawi

Van Wyngaarden, A. (2008). Teaching strategies for theory content in an outcomes and problem-based nursing education programme, MCur dissertation, University of Pretoria. Retrieved from: http://www.repository.up.ac.za on March 28, 2013.

Vaughan, W. (2002). Effects of cooperative learning on achievement and attitude among students of colour. *The Journal of Educational Research*, 95(6), 359-366.

Vavrus, F., Thomas, M., & Bartlett, L. (2011). Ensuring quality by attending to inquiry and learner-centred pedagogy in Sub-Saharan Africa. *Fundamentals of Teacher Education Development, 4, 21-96.*

Vygotsky, L. S. (1978). *Mind in the society: the development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Walker, A., Bridges, E., & Chan, B. (1996). Wisdom gained, wisdom given: instituting PBL in a Chinese culture. *Journal of Educational Administration*, 34 (5), 12-31.

Weimer, M. (2012). Five characteristics of learner centred teaching (Newsletter, 8th August). Retrieved from: www.facultyfocus.com on September 10, 2014.

Weimer, M. (2002). *Learner-centered teaching: five key changes to practice.* San Francisco, CA: Jossey-Bass.

Whiston, S. C. (2005). *Principles and applications of assessment in counseling.* (2nd Ed.). Thomson: Brooks

Yair, G. (2008). Can We Administer the Scholarship of Teaching? Lessons from Outstanding Professors in Higher Education. *Journal of Higher Education*, 55(4):447-459

Yildirim, B. (2011). Critical Thinking in Nursing Process and Education. *International Journal of Humanities and Social Science* 1(13), 257-262

Zakaria, R. (2008). *Indonesian Islamic education: a social, historical and political perspectives.* Saarbrucken: Germany.

Zan, R.,& Martino, P.D. (2007). Attitudes towards mathematics: overcoming positive/negative dichotomy. The Montana mathematics enthusiasts monograph. *The Montana Council of Teacher of Mathematics*, 3, 157-168.

Zarei, G. R., & Esfandiari, M. A. (2008). The Effect of Constructivist Vs. Conventional Teaching on Reading Comprehension. *The Social Sciences, 3*(8), 606-610.

Zepke, N., & Leach, L. (2010). Improving student engagement: ten proposals for action. *Active Learning in Higher Education, 11*(3), 167-177.

Zia, R. (2006). *Islamic education: from ancient to modern times: globalization, modernization and education in Muslim countries*. New York: Nova Science Publishers.

Zubir, R. (1988). Descriptions of teaching and learning: A Malaysian perspective. *Studies in Higher Education, 13*(2), 139-149.

Zweck, J. (2006). *Strategies to promote active learning in math/stat discussion sessions*. Available athttp://www.math.umbc.edu. Accessed on 21/08/2014.

Appendices

Appendix 1: participants' information sheet and consent form

Section A: participants' information sheet

Factors hindering implementation of learner-centred teaching/ learning strategies

You are being requested to take part in a study on exploring factors that hinder implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi. Prior to participate in the study, it is crucial that you understand the reasons for conducting the study and what will be its consequences. Please feel free to ask if there is anything that you do not understand or if you need more information. Please be assured that participation in the study is voluntary.

What is the purpose of the study?

I am Mercy Chirwa postgraduate student at Kamuzu College of Nursing pursuing Masters Degree in Nursing and Midwifery Education so in partial accomplishment of this requirement, I am conducting a study on factors that hinder implementation of learner-centred teaching strategies in CHAM nursing colleges. The results of this study will provide up to date information and add to the body of knowledge on LCT in nursing colleges in Malawi and the world over. It will also act as a base line for future research on LCT in nursing education.

Do I have to take part?

You are free to take part or not or to withdraw at any time you feel like without giving reasons. Your refusal to take part in the study will not affect your job in anyway. If you agree to take part you will be asked to sign a consent form. Any information that you will provide will be treated as confidential and no one will identify who gave the information, as the study tools will have no names on it. However, code numbers will be used. The

tools and responses will be destroyed five years after completion of the study. Study results will be presented or published as group findings not individual information.

If I take part what will happen to me?

You will be asked to answer a questionnaire regarding learner -centred teaching strategies. The investigator will at a certain stage observe the actual teaching to solicit some things related or not to learner centred teaching/ learning.

What are the possible benefits of the study?

There are no instant and financial benefits in taking part in this study. Nonetheless, the findings of the study will assist in realizing the teaching strategies that promote students self-directed learning thereby instilling a lifelong spirit which enhances critical thinking and problem solving skills which are central to the delivery of quality nursing care to patients with multifaceted conditions.

What are the possible risks for taking part?

There are no actual physical risks with the study. Nonetheless, the researcher anticipates some potential risks like long time that will be taken to observe teaching session.

If something goes wrong, what will happen?

Any complaints concerning ill treatment during the course of the study can be forwarded to Mercy P. Chirwa, Kamuzu College of Nursing, Private Bag I, Lilongwe or COMREC Secretariat, Private Bag 360, Blantyre. Telephone: 01871911

Contact for further information

If you need more information, please contact Mercy Chirwa on 0888865433 and Dr. B. Nkwinda Nyasulu on 0888410484 or 0999410484 who is my supervisor in this study.

Section B: Participant declaration form

I have understood the information about this study. It has been explained to me, clarifications were made and questions were answered to my satisfaction. I understand that my involvement in the study is voluntary. I have the right to refuse and my work will not be affected. I voluntarily agree to participate.

Code of the participant_____

Date_____

Name of the witness_____

Signature of Witness ……....Date……

Thank you for volunteering to take part in the study.

Appendix 2: Questionnaire for nurse educators

Section A: Personal particulars

Please give the correct response accordingly

1. The participant identification number_____
2. Name of college_____
3. Gender_____
4. Age_____
5. Experience in teaching indicate your responses in months or years_____
6. Educational qualifications in nursing education (circle the correct response)
   (a) Bachelor's degree
   (b) Master's degree
   (c) Doctors degree
   (d) Other specify_____

Section B: Educators knowledge on learner centred teaching strategies

Instruction:

Please give your appropriate response to each item based on your understanding and experience. Your responses could vary from "Strongly agree" to "strongly disagree.

Please circle the most appropriate number.

Key

5 =strongly agree

4= agree

3 =undecided

2=disagree

1 =strongly disagree

No	Item	Score
1	Current knowledge depends on the previous understanding.	5 4 3 2 1
2	The teacher holds most of the knowledge necessary for the students.	5 4 3 2 1
3	Students learn better when there is interaction.	5 4 3 2 1
4	I believe that teaching facts alone is enough to prepare students to understand their environment.	5 4 3 2 1
5	Teachers must encourage students to communicate effectively.	5 4 3 2 1
6	Learner centred teaching is intellectually more stimulating.	5 4 3 2 1
7	Learner centred teaching/ learning enhances the development of sense of responsibility.	5 4 3 2 1
8	Learner centred teaching/ learning promotes students critical thinking and problem solving skills.	5 4 3 2 1
9	Learner centred teaching prepares students for lifelong learning	5 4 3 2 1
10	Learner centred learning makes students responsible for their own learning.	5 4 3 2 1
11	Learner-centred teaching strategies add workload on nurse educators.	5 4 3 2 1
12	Learner centred teaching requires a lot of support from those in managerial positions.	5 4 3 2 1
13	Utilizing learner centred teaching requires a lot of time.	5 4 3 2 1
14	Implementation of learner centred teaching strategies requires good training in both preservice.	5 4 3 2 1
15	In using learner centred teaching strategies, educators find it difficult to cover the prescribed syllabus.	5 4 3 2 1

Section C: Attitudes of nurse educators on learner centred teaching strategies

Instruction:

To what extent have the following affected your use of learner-centred teaching strategies in the delivery of the curriculum? Please, rate them from “strongly agree” to “strongly disagree” based on the seriousness of the problem. **Circle the number that is most appropriate to you.**

Key:

4 =strongly agree

3 =agree

2 =disagree

1 =strongly disagree

No	Attitudes of educators	Score
1	Instructors' tendency to use traditional lecture method	4 3 2 1
2	Shortage of time to practice active learning in classroom	4 3 2 1
3	Student' lack of interest in learner centred teaching approaches	4 3 2 1
4	I lack interest in learner-centred teaching strategies	4 3 2 1
5	Lack of resources to implement learner-centred teaching strategies	4 3 2 1
6	Too much content to be covered within a specific period of time	4 3 2 1
7	Large classes are effectively managed with lecturing method	4 3 2 1
8	Instructors' belief and perception that they sole sources of information	4 3 2 1
9	Students' belief and perception that instructors need to provide them with enough information to achieve their objectives	4 3 2 1
10	Some students' dominate during group activities	4 3 2 1
11	I think well prepared lectures are most important for student achievement.	4 3 2 1
12	I believe that teaching at high education level is generally lecturer-centred.	4 3 2 1
13	Learning is an active process of creating hypotheses through activities.	4 3 2 1
14	Students participate in activities in some of my classroom session.	4 3 2 1
15	I react on feedback from students about how they learn effectively.	4 3 2 1
16	There is no time for reflection in my classes.	4 3 2 1
17	I believe students learn more effectively if they work individually	4 3 2 1

	than in groups.	
18	I don't have time to provide students with constructive feedback on their work.	4 3 2 1
19	Guided feedback is impractical in large classes.	4 3 2 1
20	I feel that good lectures enhance students' sense of commitment.	4 3 2 1
21	I believe students dislike active participation in class.	4 3 2 1
22	I generally link new knowledge to students' prior experiences.	4 3 2 1
23	I believe problem solving increases students learning.	4 3 2 1
24	I motivate students to deeply participate in the teaching-learning process.	4 3 2 1
25	I prefer classes in which students are active listeners	4 3 2 1
26	I use lecture method to assist students to develop critical thinking skills.	4 3 2 1
27	I try to create a classroom environment that supports inactive learning.	4 3 2 1

* If there are any other factors, please specify_____
_____

Section D: Actual practice of nurse educators on the teaching strategies

Instruction:

Below is a list of different teaching strategies. Please indicate the extent to which you use them in your teaching by rating according to the following scale. **Please circle the most appropriate number**

Key:

5 =always

4 =frequently

3 =some times

2 =rarely

1 =not at all

No	Teaching strategy	Score
1	Lecture	5 4 3 2 1
2	Project	5 4 3 2 1
3	Problem solving	5 4 3 2 1
4	Role-playing	5 4 3 2 1
5	Group discussion	5 4 3 2 1
6	Brain storming	5 4 3 2 1
7	Peer teaching	5 4 3 2 1
8	Cooperative learning	5 4 3 2 1
9	Field trip	5 4 3 2 1
10	Group work	5 4 3 2 1
11	Question and Answer	5 4 3 2 1
12	Demonstration	5 4 3 2 1
13	Debating	5 4 3 2 1

Section E: Actual practice of nurse educators on assessment of students

Instruction:

To what extent have you assessed the students in the delivery of the curriculum? Please, rate them from "strongly agree" to "strongly disagree". **Circle the number that is most appropriate to you.**

Key:

4 =strongly agree

3 =agree

2 =disagree

1 =strongly disagree

No	Item	Score
1	I frequently ask close-ended questions for which there is only one correct answer.	4 3 2 1
2	Students become too noisy if I ask many questions.	4 3 2 1
3	Students need to be able to respond very quickly to questions.	4 3 2 1
4	I praise students' work as often as possible.	4 3 2 1
5	I often assess students' understanding during group work	4 3 2 1

6	I often assess students' understanding through questioning.	4 3 2 1
7	I provide exercises on some of the lessons.	4 3 2 1
8	It is impossible to follow students' participation in learning.	4 3 2 1
9	I help students to take responsibility for their own learning.	4 3 2 1
10	Providing ongoing meaningful feedback to students is too time-consuming.	4 3 2 1
11	I often assess students when they solve problems in a group.	4 3 2 1
12	Through lectures I stimulate students' responsibility for their own learning.	4 3 2 1
13	I encourage students to make decisions about the what, how, and when of learning.	4 3 2 1
14	In a learner-centred teaching my responsibility is to facilitate students' learning formative assessment	4 3 2 1
15	Lack of orientation of learner-centred teaching strategies during training affects how I assess my students	4 3 2 1

Appendix 3: Observation checklist

Checklist for observation of classroom session

The main purpose of this observation checklist is to assess the activities practiced in the classroom in relation to the implementation of learner centred teaching. The activities will be marked in the category of Yes or No on the basis of whether they occur or not.

Please tick the appropriate response in the space provided

Part one.

General Information

1. Participant identification number
2. Name of the college
3. Course observed
4. Number of students in the class

Part two.

No	List of observations	Yes	No	Comments
1.0	**Classroom condition**			
1.1	Is there enough sitting space for all students?			
1.2	Are the chairs movable?			
1.3	Is there enough space for movement between desks?			
1.4	Is the class size appropriate?			
1.5	Is there group work activity?			
1.6	Are the desks arranged to promote learner centred learning? (not in rows)			
2.0	**Instructors' Activity**			
2.1	Arranging students for different classroom activity			
2.2	Clarifying the learning objectives			
2.3	Giving direction about the procedures and activities			
2.4	Using different instructional methods to implement active learning.			
2.5	Encouraging students to become active participants			

2.6	The instructor is more active than the students.			
2.7	The instructor is active in explaining, monitoring and describing all concepts			
2.8	Managing the class for active learning implementation.			
2.9	Using an exercise to elicit students' ideas knowledge and skill.			
3.0	**Activities of students during the lesson**			
3.1	Students are participating in problem solving activities			
3.2	Students are playing active roles during lesson delivery			
3.3	Students are discussing issues in groups			
3.4	Students are taking part in peer teaching			
3.5	Students are practicing demonstration			
4.0	**Utilization of Instructional Material**			
4.1	Are there charts, posters, diagrams?			
4.2	Does the teacher use these instructional materials other than books?			
4.3	Does the teacher illustrate ideas, concepts or points with the help of different instructional materials?			
5.0	**Class Evaluation**			
5.1	Instructor gives group work,			
5.2	Ask questions			
5.3	Gives exercises to the learners			
5.4	Instructor follows up students' participation and activities			
5.5	Instructor elicits response from learners instead of supplying answers			
5.6	Instructor evaluates students group cooperation			
5.7	Instructor checks and gives constructive feed back to the students' work			
5.8	Students are listening passively during the lesson.			

Appendix 4: Permission letters

Kamuzu College of Nursing
Lilongwe Campus,
Private Bag 1,
Lilongwe.

July 30, 2013.

The College Principal,
St Joseph's College of Nursing,
P.O. Box 5505,
Limbe.

Dear Madam,
RE: Request to use St Joseph's College of Nursing as a research site

I would like to request for permission to conduct a study at your institution.
I am a student pursuing Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing. I intend to conduct a study titled **"Factors hindering implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi"**
The study will involve interviewing nurse educators in CHAM nursing colleges in Malawi. This study will be implemented upon approval of the proposal by Kamuzu College of Nursing Research Committee and College of Medicine Research and Ethical Committee (COMREC).
The participation in the study will be voluntary and research ethical principles will be observed at every level of the study.
Looking forward to your response.

Yours Faithfully,

Mercy P. Chirwa.

St. JOSEPH'S COLLEGE OF NURSING & MIDWIFERY

P.O. Box 5505
LIMBE, MALAWI, CENTRAL AFRICA

Tel: (265) 01 916 033/01 916 026
Cell: (265) 08 830 228

Emai: stjosephn@yahoo.com

Date: 30th August 2013

To: Mrs. M. P. Chirwa,
Kamuzu College of Nursing,
Lilongwe Campus,
Private Bag 1,
Lilongwe.

Cc: The Dean of Faculty,
St Joseph's College of Nursing,
P. O. Box 5505,
Limbe.

Dear Madam,

RE: REQUEST TO CONDUCT A STUDY TITLED "FACTORS HINDERING IMPLEMENTATION OF LEARNER CENTRED TEACHING STRATEGIES IN CHAM NURSING COLLEGES IN MALAWI"

Reference is made to your letter dated 30th July 2013, on the above subject. I am pleased to inform you that College Management has accepted your request. By copy of this letter, the Dean of Faculty is authorised to assist you with information on our master plan so that your time can be in line with the time that the Tutors are on campus.

If any changes, please notify the college as soon as possible. We wish you well in your studies and we hope as College we will have an access to the results which will assist us to improve our utilization of leaner centred teaching strategies.

Yours faithfully

Roselyn Kalawa

Roselyn Kalawa (College Principal)

Kamuzu College of Nursing,
Lilongwe Campus,
Private Bag 1,
Lilongwe.

June 30, 2013.

The College Principal,
Holy Family College of Nursing,
P.O. Box 51224,
Limbe.

Dear Madam or Sir,

RE: Request to use Holy Family's College of Nursing as a research site

I would like to request for permission to conduct a study at your institution.

I am a student pursuing Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing. I intend to conduct a study titled **"Factors hindering implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi"**

The study will involve interviewing nurse educators in CHAM nursing colleges in Malawi. This study will be implemented upon approval of the proposal by Kamuzu College of Nursing Research Committee and College of Medicine Research and Ethical Committee (COMREC).

The participation in the study will be voluntary and research ethical principles will be observed at every level of the study.

Looking forward to your response.

Yours Faithfully,

Mercy P. Chirwa.

HOLY FAMILY COLLEGE OF NURSING

Telphone 01940376 P.O Box 51224,

Email holynursing@yahoo.com Limbe.

30TH JULY, 2013

Mrs. Mercy P. Chirwa

Kamuzu College of Nursing

Private Bag 1

LILONGWE

Dear Madam

PERMISSION TO CONDUCT A STUDY TITLED "FACTORS HINDERING IMPLEMENTATION OF LEARNER CENTERED TEACHING STRATEGIES IN CHAM NURSING COLLEGES IN MALAWI"

Refer to your letter dated 30th June, 2013 asking for permission to conduct a research on the above topic; I am pleased to inform you that permission has been granted.

Wishing you success in your studies.

Sincerely yours,

THE PRINCIPAL
HOLY FAMILY COLLEGE OF NURSING
30 JUL 2013
P.O. BOX 51224
LIMBE

SR. E. KAMBALAME
COLLEGE PRINCIPAL

Kamuzu College of Nursing,

Lilongwe Campus,

Private Bag 1,

Lilongwe.

July 30, 2013.

The College Principal,

Mulanje Mission College of Nursing,

P.O. Box 45,

Mulanje.

Dear Madam or Sir,

RE: Request to use Mulanje Mission College of Nursing as a research site

I would like to request for permission to conduct a study at your institution.

I am a student pursuing Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing. I intend to conduct a study titled **"Factors hindering implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi"**

The study will involve interviewing nurse educators in CHAM nursing colleges in Malawi. This study will be implemented upon approval of the proposal by Kamuzu College of Nursing Research Committee and College of Medicine Research and Ethical Committee (COMREC).

The participation in the study will be voluntary and research ethical principles will be observed at every level of the study.

Looking forward to your response.

Yours Faithfully,

Mercy P. Chirwa.

Subject: RE: Permission to Conduct a Study at MMCNM

To Whom it May Concern

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT A STUDY AT MMCNM

This letter serves to confirm that Ms Mercy Chirwa has been granted permission to conduct a study at Mulanje Mission College of Nursing and Midwifery for her Thesis in fulfillment of her MSc Degree at Kamuzu College of Nursing.
For further information please contact the College Principal on: 0888857847 or
email: susan.sundu@yahoo.com

Yours faithfully,

Susan Sundu (Mrs.)
College Principal

Kamuzu College of Nursing,
Lilongwe Campus,
Private Bag 1,
Lilongwe.

July 30, 2013.

The College Principal,
Malamulo College of Health Sciences,
P.O. Box 55,
Makwasa.

Dear Madam or Sir,

RE: Request to use Malamulo College of Health Sciences as a research site

I would like to request for permission to conduct a study at your institution.

I am a student pursuing Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing. I intend to conduct a study titled **"Factors hindering implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi"**

The study will involve interviewing nurse educators in CHAM nursing colleges in Malawi. This study will be implemented upon approval of the proposal by Kamuzu College of Nursing Research Committee and College of Medicine Research and Ethical Committee (COMREC).

The participation in the study will be voluntary and research ethical principles will be observed at every level of the study.

Looking forward to your response.

Yours Faithfully,

Mercy P. Chirwa.

MALAWI ADVENTIST UNIVERSITY

MALAMULO COLLEGE OF HEALTH SCIENCES

P. O. Box 55, Makwasa, Malawi, Africa.

PRINCIPAL
MRS. A. Y. Kachiwala; MSc Nursing,
BSc HSE, Dip Nursing, UCM.

Phone : 265 1 470 117
Mobile : 265 888 501 186
Telefax : 265 1 470 139
E-mail : malamulo.college@yahoo.com

All official correspondence to be addressed to the Principal

Ref. No. MCHS/13/AK/MPC/Vol.1

4th September, 2013.

Mis. Mercy P. Chirwa
Kamuzu College of Nursing
Lilongwe Cumpus
P/Bag 1
Lilongwe

Dear Mis. M. Chirwa,

Re: CLEARANCE REQUEST TO CONDUCT STUDY AT MALAMULO COLLEGE OF HEALTH SCIENCES

Malamulo College of Health sciences is pleased to accept your request to conduct a study on "Factors hindering implementation of learner cantered teaching strategies in CHAM nursing Colleges in Malawi". However, the College would like to see the proposal before you collect the data.

We hope to benefit from your results after your study.

Yours Sincerely,

Malawi Adventist University
Malamulo College of Health Sciences
THE PRINCIPAL
2013 -09- 04
P.O. Box 55, Makwasa, Malawi, Africa
Tel / Fax: +265 (0) 1 470 139

Mrs. A. Kachiwala

PRINCIPAL, MCHS

A Medical Educational Institution of the Seventh-day Adventists

Kamuzu College of Nursing,
Lilongwe Campus,
Private Bag 1,
Lilongwe.

July 30, 2013.

The College Principal,
St John's College of Nursing,
P.O. Box 18,
Mzuzu.

Dear Madam or Sir,

RE: Request to use St John's College of Nursing as a research site

I would like to request for permission to conduct a study at your institution.

I am a student pursuing Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing. I intend to conduct a study titled **"Factors hindering implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi"**

The study will involve interviewing nurse educators in CHAM nursing colleges in Malawi. This study will be implemented upon approval of the proposal by Kamuzu College of Nursing Research Committee and College of Medicine Research and Ethical Committee (COMREC).

The participation in the study will be voluntary and research ethical principles will be observed at every level of the study.

Looking forward to your response.

Yours Faithfully,

Mercy P. Chirwa.

ST. JOHN'S COLLEGE OF NURSING

P.O. Box 18
Mzuzu
Malawi
Central Africa

Telephone: (265) 311 331
Fax: (265) 311 331
E-mail: sjcnm.mw@gmail.com

11/11/13

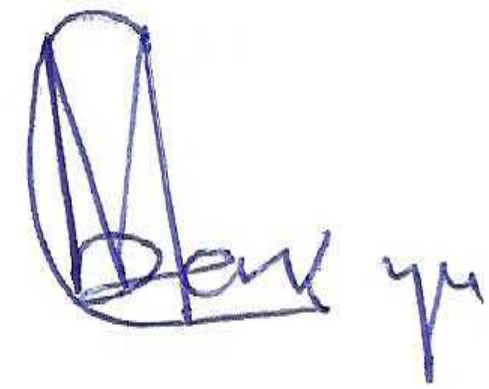
Mercy Chirwa,
KCN,
P/bag 1,
Lilongwe,
Dear Mercy,

PERMISSION TO CONDUCT A STUDY AT ST JOHN'S COLLEGE OF NURSING & MIDWIFERY

I write in response to your request to conduct a study at the above named institution. On behalf of the college, I am pleased to inform you that you have been granted permission to do so, provided you produce a clearance letter from ethics committee before you start data collection.

Wishing you all the best as you pursue your studies.

Yours faithfully,



BalwaniMbakaya

PRINCIPAL TUTOR.

Kamuzu College of Nursing,
Lilongwe Campus,
Private Bag 1,
Lilongwe.

July 30, 2013.

The College Principal,
Trinity College of Nursing,
P.O. Box 51937,
Limbe.

Dear Madam or Sir,

RE: Request to use Trinity College of Nursing as a research site

I would like to request for permission to conduct a study at your institution.

I am a student pursuing Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing. I intend to conduct a study titled **"Factors hindering implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi"**

The study will involve interviewing nurse educators in CHAM nursing colleges in Malawi. This study will be implemented upon approval of the proposal by Kamuzu College of Nursing Research Committee and College of Medicine Research and Ethical Committee (COMREC).

The participation in the study will be voluntary and research ethical principles will be observed at every level of the study.

Looking forward to your response.

Yours Faithfully,

Mercy P. Chirwa.

Trinity College of Nursing and Midwifery,

P.O. Box 51937

Limbe

12th September, 2013

Kamuzu College of Nursing

Lilongwe Campus

Private Bag 1

Lilongwe

Dear Mercy P. Chirwa,

Re: **ACCEPTANCE TO CONDUCT A STUDY AT OUR INSTITUTION**

I am pleased to inform you that you have been accepted to conduct a study on "Factors hindering implementation of learner centered teaching strategies in CHAM Nursing Colleges in Malawi" at our institution. I hope this is purely for academic purposes.

Wishing you all the best

M. BWANALI

PRINCIPAL

Kamuzu College of Nursing,
Lilongwe Campus,
Private Bag 1,
Lilongwe.

July 30, 2013.

The College Principal,
Nkhoma College of Nursing,
P.O. Box 48,
Nkhoma.

Dear Madam or Sir,

RE: Request to use Nkhoma College of Nursing as a research site

I would like to request for permission to conduct a study at your institution.

I am a student pursuing Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing. I intend to conduct a study titled **"Factors hindering implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi"**

The study will involve interviewing nurse educators in CHAM nursing colleges in Malawi. This study will be implemented upon approval of the proposal by Kamuzu College of Nursing Research Committee and College of Medicine Research and Ethical Committee (COMREC).

The participation in the study will be voluntary and research ethical principles will be observed at every level of the study.

Looking forward to your response.

Yours Faithfully,

Mercy P. Chirwa.

NKHOMA COLLEGE OF NURSING

P. O. Box 48, **NKHOMA** or P/Bag 228, **LILONGWE**
Tel: +265 127 9422/424 E-mail: nkhomacollege@gmail.com

All communication should be addressed to:
The college Principal

In reply please quote:

Our Ref: 09/05/AD/013
2013

5th September

Mercy P. Chirwa
Kamuzu College of Nursing
Lilongwe Campus
Private Bag 1
LILONGWE

PERMISSION TO CONDUCT A RESEARCH STUDY

The College would like to accept your request to conduct a research titled "**Factors hindering implementation of learner centered teaching strategies in CHAM Nursing Colleges in Malawi**" However the College is requesting you to send a copy of Certificate from Ethics Committee before conducting your research.

Wishing a good success during your research here at Nkhoma College

Sincerely Yours,

THE PRINCIPAL
NKHOMA COLLEGE OF NURSING
05 -09- 2013
P. O. BOX 48, NKHOMA
TEL: 01-751917

F. NDEGE
ACTING PRINCIPAL

Kamuzu College of Nursing,
Lilongwe Campus,
Private Bag 1,
Lilongwe.

July 30, 2013.

The College Principal,
St Lukes College of Nursing,
P.O. Box 21,
Chilema.

Dear Madam or Sir,

RE: Request to use St Lukes' College of Nursing as a research site

I would like to request for permission to conduct a study at your institution.

I am a student pursuing Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing. I intend to conduct a study titled **"Factors hindering implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi"**

The study will involve interviewing nurse educators in CHAM nursing colleges in Malawi. This study will be implemented upon approval of the proposal by Kamuzu College of Nursing Research Committee and College of Medicine Research and Ethical Committee (COMREC).

The participation in the study will be voluntary and research ethical principles will be observed at every level of the study.

Looking forward to your response.

Yours Faithfully,

Mercy P. Chirwa.

ST. LUKE'S COLLEGE OF NURSING & MIDWIFERY,

P.O. BOX 21, CHILEMA

TEL: 0995475430/0888360550

16th October 2013

Dear Mercy Chirwa

PERMISSION TO CONDUCT AN ACADEMIC Research

Thank you for the letter which you wrote asking for permission to conduct an academic research at our institution.

Am glad to inform you that the college management has granted you permission to go ahead with your study here.

Thank you

Maxwell Pangani

(Signed)

Kamuzu College of Nursing,
Lilongwe Campus,
Private Bag 1,
Lilongwe.

July 30, 2013.

The College Principal,
Ekwendeni College of Nursing,
P.O. Box 19,
Ekwendeni.

Dear Madam or Sir,

RE: Request to use Ekwendeni College of Nursing as a research site

I would like to request for permission to conduct a study at your institution.

I am a student pursuing Master of Science in Nursing and Midwifery Education at Kamuzu College of Nursing. I intend to conduct a study titled **"Factors hindering implementation of learner-centred teaching strategies in CHAM nursing colleges in Malawi"**

The study will involve interviewing nurse educators in CHAM nursing colleges in Malawi. This study will be implemented upon approval of the proposal by Kamuzu College of Nursing Research Committee and College of Medicine Research and Ethical Committee (COMREC).

The participation in the study will be voluntary and research ethical principles will be observed at every level of the study.

Looking forward to your response.

Yours Faithfully,

Mercy P. Chirwa.

CHURCH OF CENTRAL AFRICA PRESBYTERIAN

SYNOD OF LIVINGSTONIA

Ekwendeni College of Health Sciences

P.O Box 49, Ekwendeni, Malawi

Tel/Fax: +265(0) 1339 339

Email: ekwehealthcol@gmail.com

All official Correspondence to be addressed to The College Principal

Ref:

6th September 2013

Mercy P. Chirwa
Kamuzu College of Nursing
Lilongwe Campus
Private Bag 1
Lilongwe

Dear Mercy Chirwa,

RE:CLEARANCE REQUEST TO CONDUCT STUDY AT EKWENDENI COLLEGE OF HEALTH SCIENCES

Reference to your letter dated 30th July 2013 in which you applied for permission to conduct a study at Ekwendeni College of Health Sciences on "Factors hindering implementation of learner centred teaching strategies in CHAM nursing colleges in Malawi"

I am pleased to inform you that permission has been granted and you will be given all the assistance that you will need.

Yours faithfully,

E. A. Kasonda
ACTING COLLEGE PRINCIPAL