INSTITUTIONAL AND STUDENT FACTORS AS PREDICTORS OF LEARNING OUTCOMES IN REPRODUCTIVE HEALTH PROGRAMME AMONG TRAINEE MIDWIVES IN SOUTH-WESTERN NIGERIA

BY

MARTHA ILUNAMIEN UPONI

MATRIC NO: 160126

R.N. R.M.E. B.Ed., M.Ed.(Ibadan)

A Thesis in The Department of Human Kinetics and Health

Education submitted to the Faculty of Education in Partial Fulfillment of the Requirements for

the Degree of

DOCTOR OF PHILOSOPHY

of the

UNIVERSITY OF IBADAN

FEBRUARY, 2020

CERTIFICATION

I certify that this project was carried out by Martha Ilunamien UPONI in the Department of Human Kinetics and Health Education, University of Ibadan, Nigeria

_____ _____

Supervisor **Date**

Prof. Francisca C. Anyanwu.

Department of Health Education

University of Ibadan, Ibadan

DEDICATION

This project is dedicated to the Almighty God, the Alpha and Omega, the Author and finisher of my Faith, who gave me inspiration and insight for this programme. To my dear husband who encouraged me and children for their moral support during the write-up.

ACKNOWLEDGEMENTS

My sincere thanks and praise go to the Almighty God, the ancient of days, in whom is the treasure of wisdom and knowledge. God, in his infinite mercy conferred upon me inspiration and insight from above for this programme.

My sincere appreciation also goes to my able and articulate supervisor Prof. Francisca C. Anyanwu for her unreserved support and assistance, for taking her time to scrutinize the minute detail of the work. May the Almighty God enrich you in all wisdom and understanding and continue to lift you up in all your endeavors.

I am also grateful to all my lecturers; especially the head of department, Prof. J. F. Babalola,, others are Professors M.A. Ajayi, B.O. Ogundele, O.A. Moronkola, B.O. Asagba, E.O. Morakinyo, A.O. Fadoju, O.A. Adegbesan, I. O. Oladipo, Doctors, Adetoun T. Akinwusi, O. Odelola, S. Famuyiwa, Oluwatoyin M. Jayeioba in the department for their counsel and moral support. May God reward them abundantly.

I sincerely appreciate able lecturers in other department for their input, Profs. G. J. Adewale. K. Kester, Doctors A. Tella, D.A. Oluwole, Ruth O. Adio-Moses. May God bless you richly. My posthumous appreciation goes to Profs. K. O. Omolawon, A. O. Abass and J. Osiki for their contributions and mentorship; may their gentle souls rest in peace. Also I appreciate all the office staff at the department of Human Kinetics and Health Education: I.F. Talabi, Odubiyi Femi, Thomas Abayo, Ola Ayobami, Orimadegun Adebiyi and Adeleke Temitayo. Gratitude to my colleagues at school of midwifery UCH for their moral support and prayers. I appreciate my fellow Ph.D students both current and past; R. Akintujoye, M. Afolabi, K. Kadiri, G. Safiu, T. Duyilemi, O. Ogunmola, Ladi Badmus, Unice Omeboh, F. Adebayo, Sylvester Reuben Okeke, O.Ogunade, K. Amao, R. Ololade and a host of others too numerous to mention. Thank you all for your contributions. My Thanks to Drs. Bolaji Iyanda and I. Lateef and a host of others who contributed to my success. Thanks to my typist aunty Ike and my data analyst, thanks to Rueben and Uche Okeke for their input, God bless you all. Also, I appreciate my spiritual parents in the LORD for their prayers and concern. They are Pioneer Associate Pastor (Mrs) Chinyere Obed, Professor Pastor Gabriel and Barrister Ruth Akinbola, Pastor Emmanuel and Mrs Tina Joseph, Honourable Justice Olatokunbo and Professor (Mrs) Oluyemisi Bamgbose (SAN), Elder Adebayo and Mrs Odunayo Oke, Elder Johnson and Mrs Toyin Adewumi, Elder Daniel and Mrs Lucy Oshafi, Elder Yemi and Mrs Yemisi Alao, and Elder

Professor Adeolu and Mrs Anne Adedapo. My posthumous gratitude goes to pioneer pastor; Dr. U.Obed of the Glory tabernacle ministry for his spiritual mentorship and prayers; may his gentle soul rest in peace. I also wish to appreciate my siblings and their spouses; Pastor Emmanuel and Mrs Adesuwa Agwima, Dr Augustine and Mrs Christiana Okoruwa, Architect Uche and Dr (Mrs) Rachel Obed, Mr Olusoji and Mrs Victoria Oloyede, Mr Samuel Agwima, Mr Layo and Mrs Ruth Oludotun, Mr Lawson and Mrs Josephine Olu-Osagie, Mr Christian and Mrs Faith Okoeguale for their care and moral support. Appreciation also goes to my mother-in-law, Mama Mary Uponi for her words of encouragement, my sibling in-laws and their spouses; Mr Matthew and Mrs Uzoma Uponi, Barrister Anthony and Angela Uponi, Pastor Patrick and Mrs Felicia Uponi, Mr Benjamin and Mrs Kobune Uponi, Mr Cornelius and Clara Osubor, Barrister Richard and Mrs Ngozi Uponi, Mr Uche and Barrister Omuwa Uponi and family for your love and care. To my dear parents; Mr Thomas and Mrs Lucy Agwima for your support and prayers. I thank God for my wonderful children, Bethel, Mercy, John and Emmanuel for their concern and support throughout the programme.

My gratitude goes to members of my discipleship centre of the Glory tabernacle Ministry Bodija Ojurin Ibadan. Thanks for your prayers and moral support. Also thanks to the members of the Closet of prayer and our leader Dr. Shade Akinsete. God bless you all. Thanks to the Glory women and Blessed singles team of the Glory Tabernacle Ministry. Thanks to the Aho community Christian fellowship at Ajibode.

Finally, I am most grateful to God Almighty for my wonderful husband, Elder Joseph Ikechukwu Uponi for his moral, spiritual and financial support through thin and thick. May the LORD Almighty reward your labour of love abundantly. Amen.

UPONI MARTHA ILUNAMIEN

ABSTRACT

Reproductive health is one of the core programmes in midwifery education necessary for the competency development of the trainee midwife. Records have shown that trainee midwives' performance in Reproductive Health Programme (RHP) is on the decline in schools of midwifery across southwestern Nigeria. This has become worrisome and a major concern to nursing professionals and practitioners. Previous studies focused largely on curriculum development, availability of resource materials and tutor–related factors with less emphasis on institutional and student factors. This study, therefore, was designed to examine the institutional factors (Curriculum Content Knowledge-CCK, Continuous Professional Development-CPD and Learning Environment-LE) and student factors (Academic Support Seeking-ASS, Academic Self-efficacy-AS and Self-regulated Learning-SrL) as predictors of learning outcomes (knowledge, attitude to and skills) in RHP among trainee midwives in southwestern Nigeria.

Bandura's Social Learning Theory provided the framework, while the survey design was adopted. The purposive sampling technique was used to select seven accredited Post-basic Schools of Midwifery (PbSM) in the South-west (Eleyele, Ogbomoso, Ado-Ekiti, Ilesa, Osogbo, Yaba and Idi-araba). The 30 nurse tutors and 228 final year trainee midwives were enumerated. Teachers (r=0.92) and Students (r=0.86) questionnaires were used. Knowledge of Reproductive Health (r=0.70), Skills Acquisition of Reproductive Health (r=0.70) and Attitude towards Reproductive Health (r=0.86)Tests were used. Focus group discussions were held with some trainee midwives in each PbSM. Quantitative data were analysed using Multiple regression at 0.05 level of significance while qualitative data were content analysed.

The students' age was 27.74 ± 5.07 years; 73.3% had diploma certificate in nursing education, while 26.7% had first and higher degrees. The nurse tutors adopted teacher-centered teaching methods: practical demonstration (96.7%) and lecturing (90.0%), while modern teaching approaches were rarely used: seminar presentation (23.0%), simulation/Internet use (20.0%) and tutorial (22.0%). There were significant joint predictions of institutional factors on attitude ($F_{(3;224)}$=17.02; Adj. R^2=0.18); knowledge ($F_{(3;224)}$=15.23; Adj. R^2=0.16) and skills ($F_{(3;224)}$=12.57; Adj. R^2=0.13); accounting for 18.0%, 16.0% and13.0% of variance of reproductive health. There was a significant joint prediction of student factors on knowledge ($F_{(3;224)}$=71.03; Adj. R^2=0.48); skills ($F_{(3;224)}$=55.83; Adj. R^2=0.42) and attitude ($F_{(3;224)}$=9.02; Adj. R^2=0.10); accounting for 48.0%, 42.0% and 10.0% of variance of reproductive health. The CCK (β=0.39, β=0.34, β=0.37); CPD (β=0.04, β=-0.04, β=0.02) and LE (β=0.08, β=0.26, β=0.06) had relative contributions to knowledge, attitude to and skills of reproductive health, respectively. The ASS (β=0.04, β=0.13, β=0.10); AS (β=0.48, β=0.34, β=0.36) and SrL (β=0.51, β=0.15, β=0.50) had relative contributions to knowledge, attitude to and skills of reproductive health, respectively.

The learning environment lacked modern facilities for training. The trained nurse tutors were inadequate, while there were insufficient instructional materials and poor environment for teaching and learning.

Curriculum content knowledge, continuous professional development, learning environment, academic support seeking, academic self-efficacy and self-regulated learning determined the knowledge of, attitude to and skills of reproductive health among trainee midwives in south-western, Nigeria. Therefore, there is need to give attention to modern teaching approaches, conducive environment and adequate instructional materials by the heads of schools of midwifery.

Keywords: Midwifery education, Trainee midwives, Nurse tutors in southwestern Nigeria and Reproductive health programme

Word count: 489

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURE

CHAPTER ONE

INTRODUCTION

Background to the Study

Reproductive Health (RH) concept was adopted by United Nations International Conference on Population and Development (ICPD) held in Cairo, Egypt in 1994. The concept is crucial and a part of holistic health. The populace are affected in terms of their employment, economic conditions, education, family environment and living condition. The Nigerian government is determined to put into operation the reproductive health concept for the improvement of the health and quality of life of its citizens. In this respect, one area of major concerns is that of making quality reproductive health services accessible to all Nigerians. Thus the development of appropriately knowledgeable and skilled midwives holds a central position. The training activity for which the present curriculum was designed represented one of the efforts aimed at developing human resources for quality reproductive health service delivery (National Reproductive Health policy, 2001; United Nations Population Fund (UNFPA), 2010). Therefore, it is essential that well trained midwives should be key providers of reproductive health care in order to improve the general health status of the family. This action would benefit the whole society. According to World Health Organisation (2004) and UNFPA (2010), it was acknowledged that the necessary intervention for reducing maternal morbidity and mortality is to have a competent health care provider with midwifery skills at delivery and also ensuring the health of the new born.

The reproductive health status in Nigeria is poor. This is accounted for, as shown by indicators such as the high levels of Maternal Mortality Ratio (MMR) estimated at 630 per 100,000 live births (WHO, 2011), maternal mortality rate of about 576/100,000 live births (Nigerian Demographic Health Survey, 2013), total fertility rate of 5.5 (NDHS, 2013), HIV prevalence rate of 3.4% among ante-natal clinic clients(Federal Ministry of Health, 2015), and a national prevalence rate of Female Genital Mutilation (FGM) of 30% among adult woman (NDHS,2013). Also, among young people, there is a record of high rate of unprotected sexual activity, teenage

pregnancy, unsafe abortion and sexually transmitted infections. The situation depicted above clearly indicates a need for the provision of standard reproductive health information and services, which are comprehensive in scope, to be delivered in a user-friendly and integrated manner. To meet these needs, the development of appropriate human resources is critical.

The National Reproductive Health Policy set up strategies and institutional framework for the implementation of the policy in Schools of Midwifery. The school's curriculum reflects the philosophy of reproductive health programme and provides appropriate practical training in form of Life-Saving Skills (LSS). The Nursing and Midwifery Council of Nigeria (NMCN) incorporated the live-saving skills of the reproductive health programme in the midwifery curriculum so that midwives can be legally protected in meeting the needs for obstetric emergencies. The NMCN also encourage and support qualified midwives to utilise live-saving skills in maternal health services in order to effect a decline in high maternal and morbidity rates.

The Reproductive Health programme package includes Sexually transmitted infections including HIV/AIDS, Adolescent sexual and reproductive health information, education and communication services. Early diagnosis and treatment for breast and cervical cancer, The management of obstetric and neonatal complications and emergencies, Family planning services, Prevention of abortion and treatment of complications, Prevention and appropriate treatment of sub-fertility and infertility, Active discouragement of harmful practices such as female genital cutting, Male involvement in reproductive health, Antenatal care, skilled attendance at delivery, and postnatal care, Education and Promotion of support for exclusive breast feeding, Management of obstetric and neonatal complications and emergencies, management of complications resulting from unsafe abortion, Prevention and treatment of reproductive tract infections.

In Nigeria, nurses and midwives hold a special place as quality reproductive health care providers. They constitute a great proportion of skilled primary health care workers in the community. Globally, midwives with appropriate service delivery skills have been recognized as the central force in the reduction of maternal morbidity and mortality. They are members of the nursing cadre and serve as care givers, counselors, health educators and advocates as well as opinion leaders in many communities in Nigeria. The present curriculum, for the training of nurse/midwives, has been developed with these multidimensional roles in mind. It aims to equip trainees with

knowledge and skills in clinical areas, result-based management as well as inter-personal communication and counseling. The maternal health care services are affected by the existence of adequately trained nurses and midwives in Nigeria. The preparation originates from the schools and proceeds to the health care delivery point. The quality of cognitive, affective and psychomotor skills acquired by the trained midwives influences the quality of nurse/midwife graduates. The midwifery education is targeted at producing knowledgeable, competent and versatile midwife to meet the criteria of the ICM definition of a midwife and the regulatory standards of the body resulting to professional licensure as a midwife. The curriculum for midwifery education has a minimum of 41%-50% theory and a minimum of 51%-60% practical. The approaches used for teaching and learning are evidenced based. This will result in the promotion of adult learning and competency based education.

The principle guiding education in Nigeria and globally is to empower the learner with the relevant knowledge, attitude and skills. This will enable the learner to achieve optimal benefits from the educational programme and to live a fulfilled life. This will promote the welfare of the society. The Nigeria Vision 20:2020, is a notable objective necessary for the achievement of the Millennium Development Goals. This is to improve the national prospects for the achievement of the Millennium Development Goals and the creation of sustainable employment. In order to achieve this long-term broad objectives, one of the challenges is for the nation to raise the quality and standard of education to international comparative levels. The quality of educational inputs or variables will determine the quality of the outcome variables. Evaluation is necessary to determine whether the individual learner, teacher and the institution are measuring up to the standards of setting up the educational institutions (Federal Ministry of Education, 2009). There are enabling inputs that ought to be imputed into any programme of education that aims at quality. The inputs necessary for academic goals achievement includes curriculum content, learning environment, teachers, infrastructure, learning materials, etc. They determine the success of an educational programme. Ewell (2009) and Moronkola (2012) opined that the issue of evaluation of learning outcomes must be seriously taken care of since learners' outcomes in subject(s) or course(s) offered in educational institutions will determine the quantity and quality of future manpower of any nation.

The educational outcomes indicates the ultimate goals to which the development of an educational programme should aim. One unique strategy, among others, to

improve dwindling educational standard is through quality curriculum as content and as process. Hence, there must be regular review of the programme. In addition, there should be on-the-job training and in-service training programme. This is to enhance teacher's performance and productivity (Ajala, 2012). The learners' personal characteristics need to be motivated in other to improve their learning outcomes.

The resources available to support teaching and learning and the way resources are deployed will strongly influence it's success. It is obvious that schools without adequate teaching staff, instructional materials and infrastructures may not be able to do an effective job. In that case, teaching and learning resources are important for education quality.

Every Nigerian must have opportunity to acquire quality education in an environment conducive for learning. One of such opportunities is the Midwifery Education. Midwives are a key part of the work force that provide primary health care for women and families. They work in the communities to prevent diseases and promote health. They provide immediate care when complications arise. Proficient and dependable midwives are able to determine cares that lies within their competence and identify problems for reference. The midwifery education curriculum was revised in 1991 and 2006 respectively by the Nursing and Midwifery Council of Nigeria (NMCN). Reproductive health programme was integrated into the curriculum as a key component in midwifery education in line with the 2001 National Reproductive Health policy from the Federal Ministry of Health.

According to the (2011) International Confederation of Midwives (ICM), a midwife is recognized as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births and to provide care for the newborn and the infant. This care includes preventive measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care, the carrying out of emergency measures and other appropriate assistance. The Midwifery education curriculum was revised to embrace the concept of reproductive health in other to prepare midwives to provide midwifery care within the broader concept of reproductive health. Therefore, midwives are trained to offer services encompassing maternal and child health, family planning and reproductive health.

In education, Bloom taxonomies (Bloom, 1956) classify three domains of learning; cognitive, affective and psychomotor. The cognitive domain is concerned with intellectual objectives; it deals with knowledge and the development of intellectual abilities and skills. The affective domain describes interest, attitudes, and values. In midwifery education, this domain relates to how these characteristics impact on the practice of midwifery. The psychomotor domain refers to the manipulative or motor-skill area. This domain is concerned with physical movement that requires coordination. Psychomotor skills are technical skills and include, acquisition of those techniques, procedures or methods that involve the use or manipulation of equipment or instruments. It also involves the use of the individual's own motor skills or abilities. The trainee midwife requires training skills in Reproductive health. Oermann (2010) identified that psychomotor skills have a cognitive aspect, which involves understanding the principles underlying each skill, and an affective dimension, which is concerned with the nurse's values and attitudes while performing a skill.

In 2009, WHO published global standards for the initial education of nurses and midwives 'Initial education' refers to the programme of education required for a person to qualify as a professional nurse or midwife. These global standards, developed with inputs from ICM and the International Council of Nurses (ICN), sought to develop competency-based outcomes and ensure that the future health workforce meets population health needs. More recently, ICM has developed global standards that are specific to midwifery education (ICM, 2011), where a fully qualified midwife has a formal education based on ICM essential competencies. The development of competency-based curriculum is to embrace the wider concepts of Reproductive Health in order to build an appropriate professional cadre of midwives to achieve reproductive health for all.

The assessment of students provides information for improving learning and teaching. It involves teaching, learning, and outcomes between students and the teachers. This information from the outcome is to inform the teachers about the student performance so as to make changes in the learning environment. This provides information for improving learning and teaching. The result of the feedback is given to both students and parents so as to improve their learning and study habits. Midwifery education have diverse forms of assessment of practice; these include written tests, practical sessions, oral test, projects, term papers/seminar, etc. The most effective way to state instructional objectives is in terms of the behaviours that one

expects students to achieve at the end of a course.

Gronlund and Brookart (2008) maintained that defining objectives in terms of desired student learning outcomes shifts the focus from the learning process to the learning outcomes, and also provides a basis for the assessment of student learning. The outcome based education is primarily to promote the expected changes in the learners. This can be achieved by improving knowledge, skills developments and influencing attitudes, values and judgment positively. Outcome based education affirms that assessment of achievement promotes learning. The determined goal can be attained by various techniques strategies and processes. The development of the reproductive health programme curriculum is competency-based training. As such, the learning output have been defined in terms of specific tasks that the student midwife would be expected to perform competently at the end of each module and ultimately at the end of the training as a qualified nurse/midwife. The clear articulation of the learning outcomes forms the bases for evaluating the effectiveness of the teaching and learning process.

Healthcare delivery is an important outcome of the training received by the trainee midwives. Hence, the need to assess the institutional factors of curriculum content knowledge of the trainee, learning environment and teacher's continuous professional development and student factors of academic support seeking, academic self-efficacy and self-regulated learning predicting learning outcomes in Reproductive health programme among trainee midwives.

Curriculum content and learning processes are driven by outcomes and competences specified for educational programmes. In midwifery education, the trainee midwife identifies competencies needed by graduates to meet the needs of specific professional roles. Curriculum recognizes four areas of educational needs. They are subject matter, teaching and learning process, assessment and learning outcomes. The curriculum acknowledges the relevance of training. This is to ensure quality assurance and employer focus of the training, is attained throughout the programme. Teaching influences learning and poor teaching has negative effect on students' learning (NMCN, 2010). Good teaching ability is evident when the teacher display good mastery of the subject matter. The teacher must communicate enthusiasm and professional activity to support students in developing their academic skills. A teacher should have an informed understanding of how students learn and demonstrate this in their contact with students in a range of teaching contexts. The NMCN

developed the framework that constitute the core curriculum for formal lectures and clinical instruction and also set standard for schools. The NMCN comprehensive curriculum integrates classroom lectures, practical demonstrations in the laboratories, and clinical experiences at health facilities including primary care settings and hospitals. Theoretical learning supports and reinforces clinical training in skills related to reproductive health programme. According to Adesoji and Olatunbosun (2008), in any teaching and learning situation, the students, the teachers, the curriculum content and the learning environment are the four pivots for educational advancement

Learning environment is a factor that predicts learning outcomes in reproductive health programme. It can be measured in terms of infrastructures, learning resources, teacher-student ratio, class size and number of educators. Akpa, Udoh and Fagbamiye (2005) and Ezeonwu (2013) identified some of the factors militating against quality of higher education to include: inadequate fund, shortage of physical facilities, shortage of qualified teachers, unstable educational policies, lack of uniform curriculum and poor supervision and monitoring. According to the standards of NMCN (2010) Midwifery schools requires accessible, current and relevant physical facilities including, classrooms, clinical practice sites, information and communications technology, clinical simulation laboratories and libraries.

The NMCN 2016 revised curriculum mandated that the ratio of registered educators to students in the classroom and the clinical setting should be 1:6 and a class size of 50 students. The unavailability of adequate infrastructure, as well as teaching materials adversely affects the teachers' efforts. Ezeonwu (2013) reported that lack of basic educational items that facilitate teaching and learning hinders efforts on nursing workforce development. Such items include books, projectors, computers, laboratory academic journals, midwifery kits and equipment for demonstration. Ezeonwu further stressed in her findings that most of the text books that are written are foreign-based. Books written by Nigerian authors regarding the health problems of our population are few.

It was also reported that some schools have just started making use of the internet facility but are not able to subscribe in order to access new online teaching, learning and research materials. Therefore, the quality of instruction, the quality of nurse/midwife graduates, and the quality of care delivered to clients will affect the outcomes of reproductive health services.

Teacher's continuous professional development in form of attendance at relevant

in-service seminars or workshops is a factor that affect students' learning outcomes in reproductive health programme. Noohi, Karimi-Noghondar, Haghdoost (2012) reported that the ability to think critically is an essential element of higher education and more specifically, nursing education. Nurse/Midwife educators are crucial to educational interaction, thereby having the potential to facilitate positive critical thinking abilities and dispositions of students. Ajayi (2009) stated six indicators for assessment of quality in higher education system. These include quality of instructions, quality teachers, quality facilities, the quality of evaluation procedure, quality morality, and the quality of administration and management. According to American Nurses Association (2014), Evidenced Based Practice (EBP) and critical thinking are required standards in health care today. So, on this premise, it is the belief that midwife educators need to have the competencies of EBP and critical thinking to instill them in their students to make critical client-care decisions. According to NMCN (2010) It is therefore necessary that teachers be encouraged to go for continuous professional training in their areas of specialization in order to update knowledge to enhance expertise. The NMCN in 2010 mandated that teaching staff should attend relevant long and short term courses at least once in three years to upgrade and update competency academically and technically. This will equip teachers to give optimal academic support to the students. Learning outcomes of the trainee midwives can also be predicted by student factors of academic support seeking, academic self-efficacy and self-regulated learning.

Academic support seeking is required by students' in competency-based learning to attain high levels of critical thinking and reflection. Postmontier (2008) reported that skills are best learned as a result of problem-based learning. Problem-based learning in reproductive health make learners become active participants and responsible for their learning. In order to remain current in practice learners are to develop a lifelong habit of learning. Adeniran (2012) reported academic support to be a good predictor of academic achievement. The personal and psychological characteristics of learners play an important role in their academic success.

Academic self-efficacy is regarded as self-belief on how well one can perform an academic assignment. The higher self-efficacy one has, the more increased are the amount and durability of one's effort. Academic self-efficacy is referred to as the confidence one has to be able to perform well academically. The higher the self-efficacy, the more the effort by the learner. Adeyemo (2007) and Hodges (2008) stated

that the learner with higher self-efficacy will put in more effort while the one with anxiety will exhibit less effort in times of difficulty. Academic self-efficacy also refers to the ability to personally organize and execute the learning activities in reproductive health. (Yoon and Bae, 2008; Akomolafe, Ogunmakin, and Fasooto, 2013) argued that self-efficacy impacts the learners academic outcomes. The learners positive self- efficacy impacts their learning outcomes in the area of skill acquisition, choice and persistence of task and academic performance. Salami (2010) reported that learners with low self-efficacy perform lesser than those with higher self-efficacy. Those who are highly motivated complete their task and exhibit greater efforts than those who are not motivated. The learner with a higher self-efficacy engage in deeper learning tasks that leads to better performance, increasing the student academic self-efficacy and self- regulation.

Self-regulation is important in the teaching and learning process in Reproductive health programme. Wolters (2011) and Jarvela and Jarvenoja (2011) stated the need for self- regulation, which will enable the learner improve their learning habits and study skills. The teachers awareness of the factors that imparts the learner's ability to strategize and self- regulate study habits will enhance self- regulated learning in the class. Nwafor, Obodo and Okafor, (2015) stated that learning strategies are put in place to enhance academic outcomes. Zimmerman (2008) and De Bruin, Thiede and Camp (2011) revealed self- regulated learning to be one of the important component of academic achievement in the classroom learning. It was further stated that learners willing to make use of self-regulated strategies tend to perform better in their academics than their counterparts who make less use of them.

Self- regulated learning (SRL) refers to the numerous strategies and actions for promoting the learners' knowledge, attitude and skills. The strategies are; the ability to organize, evaluate oneself and set objectives, in order to acquire knowledge in reproductive health. De Bruin, Thiede and Camp (2011) noted that self-regulation enable learners to monitor performance and evaluate their academic progress. Moreover, learners who are self- regulated become more self-efficacious in learning than those with poor self-regulation skills. The learners believe they can exert self-regulatory skills to help them learn effectively. Kim and Yan (2014) stressed that teachers are to consider SRL strategies as they prepare the instructional materials because of the close relationship between SRL strategies and the learning outcomes.

Educators, learners and stakeholders inputs support learning and achievement of

desired learning outcomes. Previous studies focused largely on performance indicators in maternal and child health programme while this study focused on specific behavioural strategies to enhance effective learning outcomes in Reproductive health programme among trainee midwives. The learners' outcomes in Reproductive Health programme will influence the quality of healthcare delivery, which is an outcome of the training received. Therefore this study examined the institutional and students factors predicting learning outcomes in reproductive health programme among trainee midwives in South-west, Nigeria.

Statement of the Problem

The need for quality reproductive health care is of paramount importance to professional nurses and midwives because it fosters a healthy nation. The scientific knowledge explosion, consumer demands, emerging and re-emerging diseases mandate the nurses and midwives to keep abreast with the new trends required to meet reproductive health needs of the community. In Nigeria, the reproductive health status of women, men and adolescent is poor. The result, as shown by statistics revealed the high levels of maternal mortality rate of about 576/100,000 live births (Nigerian Demographic Health Survey, 2013), total fertility rate of 5.5 (NDHS, 2013), HIV prevalence rate of 3.4% among ante-natal clinic clients(Federal Ministry of Health, 2015), a prevalence rate of Female Genital Mutilation (FGM) of 30% among adult women (NDHS,2013) and also a high rate of sexually transmitted diseases, teenage pregnancy and unsafe abortions among young people. Following the millennium development goals (MDG), Reproductive Health services are now given priority in the sustainable development goals (SDG), with the aim of achieving universal access to sexual and reproductive healthcare services by 2030.

Previous studies by Ezenowu (2013) revealed that the competency of trained nurses and midwives affect maternal health services outcomes in Nigeria. Lewis (2010) case study also reported factors such as motivation, supportive environment for learning, teaching methods, curriculum and learning abilities as facilitators of learning among Nursing students. Adeniran (2012) also reported the causal influence the school and student exert on student midwives achievement in core midwifery courses. Knowledge, skills, and attitude are required to demonstrate competency in midwifery training. Reproductive health is one of the core programme in midwifery education necessary for the competency development of the trainee midwife. The researcher preliminary inquiry revealed that the trainee midwives ability to match the learning

outcomes with learning contexts in Reproductive health programme requires improvement.

In keeping with best practices, the notion of how best to keep the reproductive health programme more functional and as a swift response to the yearning of the society has continuously remained a concern. While the need to regularly upgrade the curriculum through the integration of new and more sustainable content is urgent, the dearth of relevant personnel and resources have been elusive due to inadequate funding of schools of midwifery. The nursing and midwifery council of Nigeria acknowledges the important dimension of teachers' continuous professional development and the consequent import on improved teaching and learning outcomes in Reproductive health programme. Despite this, the urgent desire on making teaching and learning activities of the teachers to directly impact the learning outcomes of trainee midwives in Reproductive Health is still far-fetched.

Moreover, in the search for sustainable learning outcomes of the reproductive health programme, the irritant on whether it is the student factors alone or the institutional factors solely and or the combination of both that predict and maintain actual outcomes is functionally conjectural. Hence, the study examined the institutional and student factors as predictors of learning outcomes in Reproductive health programme among trainee midwives in South-west, Nigeria.

Main objective of the study

This study examined the institutional and student factors predicting learning outcomes in Reproductive Health programme among trainee midwives in South-West, Nigeria.

Specific Objectives of the Study

The following specific objectives were accomplished in the study:

1. It predicted the contribution of Institutional factors(curriculum content, teachers continuous professional development and learning environment) on learning outcomes in Reproductive health programme among trainee midwives in South-West, Nigeria.
2. It examined the contribution of Student factors (academic support-seeking, self-regulated learning and academic self-efficacy) on learning outcomes in Reproductive Health programme among trainee midwives in South-West, Nigeria.
3. It ascertained the composite contributions of Institutional and Students factors

on learning outcomes in Reproductive Health programme among trainee midwives in South-West, Nigeria.

4. It examined the students' achievement in Reproductive Health programme in Schools of Midwifery South-West, Nigeria.
5. It ascertained the availability and adequacy of teaching and learning resources.

Research questions

The study provided answers to the following research questions:

1. How relevant and adequate is the curriculum content knowledge in predicting students' learning outcomes in reproductive health programme in schools of midwifery, South-West, Nigeria?
2. What is the students' perception of the learning environment for Reproductive health programme in Schools of Midwifery South West, Nigeria?
3. What is the teaching method mostly used by the teachers to teach Reproductive Health in Schools of Midwifery South-West, Nigeria?
4. What is the attitude of students towards Reproductive Health programme in Schools of Midwifery, South-West, Nigeria?

Hypotheses

The following hypotheses were tested in this study:

1. Institutional factors (curriculum content knowledge, teachers' continuous professional development and learning environment) would not significantly predict knowledge, attitude and skill in Reproductive health programme among trainee midwives in South-West, Nigeria.
2. Student factors (academic support-seeking, self-regulated learning and academic self-efficacy) would not significantly predict knowledge, attitude and skill in Reproductive Health programme among trainee midwives in South-West, Nigeria.
3. The composite contribution of Institutional and Students factors would not significantly predict knowledge, attitude and skill in Reproductive Health programme among trainee midwives in South-West, Nigeria.

Delimitation of the Study

The study was delimited to the following:

1. Descriptive survey research design of the correlation type.
2. Teachers and students in Schools of Midwifery in South-West Nigeria, namely Ogun, Osun, Oyo, Ondo, Ekiti and Lagos states as population

3. Total enumeration (census) and Purposive sampling technique.
4. Post-basic Midwifery schools
5. Final year trainee midwives
6. Independent variables of Institutional factors (curriculum content knowledge, teachers' continuous professional development and learning environment) and Student factors (academic support seeking, self-regulated learning and academic self-efficacy)
7. Dependent variables of students' knowledge, attitude towards reproductive health, and skills in reproductive health.
8. Self-structured and adapted instruments, trainee knowledge test, procedure checklist for skill test and Focus Group Discussion (FGD) guides for data collection.
9. Descriptive statistics of frequency counts and percentages to analyze demographic data and research questions while inferential statistics of Multiple Regression Analysis was used for testing the hypotheses at 0.05 alpha level.
10. Six (6) trained research assistants.

Limitation of the Study

The following limitation was encountered in the course of the study:

The teachers who were absent from school during the period of the study were excluded**.** The contributions from the excluded teachers would have made the result more robust.

Significance of the Study

The data generated from this study provided empirical basis for predicting students' learning outcomes in schools of Nursing and Midwifery required for policy improvement. The study would add to the existing body of knowledge in curriculum, instruction and evaluation studies. Assessing predictors of trainee midwives outcomes is necessary to demonstrate midwifery education competency in reproductive health programme to the community. The study would serve as a tool for curriculum content rejuvenation for a functional performance in reproductive health skills in order to attain the sustainable development goals in the reduction of maternal morbidity and mortality.

Furthermore, the outcome of this provided enlightenment to the public, education services, regulatory bodies and various other organizations on the need for

quality education. The data obtained from this study would be useful to researchers who would wish to study academic performance of student' midwives. The result would inform decision making.

The empirical result of this study will enable the constituted authorities of Nursing and Midwifery Council of Nigeria implement changes in institutional policies and practices to improve students' learning and success. This study would provide information that will be used by concerned authorities to make changes in the learning environment, this will assist students in improving their learning and study habits. It may also be useful in identifying the strengths and weaknesses of the programme to correct and improve on them.

This study would alert external funding sources, stakeholders to focus on institutional effectiveness and improvement. The study would enable stakeholders such as NGOs in education and health sector to put in place the necessary educational materials to enhance academic performance. This is to produce future competent work force in this age of increasing globalization.

Operational Definition of Terms

Academic Self-efficacy: It is trainee midwife's belief of her own capabilities to accomplish a given task that can produce desired academic outcomes in Reproductive health programme

Academic Support Seeking*:* It is learning assistance requested for by the trainee midwife either from the peers, classmates or from the educators in the school

Curriculum Content: The totality of the reproductive health components that is coherent in structure, processes and outcome and that links theory and practice in the professional education of a midwife.

Institutional Factors: These are institution/school variables/ characteristics (i.e. Curriculum content knowledge, teachers' continuous professional development and learning environment) that predict trainee midwives learning outcomes in Reproductive Health programme.

Learning environment: This is in form of school resources/instructional materials (such as computers, libraries, classrooms e.t.c.) that may increase students' knowledge and improve their performance.

Learning Outcomes: Learning outcomes are specific, measurable results that are expected subsequent to learning experiences involving knowledge (cognitive), skills (psychomotor), and attitudes (affective) that provides evidence that learning has

occurred in reproductive health programme.

Post-Basic Midwifery Programme: It is an eighteen month training programme for those that have undergone the three year General Nursing programme. It provides training for qualified nurses in midwifery education. To prepare professionally competent and versatile midwifery Practitioners.

Reproductive Health programme: Reproductive health components/packages in form of course units designed to acquit the students with the strategies put in place to improve the quality of maternal health services and to increase awareness about reproductive health issues in the community.

Students factors: These are student personal/psychological variables/ characteristics (i.e. academic support-seeking, self-regulated learning and academic self-efficacy) that predict trainee midwives learning outcomes in Reproductive Health programme.

Self-Regulated Learning: It is an individual learning habits/ strategies that strengthens and allow the learner to study at their pace to enhance desired academic outcomes in reproductive health programme.

Teachers' Continuous Professional Development: This consist of attendance at conferences and workshops at internal, local and national /international levels in keeping up-to-date with knowledge, skills and attitudes clinically, managerially and professionally in Reproductive health programme/ Midwifery education.

Trainee Midwife: A trainee midwife is a person admitted to a midwifery educational programme, duly recognized in the country in which it is located, yet to complete the prescribed course of studies in midwifery and acquire the requisite qualifications to be registered and/or legally licensed to practice midwifery.

CHAPTER TWO

REVIEW OF LITERATURE

The review of related literature were discussed under the following sub-headings:

1. **Conceptual Framework for the study**
2. **Theoretical framework for the study (Social learning Theory)**
3. **Theoretical Review**

a. Concept of Reproductive Health
b. National policy on Reproductive Health in Nigeria
c. Nursing and Midwifery Education in Nigeria
d. Contributions of Midwifery Education to advancing Reproductive Health in Nigeria
e. Reproductive Health and Reproductive Rights situation in Nigeria
f. Reproductive health programme in Nigeria
g. Maternal and Child health in Nigeria
h. Maternal Morbidity and Mortality in Nigeria
i. Concept of learning outcomes
j. Assessment of students' learning outcomes

4. **Empirical review:**

a) Institutional factors :

i. Curriculum content knowledge and learning outcomes in Reproductive health programme
ii. Teachers' continuous professional development and learning outcomes in Reproductive health programme
iii. Learning environment and learning outcomes in Reproductive health programme

b) Students factors:

i. Academic support-seeking and learning outcomes in Reproductive health programme
ii. Self-regulated learning and learning outcomes in Reproductive health programme
iii. Academic self-efficacy and learning outcomes in Reproductive health Programme

5. Appraisal of literature review.

CONCEPTUAL FRAMEWORK FOR THE STUDY

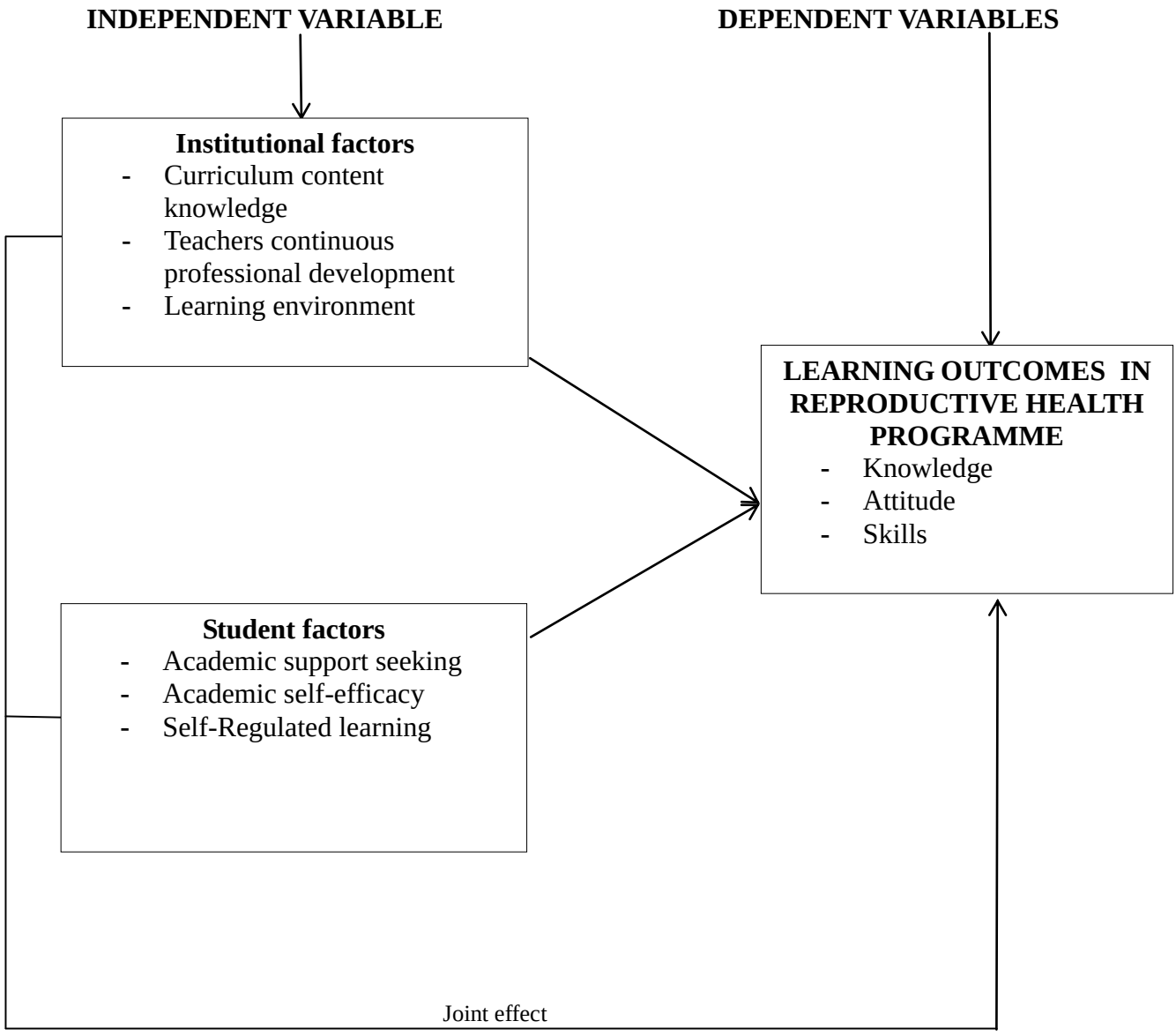


Fig1: Conceptual framework on the institutional and student factors as predictors of learning outcomes in Reproductive Health programme

Source: Self –developed

The framework was a self-developed concept to describe the joint effect and relative contributions of the independent variables on the dependent variables. The institutional factors; curriculum content knowledge, teachers' continuous professional development and learning environment and the student factors; academic support seeking, academic self-efficacy and self-regulated learning were described as the independent variables; while learning outcomes in Reproductive health programme; knowledge, attitude and skills were depicted in the conceptual framework as dependent variables respectively. The interactions of these variables predicted the students learning outcomes in Reproductive health programme. This was intended to improve the quality of the teaching and learning process as related to this programme. Quality in Education is a multidimensional concept. Every learner must have opportunity to acquire quality education, in an environment conducive to learning. One of such programme is the Midwifery Education Programme. There are clusters of various things that ought to be imputed into any programme of education that aims at quality. They are curriculum content, learning environment, teachers, infrastructures, materials, e.t.c. These are all known predictors of success in any educational programme.

THEORETICAL FRAMEWORK FOR THE STUDY

Social Learning Theory

Social learning theory by Bandura (1997) focuses on the learning that occurs within a social context. People learn from one each other, this include such concepts as observational learning, imitation, and modeling. Albert Bandura is considered the leading proponent of this theory apart from other writers. It was noted that people can learn by watching the behavior of others and the outcomes of those behaviors. It is possible for learning to occur without a change in behavior. Behaviorists stated that learning has to be represented by a permanent change in behavior, on the contrary, social learning theorists revealed that because people can learn through observation alone, their learning may not readily show in their performance.

Cognition plays a role in learning. Over the last 30 years social learning theory has become increasingly cognitive in its interpretation of human learning. Awareness and expectations of future reinforcements or punishments can have a major effect on the behaviors that people exhibit. Social learning theory can be considered a bridge or a transition between behaviorist learning theories and cognitive learning theories

According to Pritchard (2009), there are many theories that attempt to describe how individuals learn, both formally and informally. The primary reason for learning theories is an attempt to understand the processes and complexities involved in learning; that is, how does one gain knowledge, move to understanding the meaning of that knowledge, and then acquire needed skills in order to demonstrate their learning. The most common learning theories include behaviorist and constructivist/cognitive learning.

Behaviorism or behaviorist learning theory requires some type of stimulus for the learner to learn. One of the interesting characteristics of this learning theory is the belief that all behavior can be explained without the need to consider internal mental states. it is conditioned by a stimulus. That stimulus is usually some type of reward such as teacher positive reinforcement in form of grade or mark. This form of learning is quite valuable in a competency-based curriculum for skill development, especially in a practical laboratory setting. This form of learning is described as teacher-centered in that teacher is interested in the changes they can see in observable behavior, such as demonstration of specific midwifery skills.

Constructivism and cognitive learning theory requires that the learner become active in determining how they will learn to think critically (Bruner, 2012). The teacher cannot 'see' the thinking, but can use such activities as requesting that the learner give their plan of action with rationale before proceeding to perform a procedure. Cognitive learning is described as learner-centered in that the learner is using internal thought processes to discover new ways of using past knowledge and new knowledge to provide midwifery/reproductive health care. When something learned in the past does not fit with the current situation, the learner experiences 'cognitive dissonance' and must resolve this before continuing to learn. Teachers build upon their understanding of how learners learn in order to create/select effective learning activities.

Humanistic theory suggests that learning occurs because the learner has a specific goal to learn and to fulfill one's potential in life; e. g., becoming a qualified midwife. The learner has set a goal for learning and is supported in meeting that goal (self-actualization) by teachers who are facilitators of knowledge. Humanism focuses on human freedom, dignity and potential and believes that people act intentionally based on their personal values. This belief is in contrast to the behaviorism belief that learning occurs only in response to external environmental stimuli or the cognitive

belief that discovering knowledge and constructing meaning from this discovery is central to learning.

Social learning theory is based on beliefs that people learn from one another via observation, imitation, and modeling requiring attention, memory and motivation. In many ways it is a combination of behaviorism cognitivism/constructivism, and humanism. (Knowles,1984, Merriams and Caffarella,1991,Mezirow,1985, Pritchard, 2009.) have attempted to define how adults learn and whether this learning is different from their learning as children. Educationalists and psychologists theorized many years ago that adults are internally motivated to learn as they have a life goal (Bandura, 2012). They build upon prior life experiences that they bring to the learning environment, and need support as they examine prior experiences and change their thinking when needed to fit the midwifery role. Adults also need to be encouraged and supported to take responsibility for their own learning.

However, in order for adults to become active participants in their own learning, they need to know what it is that they are expected to learn and demonstrate at the end of the educational encounter. Therefore, adults need clearly defined expectations for learning (outcomes), suggested learning activities, and repeated opportunities to think critically, reason morally, and make good decisions in their midwifery practice. Taking responsibility for one's own learning as an adult may be difficult for younger students if they have not yet reached a mature understanding that they are responsible for their own learning. This also implies that teachers need to encourage learners to take on such responsibility and give them ample experiences to demonstrate their ability to do so.

Guiding principles behind Social learning theory:

- The observer will imitate the model's behavior if the model possesses characteristics such as talent, intelligence, power, good looks, or popularity that the observer finds attractive or desirable
- The observer will react to the way the model is treated and mimic the model's behavior. When the model's behavior is rewarded, the observer is more likely to reproduce the rewarded behavior when the model is punished, an example of vicarious punishment, the observer is less likely to reproduce the same behavior.
- A distinction exists between an observer's "acquiring" a behavior and "performing" a behavior. Through observation, the observer can acquire the behavior without performing it. The observer may then later, in situations where

there is an incentive to do so, display the behavior.

- Learning by observation involves four separate processes: attention, retention, production and motivation.

Attention: Observers cannot learn unless they pay attention to what's happening around them. This process is influenced by characteristics of the model, such as how much one likes or identifies with the model, and by characteristics of the observer, such as the observer's expectations or level of emotional arousal.

Retention: Observers must not only recognize the observed behavior but also remember it at some later time. This process depends on the observer's ability to code or structure the information in an easily remembered form or to mentally or physically rehearse the model's actions.

Production: Observers must be physically and/intellectually capable of producing the act. In many cases the observer possesses the necessary responses. But sometimes, reproducing the model's actions may involve skills.

Motivation: In general, observers will perform the act only if they have some motivation or reason to do so. The presence of reinforcement or punishment, either to the model or directly to the observer, becomes most important in this process.

Attention and retention account for acquisition or learning of a model's behavior; production and motivation control the performance.

The relationship between complex interaction of the person, the person's behavior, and the environment is called reciprocal determinism. A person's cognitive abilities, physical characteristics, personality, beliefs, attitudes, influence both his or her behavior and environment. These influences are reciprocal.

A person's behavior can affect his feelings about himself and his attitudes and beliefs about others. Likewise, much of what a person knows comes from environmental resources such as television, parents, and books. Environment also affects behavior: what a person observes can powerfully influence what he does. But a person's behavior also contributes to his environment.

THEORETICAL REVIEW

(a) Concept of Reproductive Health

The term Reproductive Health originated in the late 1980s, as an unofficial working definition used to describe a broad, life course health approach, going beyond vertical family planning programmes. In recognition of its sensitivity at the time, the

term was not presented to official international such as WHO governing bodies (Singh 2009). In September 1994, the International Conference on Population and Development (ICPD) was convened under the auspices of the United Nations (UN), organized by a secretariat composed of the Population Division of the UN Development for Economic and Social Information and Policy Analysis and United Nation Population Fund (UNFPA). At this conference, the term was presented, and the delegations from 179 UN member states of which Nigeria was inclusive adopted the ICPD Programme of Action by consensus (UN, 2013).

The ICPD Programme of Action provides a definition of 'reproductive health': Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility which are not against the law, and the right of access to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant. In line with the above definition of reproductive health, reproductive health care is defined as the constellation of methods, techniques and services that contribute to reproductive health and well-being by preventing and solving reproductive health problems.

Moreover, with respect to the MDGs, in 2000 the Millennium Summit produced the Millennium Declaration, a general statement of intent to eliminate poverty. The Declaration did not produce quantitative time bound goals. During the course of 2001, the Inter-Agency Expert Group(IAEG) developed the Millennium Development Goals, with targets and indicators, as a monitoring framework for the Declaration. The framework picked up most of the quantitative, time-bound targets from the ICPD, such as those referring to maternal health and mortality (MDG5), child and infant mortality (MDG4) as well as the indicator of 'contraceptive prevalence rate', somewhat illogically placed under MDG6 (dealing with AIDS, TB and malaria). The only ICPD target, which was left out, was the one, which proposed 'universal access to reproductive health'. At the 2005 Summit, which reviewed

progress on the MDGs, the UN Secretary-General submitted a recommendation to include four additional targets, including Target 5B: 'Achieve, by 2015, universal access to reproductive health'. The 2007 UN General Assembly adopted the report. Target 5B and its four attendant indicators –contraceptive prevalence rate, adolescent birth rate, antenatal care coverage and unmet need for family planning – became indisputably effective for the UN system only after 15 January,2008

According to (Adegoke and Vanden Broek 2009), to avoid unintended pregnancies which are more likely to result in unsafe abortion, birth attendance by skilled personnel, and access to Emergency Obstetric Care (EmOC) care in case there are complications are vrey essential. Obstetric emergencies cannot be predicted, hence the presence of a trained health care worker at the time of delivery and rapid access to emergency obstetric care are essential for maternal and newborn survival. Skilled personnel working in an enabling environment can administer interventions to prevent and manage obstetric complications. WHO (2009) defined a skilled birth attendant as midwives, doctors or nurses who have been educated and trained in the skills needed to manage pregnancies, childbirth and the immediate postnatal period including identification, management and referral of complications in women and newborn.

(b) National policy on Reproductive Health

Nigeria participated in the International Conference on Population and Development (ICPD), held in Cairo, Egypt in September 1994. The ICPD marked the beginning of Maternal and Child Health and Family Planning (MCH/FP) to Reproductive Health. At the ICPD, the nations of the world reached an understanding on the key concepts of reproductive health and reproductive rights and armed that reproductive health is a right for all men, women and adolescents. The global community, further agreed that reproductive health and rights are indispensable to people's health and development, and set the goal of achieving universal access to reproductive health information and services for the year 2015. Thus it becomes imperative for every nation to operationalise the reproductive health concept and promote quality reproductive health services in the interest of the well-being of the people, enhanced social life of the community, national development, and the future of the human society.

Reproductive health is defined as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, in all matters related to

the reproductive system and to its functions and processes. The concept is centered on human needs and development throughout the entire life cycle, from the womb to the tomb and from the cradle to the grave. Reproductive health care covers a wide range of services. These are defined as follows in the ICPD Programme of Action (PoA): family planning counseling and services, Information, Education, Communication services(IEC); health education and services for prenatal care, safe delivery and post-natal care, and infant and women's health care; prevention and treatment of Infertility; prevention and treatment of infections, sexually transmitted diseases, including HIV/AIDS; breast cancer and cancers of the reproductive system, and other reproductive health conditions; and active discouragement of harmful traditional practices, such as female genital mutilation.

Reproductive Rights embrace certain human rights that are already recognized in national laws, international human rights documents and other consensus documents. These rights rest on the recognition of the basic right of all couples and individuals to decide freely and responsibly the number, spacing and timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health. It also includes their right to make decisions concerning reproduction free of discrimination, coercion and violence, as expressed in human rights documents. In the exercise of this right, they should take into account the needs of their living and future children and their responsibilities towards the community.

In addition to the commitment at the global level and in order to achieve the targets set out in the ICPD PoA, the Member States of the African region adopted a regional strategy on reproductive health in September 1997 and committed themselves to implement the reproductive health concept for the next twenty years. The regional vision is that, within the next twenty-five years, all people of the region
should enjoy an improved quality of life through a significant reduction of maternal and neonatal morbidity and mortality, unwanted pregnancy and sexually transmitted infections including mother to child transmission of HIV, and through the elimination of harmful practices and sexual violence.

Nigeria as a member of the global community and in the interest of her people's health and development is committed to the implementation of the concept of reproductive health and reproductive rights as agreed at the ICPD, and has adopted and launched the African regional strategy. This commitment would enable the

country to effectively address the major reproductive health challenges and revive the current trend of poor reproductive health status and services. This policy document is, among others, an expression of the desire and determination of the governments and peoples of Nigeria in this regard. Addressing the various reproductive health problems in Nigeria requires, among others, a comprehensive and sustainable policy which provides an appropriate framework for addressing relevant problems and design and implement appropriate programmes that would result in well-functioning health care delivery system and ensure access to affordable good quality care at all levels.

This policy has been developed to address the followings:

- The unacceptably high levels of maternal and neonatal morbidity and mortality;
- The increasing rate of infection with the human immuno-deficiency virus (HIV) including MTCT and the revalence of other STIs;
- Increasing high-risk behaviour of adolescents leading to premarital sexual encounters, early marriage, unintended pregnancies, unsafe abortions and the social consequences such as school dropout with subsequent negative inter generational effects;
- The persistence of harmful practices including imported and dangerous family health values and practices;
- The serious consequences of domestic violence and sexual abuse against women and girl children;

The current fragmentation of reproductive health activities and the limited impact of existing programmes in reducing sexual and reproductive ill- health, and improving reproductive health and well-being;

- The low level of male involvement in reproductive health;
- The low level of awareness and utilization of contraceptive and natural family planning services;
- Inadequate services for infertility and the associated misery.
- To further the implementation of the programme of action of the International Conference on Population and Development (ICPD, 1994).

(c) Nursing and Midwifery Education in Nigeria

History and Origin of Nursing in Nigeria

The history of Nursing and Midwifery Council of Nigeria has a lot in common with other allied professions, particularly in the health industry except that it came

into existence before most if not all of them. Nursing was among the first five recognised and accepted professions in the colonial era, hence recognition was transferred from the Home government. Nursing and Midwifery services were given prime of place because of their relevance and direct impact to the life, health and well-being of the individual family and community. Therefore, in the attempt to modernize Nursing Education and Practice in the colony at least to cope with the developmental pace. The colonial Government decided to introduce, gradually, Nursing and Midwifery education on a formal basis, to enable them render modern and scientific Nursing and Midwifery care to the civil servants and their families. In 1930, the Midwives Ordinance which established the defunct Midwives Board was promulgated to regulate Midwifery education and practice in Nigeria. In 1947, the Nursing Council of Nigeria was established by the Registration of Nurses Ordinance of August 1947 to regulate and control the education and practice of Nursing in Nigeria.

Following, the humble beginning through the pioneering Midwives Ordinance of 1930 with its major Amendment known as the Mid-wives Act of 1966 to the first Nurses Ordinance of August 1947 and series of Amendment, such as Ordinances of 1957, 1959, the Nurses Act, No. 2 of 1970; the Nurses Amendment Act No. 30, of 20th July, 1974, what started as two separate bodies were merged together into one big effective body by the enabling decree 89 of 1979. Since then it grew and developed more and more in status, functions and responsibilities as well as influence and authority as one of the foremost statutory professional regulating body with the largest scope, jurisdiction and professional personnel to control, supervise and regulate.

The Nursing and Midwifery Council of Nigeria known as "The Council" is the only professional Council for all grades and Cadres of Nurses and Midwives. It is the only legal and administrative, corporate and statutory body charged with specific functions to perform on behalf of the Federal Government of Nigeria to ensure the delivery of safe and effective Nursing and Midwifery care to the public through quality education and best practices. The Council is mandated by Law to regulate the standards of Nursing and Midwifery Education and Practice in Nigeria and to review such standards from time to time to meet the changing health needs of the society.

The primary objectives of the Nursing and Midwifery Council of Nigeria are to ensure high quality of Nursing and Midwifery education in Nigeria, maintain high standard of professional nursing and midwifery practice and enforce discipline within the profession. The Council has its headquarters in Abuja with Zonal Offices in

Sokoto, Kaduna, Bauchi, Enugu, Port-Harcourt and Lagos.

The Council is headed by a Secretary General/Registrar and is assisted by other professionals and non-professional staff. They are responsible to a Board headed by a Chairman with members drawn from various institutions and zones in the country.

Midwifery Education

International Confederation of Midwives (ICM)

The International Confederation of Midwives (ICM) is a federation of midwifery associations, representing countries across the globe. The ICM works closely with the World Health Organization, all United Nations agencies, and governments in support of safe motherhood and primary health care strategies for the world's families. ICM takes the leadership role in development of the definition of the midwife, and the delineation of the midwifery scope of practice (the essential competencies). ICM also promotes standards and guidelines that define the expected structure and context of midwifery pre-8service education programs; provides guidance for the development of regulations for midwifery practice; and assists countries to strengthen the capacity of midwifery associations and to develop leaders of the midwifery profession worldwide. The term "competencies" is used to refer to the knowledge, skills and behaviours required of the midwife for safe practice in any setting. They answer the questions "What is a midwife expected to know?" and "What does a midwife do?" The competencies are evidence-based. The majority of the competencies are considered to be basic or core, i.e., those that should be an expected outcome of midwifery pre-service education.

The competencies are written in recognition that midwives receive their knowledge and skills through several different educational pathways. They can be used by midwives, midwifery associations, and regulatory bodies responsible for the education and practice of midwifery in their country or region. The essential competencies are guidelines for the mandatory content of midwifery pre-service education curricula, and information for governments and other policy bodies that need to understand the contribution that midwives can make to the health care system. According to (UNFPA, 2014) midwives do not only deliver babies; they provide a host of sexual, reproductive, maternal and newborn health services. Yet this essential care is often unavailable in poor, remote or marginalized communities.

Key midwifery concepts

There are a number of key midwifery concepts that define the unique role of midwives in promoting the health of women and childbearing families. These include: partnership with women to promote self-care and the health of mothers, infants, and families; respect for human dignity and for women as persons with full human rights; advocacy for women so that their voices are heard and their health care choices are respected; cultural sensitivity, including working with women and health care providers to overcome those cultural practices that harm women and babies; a focus on health promotion and disease prevention that views pregnancy as a normal life event; and advocacy for normal physiologic labour and birth to enhance best outcomes for mothers and babies

Scope of midwifery practice

This is built upon the ICM international (2011) Definition of the Midwife which recognizes the midwife as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife's own responsibility, and to provide care for the newborn and infant. This care includes preventative measures, the promotion of normal physiologic labour and birth, the detection of complications, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures. The midwife has an important task in health counselling and education, not only for the woman, but also within the family and the community. This work should involve antenatal education and preparation for parenthood and may extend to women's health, sexual or reproductive health and child care. A midwife's role as advocate for evidence-based midwifery practices can also be valuable in advancing public health policy regarding women's health and maternal and child health care. A midwife may practice in any setting including the home, community, hospitals, clinics or health units.

Midwifery training in Nigeria

Midwifery training programme vary widely in content and quality within and across countries. Many fail to address the midwifery competencies outlined by the International Confederation of Midwives. Some programmes have tried to produce more skilled birth attendants by making training courses shorter, simplifying content and reducing access to supervisory staff. However, this reduces the quality of graduating staff. Evidence shows that midwifery competencies, requires more

competency-based teaching, more training in clinical settings and better access to qualified staff. The post-basic midwifery curriculum in Nigeria was revised in 1991 and updated in 2006 to embrace the concept of Reproductive Health in other to prepare midwives for their roles and responsibilities in providing midwifery care within the broader concept of Reproductive Health. the appreciation of the broader issues around reproductive health, will equip midwives in their ability to offer full range of services including those that in the past were seen as beyond the confines of maternal and child health and family planning. The focus of midwifery education has shifted from the educator to learner however this shift requires change within the educational system in order to facilitate learning.

The NMCN develops the framework, and sets the programme standard for schools. Formal lectures and clinical instructions in the field constitute the core curriculum. The framework determines the sequence of specific courses required in the nursing and midwifery curriculum. The Council's comprehensive curriculum integrates classroom lectures, practical demonstrations in the laboratories, and clinical experiences at health facilities including primary care settings and hospitals. General and basic nursing training programs produce versatile and well-rounded nurses who do bits of everything such as general nursing, psychiatry, education, administration, public health, and midwifery.

Midwifery programme further prepare students to perform physical examinations and health needs assessments; palpation, early detection of abnormal risk factors and timely referral, labor, delivery, and child welfare including nutrition, growth monitoring, and immunization. The theoretical and clinical components of the curriculum, help prepare the students to be competent nurses and midwives.

Theoretical training

Students are equipped with the fundamental knowledge of nursing and midwifery. The curriculum includes extensive and rigorous coursework that exposed students to the use of the nursing process in the care of individuals, families, and communities. General nursing training programme emphasize human anatomy, physiology, and fundamentals of nursing and midwifery practice, but also reproductive health, including family planning, infant and child health. The midwifery programme also embraces a rigorous curriculum. The extensive course work includes applied anatomy and physiology, with emphasis on midwifery. This is an important course that supports the midwife's role in understanding physiologic changes during pregnancy, and

locating the female anatomical landmarks during delivery. Other courses include; Reproductive Health, Fundamentals of midwifery practice, Community-based midwifery practice, Family planning, Ethics in midwifery, Research methods and statistics and Application of management and teaching principles to midwifery.

Seminars in midwifery practice provide students with opportunities to practice presentation techniques in giving health and antenatal talks to different audiences. Students are also prepared for physical examinations and health needs assessments. Theoretical foundation on family planning, abortion and post-abortion care, child health, infant care and pharmacology related to obstetric practice also command emphasis in the classrooms. Computer studies is also a relevant course in the midwifery training. This is to enable trainees meet up with technological advancement and globalization.

Clinical preparation

Curriculum integration is important as it emphasizes theoretical learning supports and reinforces clinical training in midwifery skills. Students are posted to both antenatal community clinics and antenatal wards in the hospitals. These settings provide students with opportunities to observe and actually assist in clinical activities. Students work under the supervision of trained personnel and their clinical instructors. practical exposures hold the key to students' achievement of their competency goals in birth attendance, postpartum care, placement of contraceptive devices, and other important obstetric and gynecologic clinical activities. For example, before sitting for the qualifying examination for licensure, students in the post basic midwifery program are required to have done a minimum of 20 deliveries, cared for 30 or more clients during pueperium, inserted minimum of 10 intrauterine contraceptive devices, fitted 2 diaphragms, prescribed 10 oral contraceptives, and performed at least 5 manual vacuum Aspiration (MVA).

Furthermore, they must have Performed and repaired 5 Episiotomies. Witnessed and assisted in 5 Caesarean section operations. These are stipulated by the NMCN. Ezenowu (2011) opined that theoretical knowledge gained in the classroom support students' experiences in the real world.

Nursing and midwifery pre-service and workforce development pedagogical challenges

Teachers have considerable pedagogical autonomy to interpret the curricula and to choose teaching methods and materials, as well as resources and methods to

continuously assess students' progress. According to (Ezenowu,2011) the unavailability of teaching resources greatly impacts the teachers' abilities to teach. Lack of basic educational items that facilitate teaching and learning hinder efforts on nursing/midwifery workforce development. Such items include academic journals, books, projectors, computers, clinical laboratory and demonstration equipment such as midwifery kits. Others include office supplies such as papers, ink, printers, copiers, and telephones. The use of internet and the ability to subscribe in order to access new online research or teaching materials is poor.

(d) Contributions of Midwifery education to advancing Reproductive Health in Nigeria.

Maternal health improvement since ICPD

Maternal death, is a preventable death. The WHO refers to maternal health as "health of women during pregnancy, childbirth and the postpartum period." Therefore, women, pregnancy, childbirth, and the postpartum period can lead to death. The complications during pregnancy, childbirth, and the postpartum period that can be prevented by adequate management. The International Conference on Population and Development (ICPD) Program of Action (PoA) in Cairo, Egypt in 1994, was adopted by 179 countries. The PoA has been affirmed since 1994 at every session of the UN Commission on Population and Development, and cited in policy-making throughout the world. Women health and safe motherhood section was included in the programme. The global conferences held by UN strongly affirmed the basic human right for mothers to have access to quality and comprehensive maternal and reproductive health care. WHO (2008) stated that the first International Decade for women in 1985 agreed with the widely cited WHO estimates that approximately 500,000 women die yearly from obstetric complications. In 1987, the Safe Motherhood Initiative (SMI) was introduced at the International Safe Motherhood Conference in Nairobi. The 1994 ICPD produced the PoA that mandated measurement of global progress on maternal health. The fifth MDG, Improve Maternal Health, set a target to reduce maternal mortality ratios (MMRs) by 75% by 2015. The MDG5b called for universal access to reproductive health care which resulted in merging the ICPD platform for action with the MDGs in 2007.

Implications for maternal health

(Ezenowu, 2013) revealed that adequately trained nurses and midwives affect maternal health services provision in Nigeria. This starts from the schools and extends to the points of care. The quality of instruction provided, the quality of nurse/midwife graduates, and the quality of care delivered to clients impact maternal health outcomes. The lack of necessary financial and technical support for nursing and midwifery education means that most classrooms are not well equipped, and instructors do not have the necessary tools to support students' learning. The instructors' readiness to provide students with solid knowledge base with which to go out and practice with confidence and implication for maternal health outcomes are affected. This directly affects theoretical preparation and clinical skills training for students. When students are not well prepared for clinical practice, their care delivery skills will be compromised.

Infant and maternal health became worse in Sub-Saharan Africa between 1990 and 2000. The neonatal mortality rate in 2000 was 45/1,000 live births and the maternal mortality ratio was 1,000/100,000 live birth. These human statistics provided the impetus for an intensified effort to impact maternal and child health in the African region. The Maternal and Newborn Road Map for Health include the followings: family planning, revision of national policies' standards and protocols for maternal and newborn health using international evidence-based standards of care, upgrading health services to ensure greater accessibility, acceptance and quality of care. implementing standards of emergency obstetric care, updating training curricula in training schools establishing radio communication systems linked to a transport system, strengthening health information, promoting male involvement in establishing community committees for maternal and neonatal health.

The United Nations Millennium Development Goals (MDG's), provided an international framework for measuring progress towards sustaining development and eliminating poverty.

Four out of eight goals are directly related to reproductive health; They are mentioned as follows:

Goal 3; Promote gender equality and empower women, Goal 4; Reduce child mortality

Goal 5; Improve maternal health and Goal 6 Combat HIV/AIDS, malaria and other diseases.

Four other related goals bear close relationship to reproductive health and the issue of health overall; They are named as follows: Goal 1; Eradicate extreme poverty and hunger, Goal 2; Achieve universal primary education, and Goal 7: Ensure environmental sustainability.

Reproductive health, is concerned with people's ability to have a responsible, satisfying and safe sex life, their capability to reproduce, and their having the freedom to decide if, when and how often to do so. This definition of reproductive health encompasses some key characteristics that make reproductive and sexual health unique compared to other fields of health. Reproductive health extends into the years before and beyond the years of reproduction, not just the time of reproduction. It also acknowledges gender roles, and the respect and protection of human rights

Risk of maternal death is highest for youngest women. Compared to women in their twenties. The risk is doubled for women 15-19; The risk is five times higher for girls younger than 15. Maternal mortality is an important cause of mortality among children. Nigeria is the most populated country on the continent with population estimated at 158 million in 2010 and expected to increase to 176 million in 2015. Nigeria has the second largest number of maternal deaths after India, with a maternal mortality ratio of 840 deaths per 100,000 live births. Maternal death carries high psychosocial toll on families and individuals. The MDGs Target 5A: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio. Target 5B: Achieve by 2015 universal access to reproductive health.

Challenges and Career innovation

Training institutions do not have enough educators and their infrastructure and equipment are inadequate. Retired staff are being recycled and used on a contract basis in response to the shortage of midwife teachers and tutors. Midwives are expected to hold dual qualification, which means that career progression and government employment are limited for those with a single qualification.

The midwifery curriculum has been upgraded to include Obstetric Emergencies Care, life saving skills and post abortion care. Registered midwives must undergo regular assessment of their knowledge, skills and judgment to ensure that they are competent to practice. Continuing education is encouraged and sponsored. The Midwives Service Scheme is an intervention designed to address the shortage of skilled birth attendants at the Primary Health Care level. Under this scheme, unemployed and retired midwives are mobilized and deployed to primary health care

facilities in selected areas. Networks have been established with the International Council of Nurses, the International Confederation of Midwives and other professional bodies to share experiences and ways of improving service delivery. Midwives are central to reproductive health care and have crucial role to play in the achievement of MDGs 4 and 5. It is of great concern that between 2009 and 2012, 10 schools of midwifery across the country had lost their accreditation due to factors like inadequate man power, infrastructure, and teaching and learning materials. All schools of midwifery use a standardized curriculum and are supervised and regulated by the Nursing and Midwifery Council of Nigeria, which is the statutory body established by the Federal Government for the education and regulation of Nurses and Midwives in the country. The goal for midwifery Education is to produce professionally competent, versatile and proficient midwives that are capable of providing quality services at all levels of care to child bearing women, newborns, the family and the community in line with the ICM global standards.

Trained and skilful midwives make enormous contributions to the health of mothers and the newborns, and the well being of communities. Access to quality health care is a basic human right. Greater investment in midwifery is key to making this right a reality for women everywhere. Midwives have a crucial role to play in the achievement of the Millennium Development Goals (MDGs) 4 and 5. The State of the World's Midwifery report(SoWMy) 2014 shows that midwives who are educated and regulated to international standards can provide 87% of essential care needed for women and newborns and can potentially reduce maternal and newborn deaths by two thirds. The SoWMy 2014 also highlights the importance of investing in midwifery as a best buy in Primary Health Care. It reports that investing in midwifery education with appropriate deployment of midwives could yield a 16-fold return on investment in terms of lives saved and costs of caesarian sections avoided. Midwives are key players in ensuring safe motherhood for women and their babies during pregnancy, labour and post natal periods.

In addition, midwives provide comprehensive reproductive Health(RH) care, including health education and family planning services, emergency care for mothers and infants, comprehensive maternal and newborn care, safe delivery, counseling on making informed choices for individuals, couples and partners, comprehensive post abortion care services and Prevention of mother to child transmission of HIV/AIDS(PMTCT), as well as prompt identification of complications, First aid and

referral.

(e) Reproductive health and reproductive rights situation in Nigeria.

Current Reproductive Health and Rights

The UN declaration was translated into a road map, setting out goals to be reached by 2015. The critical importance of reproductive health to achieving international development goals was affirmed. Reproductive Health is a fundamental human right. But, poor reproductive health conditions are the leading cause of deaths and illnesses in women of child bearing age worldwide. It is the rights of both men and women, to be informed of effective, safe, affordable and acceptable methods of fertility regulation. They should also have access to safe, effective, affordable and acceptable methods of fertility regulation of their choice. The women should have access to appropriate health care services that will enable them go through pregnancy and childbirth safely. This will provide couples with the best chance of having a healthy infant.

UNFPA promotes holistic approach to reproductive health care that includes; universal access to accurate information, a range of safe and affordable contraceptive methods, and sensitive counselling. The approach ensures that quality maternal obstetric care is available to all pregnant women and prevention and management of sexually transmitted infections, including HIV and gender equality. These benefits extend from the individual to the family and from the family to the society. The areas of utmost priority include safe motherhood, prevention of sexually transmitted infections, including HIV, adolescent health and gender-based violence. UNFPA also encourages the full participation of women and young people in efforts to rebuild their societies.

(f) Reproductive Health programme in Nigeria.

International Conference on Population and Development (ICPD) Programme of Action (PoA)

The 1994 International Conference on Population and Development (ICPD) held in Cairo recognized that Reproductive Health (RH) is a critical part of an individual's well-being and is central and critical to human development. Nigeria moved the focus of her population and development programmes to reproductive health after the conference. Reproductive Health is defined as, "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters and process" (UN, 1994). The components of RH as adopted by Nigeria include: Safe

motherhood comprising prenatal care, safe delivery, essential obstetric care, post-partum care, neonatal care, and breastfeeding. Others are namely; Family planning information and services; prevention and management of infertility and sexual dysfunction in both men and women; prevention and management of complications of abortion; Prevention and management of reproductive tract infections, especially sexually transmitted infections (STIs),including HIV infections and AIDs, Promotion of healthy sexual maturation from pre-adolescence, responsible and safe sex throughout life and gender equality, elimination of harmful practices, such as female gender mutilation (FGM), child marriage domestic and gender violence against women; and Management of non-infectious conditions of the reproductive system, such as genital fistula, cervical cancer, complications of FGM and reproductive health problems associated with menopause and andropause.

Nigerian statistics revealed that the reproductive health status of men, women and adolescents has remained poor (FMOH,2015). The ICPD PoA was a clarion call for client-centered services that provide quality and accessible care. Maternal health included in sexual and reproductive health services pointed the way to strengthening health systems overall, with women at the center.

(g) Maternal Morbidity and Mortality in Nigeria

Maternal mortality in Nigeria is still very high (FMOH,2015). Maternal mortality is the indicator that is more commonly used to assess maternal health. Maternal mortality is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

According to NDHS (2013) Nigeria has one of the highest maternal mortality rates in the world as estimated as 545 maternal deaths per 100,000 live births. Maternal death results from obstetric complications of pregnancy, labor, and the puerperium such as infection, pre-eclampsia and eclampsia, hemorrhage, abortion, and obstructed labor. Other causes of maternal deaths occur as a result of previous existing disease or the disease that developed during pregnancy. The existing disease may be aggravated by physiologic effects of pregnancy. Such diseases are; hepatitis, cardiovascular disease, HIV/AIDS, diabetes, tuberculosis anemia, malaria and psychiatric illness. The statistics from NPC and ICF Macro (2009) revealed that the confidence interval estimate for maternal deaths ranged from 475 to 615 per 100,000

live births. The 2013 NDHS shows maternal mortality rate to be 576 per 100,000 live births. Medically most of the maternal deaths occur as a result of five major complications such as haemorrhage, infection, unsafe abortion, hypertensive disease of pregnancy. The health seeking behaviour of our women in Nigeria concerning pregnancy related care remains poor. (FMOH,2015) This result is one of the greatest challenges to maternal mortality reduction in the country. The 2013 National Demographic Health Survey revealed that 60% of women with age range of 15-49 years received antenatal care (ANC) from a skilled provider(doctor, nurse/midwife or auxiliary) during their last pregnancy. The survey also revealed Thirty three percent (33%) of women received ANC services from a nurse or midwife, This result indicates that nurses/ midwives attend to more pregnant women than other skilled health workers, hence, investing in midwifery is advocated as one of the recommended solutions to reducing the high rates of maternal morbidity and mortality in Nigeria. The survey also show that only 23 percent received ANC services from a doctor. Three percent (3%) of women received ANC services from a traditional birth attendant, and Thirty six (36%) did not receive ANC services at all. In Nigeria, the provision of ANC is in transition from the focus antenatal care approach back to the traditional approach. It has been found that early detection of problems during pregnancy leads to a more timely treatment and referrals in the case of complications. This is particularly important in Nigeria, where physical barriers are a challenge to the health care delivery system.

Causes of maternal mortality and morbidity

The babies given birth to by the adolescent mothers are also at increased risk of infant death. A number of factors contribute to maternal mortality and morbidity among adolescent girls. WHO (2008) reported such factors as child marriage, poor nutrition, low social status of women, female circumcision, illiteracy, and a host of others. It is recorded that 90% of adolescent births occur within marriage. The girls are also at increased risk of sexually transmitted infections (STIs), including HIV and pregnancy.

Early childbearing age: The 2012 WHO report reveals that girls experience inappropriate maternal ill health, which account for eleven percent (11%) of global births, twenty three percent (23%) of all disability adjusted life years and thirteen percent (13%) of deaths. The young girls are at higher risk of pregnancy complications as a result of immature organs in their bodies. The survey also shows

that in developing countries, poor maternal health is the highest cause of mortality and disability among girls aged 15 to 19years. The girls at this age are twice more vulnerable to death during childbirth than women of age 20 to 30years. while younger girls below 14 years of age are five times more likely to die. In sub-Saharan Africa, HIV/AIDS is an increase cause of maternal morbidity and mortality within the population. Sexuality education and Family planning are important tools in the reduction of adolescent pregnancy and transmission of HIV. The HIV/AIDS epidemic among young women especially is one of the factor limiting progress in the reduction of maternal mortality overall.

Skilled attendance at delivery: The ICPD PoA set targets for improving skilled attendance at birth as reviewed at its 5-year point, four *Key* Actions for the further Implementation of the ICPD Programme of Action. UN (2012) reported that the 2015 target for 90% of all births where the maternal mortality rate is very high should be assisted by skilled attendants. According to the 2013 Countdown report, data from 2007 to 2012 showed "the median coverage of skilled birth attendance is slightly more than 60% for the countries studied, but the coverage between these countries ranges from 10% - 100%." (UN, 2012) There has been much debate about what skills a skilled attendant must have, and the proximity of that skilled attendance to a delivering mother.

The International Confederation of Midwives, a venerable organization since 1919, has facilitated and summarized the definition of midwifery, which is consistent with that of a "skilled birth attendant". The ICM's definition is as follows: "The midwife is recognised as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife's own responsibility and to provide care for the newborn and the infant. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures. "The UNFPA report on skilled attendance expands on the importance of midwifery in the community: "Historical as well as contemporary evidence from many countries, most notably China, Cuba, Egypt, Jordan, Malaysia, Sri Lanka, Thailand and Tunisia, indicate that skilled midwives functioning in or very close to the community can have a drastic impact on reduction of maternal and neonatal mortality. This is why the proportion of births attended by a

skilled health provider is one of the two indicators for measuring progress toward the fifth MDG, improving maternal health." (UN 2012)

Unmet need for Family Planning: The 2013 NDHS shows the contraceptive prevalence rate in Nigeria is fifteen percent (15%) This indicates low contraceptive usage, while unmet need for Family Planning is sixteen percent (16). UN MDG (2010) reported that the unmet need for family planning and reproductive health services has delayed the efforts to improve maternal health. The women are at greater risk of maternal death and disability. Meeting the unmet needs for family planning would in turn result in the reduction of the number of unplanned pregnancies. According to UN MDG (2010) the woman with fewer pregnancies will lower her risk for maternal mortality and morbidity.

Gender disparities: Many developing countries where maternal mortality is high experience gender disparities and health service utilization is low. In Nigeria, the low social status of women, dis-empowerment and gender inequality have greater impact on access to maternal health care services(FMOH, 2015). The role of men in maternal health care was very low before 1994. This led to the precedent set by the PoA 20 years ago which emphasised men's responsibilities and roles in sexual, reproductive and maternal health care. The traditional gender norms that compromised the health of women were attended to by the use of various mechanism. The reproductive health programme enabled the men to discover their impact, responsibility, participation and decisions to understand the value of supporting the woman's choice. The men are also encouraged to discuss issues such as contraception, HIV counseling and testing, emergency preparation for labor and delivery and post-abortion counseling with women.

HIV/AIDS: HIV/AIDS is a major global health emergency (UNFPA 2005) The pandemic affects all the regions of the world. In the year 2000, the rage has spread through the developing world. It was noted that the infection rate was much higher in women than men in many places (UNFPA 2005) and that mostly in sub Saharan Africa,5 6,100 maternal deaths were attributed to HIV/AIDS(UN,2012). In United Nation Assembly, prevention of mother-to-child transmission (PMTCT) of HIV/AIDS was emphasised with the use of anti-retroviral therapy. HIV/AIDS in sub-Saharan Africa, had been referred to as epidemic for women and it is a great priority to prevent mother-to-child transmission of the disease. The approach to provide lifelong Anti-retroviral treatment coverage for HIV positive pregnant women had been advocated

(UN, 2012)

Quality of Care: The inception of ICPD has led increased importance of the quality of maternal health care.(UN, 2012). The maternal health services have increased in coverage in some high burden countries, but the services at the community level are yet to improve.

Unsafe abortion: Worldwide, an average of 35 in 1000 women of childbearing age have an abortion each year. As a result of unsafe abortion, about 47,000 women die(UN, 2012). ICPD PoA identified that unsafe abortion is a leading cause of maternal morbidity and mortality, with harmful effects on women and their families.(UN, MDG, 2012). Most of the deaths occur in developing countries. In Nigeria, it is estimated that about 40% of maternal deaths occur from abortion and its complications In most areas of the world where unsafe abortion is endemic manual vacuum aspirators and medical abortion with the use of mifepristone or misprostol alone are not readily available. Generally, the issue of reducing unsafe abortion has been minimal due to the societal stigmas associated with abortion generally.

(h) Maternal and child Health in Nigeria

In Nigeria, the risk of a pregnant woman dying from pregnancy or child birth related complications is 1 in 13, compared to her counterpart in developed countries who has 1 in 5000 (FMOH,2015). According to NDHS (2013), it is estimated that 33,000 women die annually in Nigeria from pregnancy related complications out of 529,000 global maternal deaths. One maternal death occur every 90 minutes in developed countries and one every minute in developing countries. Teenage mothers account for nearly 1 million births in Nigeria annually. Pregnant girls who are 15years and below have a maternal mortality ratio seven times higher than that of women of 20-24years. Eighty percent (80%) of women in Nigerian hospitals with abortion related complications are mainly adolescents girls. These complications include: Haemorrhage, septicaemia, perforated uterus and in most cases death.

According to WHO (2013) the risk of a woman dying in her life time as a result of a maternal health complication in Nigeria is 1 in 29; Somalia is 1 in 16; while United States is 1 in 2,400; and Greece, 1 in 25,500. According to Hussein, McCaw-Binns, and Webber, (2012) India's fifty-six thousand (56,000) and Nigeria's forty-thousand (40,000) maternal deaths make up one third of the global burden of maternal deaths. As the maternal health field looks beyond the ICPD and MDGs, it is essential to expatiate the important gap between the health of mothers and the economic

progression of the families, communities and nations. Research done by UNFPA, have shown that the health of every mother is directly linked to the advancement of her family and community. Bringing an end to preventable maternal deaths may be the agent of change to accelerate the attainment of all global health and development goals, from ICPD to the MDGs and now to the framework of sustainable development goals.(SDGs). The ICPD PoA written in 1994, estimated 543,000 annual maternal deaths and Maternal mortality rate of 400 deaths per 100,000 live births in the global figures (WHO,2012). The PoA called for a reduction in Maternal mortality rates by 75% between 1990 and 2015. (WHO,2012).

The governments were urged to reduce differences in maternal mortality within countries and among geographical areas, ethnic and socioeconomic. In 1994, the United Nations mandated all countries to reduce maternal morbidity and mortality to the bearest minimum so that it no longer constitute a public health problem. The PoA made a proposal of MMR of 60 deaths per 100,000 live births for countries with intermediate levels of maternal mortality. It further proposed a MMR of 75 deaths per 100,000 live births for countries with the highest levels of maternal mortality by 2015. Although, Nigeria and India do not have the highest MMRs, they contribute to more maternal deaths each year and to the global burden than other countries in the world. Maternal mortality are common among women with little resources and also high in conflict affected countries, where women and girls lack access to sexual and reproductive health services, skilled attendance at birth, basic and comprehensive emergency obstetric services and contraception increasing the global maternal deaths (WHO,2009).

Globally, the number of maternal deaths has declined significantly since ICPD. According to the most recent estimates by the global, regional, and country-level and the Institute for Health Metrics and Evaluation revealed that between 2005-2008, maternal deaths reduced 36% from 535,900 to 342,000 and also from 2008-2011, maternal deaths decreased an additional 20% to 273,500. (WHO,2012)

Family Planning

In Nigeria, there is gap in the knowledge use of contraception. In spite of the efforts and high level of awareness of family planning, the utilisation rate is still low. The estimate by NDHS (2013) revealed that contraceptive prevalence rate (CPR) was 15%. Adebayo, Gayawan, Ujuju and Ankomah, (2013) study revealed a trend in the reduction of modern contraceptive method usage in Nigeria.

Adolescent Reproductive Health

Adolescents is made up of a fifth of the national population, the reproductive health challenges are enormous (FMOH, 2015). In Nigeria, adolescents are faced with the challenge of traditions and changing culture. Adolescents sexuality especially the traditional mechanisms for coping with and regulating norms of chastity is being eroded by the influence of internet and media, urbanisation and globalised economies. This has resulted in risky sexual behaviours. A quarter of adolescent males and half of the females were recorded to be sexually active, with 20.3% of the female respondents and 7.9% of male respondents already engaging in sexual intercourse by the age of 15 years (FMOH, 2007).

The 2013 NDHS revealed that sexual intercourse among adolescents is mostly in the absence of contraception. Consequently, incidence of unwanted pregnancy, unsafe abortions, HIV and other STIs are high among adolescents. NPC and ICF Macro (2013) estimated that 20% of women that are married have an unmet need of family planning.

Harmful Practices and Reproductive Right

Reproductive Rights and Harmful Practices

The leading reproductive health rights violations in Nigeria are harmful traditional practices such as Female genital mutilation (FGM) domestic and gender violence. The plan of action and national policy developed by Nigeria was based on the fact that FGM infringes on human rights and also a kind of violence against girls and women. (FMOH, 2002; NDHS, 2013) Female genital mutilation is prevalent in most part of Nigeria.(NPC and ICF Macro, 2009). FGC is reportedly more common in South East and South West Zones than the Northern zone (NDHS,2013). Nevertheless, the 2008 Nigeria Demographic and Health Survey (NDHS) result showed that thirty percent(30%) of women within age 15-49 years have female genital mutilation done.

Reproductive health Non- infectious Conditions

The Knowledge about reproductive health cancers and the screening practices to promote early detection of the disease is quite poor among the population. It was reported according to 2007 NARHS that 59% of respondents were aware of cancer of the breast, while 17% were aware of cancers that affect the male reproductive organs (FMOH, 2009). It was reported that in most communities majority of the people and health care givers are not aware that the reproductive health cancers can be diagnosed at the pre-malignant stage.(NDHS, 2013)

Sexually Transmitted Infections (STIs)

Sexually transmitted infections (STIs) are human infections that are transmitted sexually. Globally STIs affect majority of the population. It is a major public health problem and causes health and socio-economic consequences. The prevalence of STIs in Nigeria show high levels of prevalence of various types of STIs such as syphilis, gonorrhoea, chlamydia, genital herpes and trichomoniasis. The major consequences of STIs are chronic lower abdominal pain, ectopic pregnancies, female and male infertility, spontaneous abortions, stillbirths, cervical cancer and death. STIs is a asymptomatic and may require highly sophiscated equipment for diagnosis. The control of STIs is an important element of reproductive health. In Nigeria many indications reveal that many people self-medicate or patronize traditional healers. The presence of STIs can increase the spread of HIV transmission, proper education and control of STIs are important strategies for preventing the spread of HIV.

(i) Concept of learning outcomes

The most effective way to state instructional objectives is in terms of the behaviour that is expected of students to achieve at the end of a course. Learning outcomes determines what the students should be able to demonstrate in terms of knowledge, skills, and values at the course or programme. Clear understanding of learning outcomes serves as the bases for assessing the effectiveness of the teaching and learning process. There are so many approaches to evaluating the student outcomes. Gronlund (2000) reported that it is important to keep the learning outcomes specific and to keep them free of specific content in other to be applied across all units of study. When stated without specific content, learning outcomes can be applied for establishing evidence of mastery of the learning task required for many procedures. For example, identify the rationale for the procedure applies to all nursing procedures, while describe the steps of the procedure requires that a checklist is developed for each procedure. This approach provides consistency across content for both student and teacher.

Learning Outcomes-based Approach

The 21st century demand for workers have focused mostly on the individual outcome rather than only the paper qualification (Majid, 2010). It was further reported that apart from knowledge acquisition, organizations prefer individuals who posses good skills in communication and are also versatile in critical and analytical thinking. Diaconu and Pandelica (2011) acknowledge the importance of learning outcomes as

the bedrock of training highly qualified employable graduate. Learning outcomes is the final product of the learning process. This entails the cognitive, affective and skills outcomes (Lizzio, Wilson and Simons, 2002). Cognitive outcomes refer to the development of knowledge and professional skills while non-cognitive outcomes focus on changing the attitudes and values of individuals (Ewell, 2009). Mundia (2012) opined that computer and communication skills, ability in analysis, synthesis, problem solving and evaluation as well as thinking critically and creatively are some examples of learning outcomes. Allen and Friedman (2010) acknowledged cognitive, affective and behavioral outcomes as important dimensions of learning outcomes necessary for competency as a professional.

Student satisfaction plays an important role in developing students' skills and knowledge that is a significant predictor of enhancing the students' learning outcomes (Letcher and Neves, 2010; Eom, 2009; Tam, 2007). Furthermore, evaluation of student learning outcomes is vital because it indicates the level of institutional effectiveness (Hou, 2010; Astin, Banta, Cross, El-Khawas, Ewell, Hutchings, and McClenney, 1996) Indeed, this evaluation reflects whatever is essential for improving the quality of the university (Scott, 2011).

Outcomes-based approach

The outcomes-based approach to education clearly specifies what students are expected to learn and arranges the curriculum such that these intended outcomes are achieved (Harden, 2007a). Learning outcomes provides the bases for an effective integrated and aligned curriculum. Learning outcomes provide a strong framework on which to structure the curricula. According to Harden, Crosby, and Davis,(1999; 2007b) learning outcomes help to provide clarity, integration and alignment within and between a sequence of courses. It promotes a self-directed and independent approach to learning, encourage a learner centred approach to curriculum development and planning. Moreover, learning outcomes enable students to be held responsible for their learning, and also to consistently assess their achievement and progress. This will promote a collegial approach in planning the curriculum. The collaboration of the instructors in outcome based approach will encourage gap identification. The learning environment and curriculum are streamlined. Hence the need for continual monitoring and evaluation to ensure improvement, accountability and quality of educational programmes

The Components of a Measurable Learning Outcomes

Three essential components of a measurable learning outcomes are:

- The student learning behaviors
- The appropriate assessment methods
- The specific student performance criteria for success

Measurable learning outcomes format

- It focuses on student behavior
- The use of simple and specific action verbs
- The selection of appropriate assessment methods
- The use of stated desired performance criteria for success

Student learning outcomes

Student learning outcomes states what the learner should know, be able to do, and value by the end of their educational programme. Four dimensions of learning outcomes are generally identified in educational programme:

- **Knowledge outcomes:** This pertains to grasping of the fundamental cognitive content and core concepts
- **Attitudes and values outcomes:** This encompass affective values and ethical principles.
- **Skills outcomes:** This focus on the capacity for applying basic knowledge, the analysis and synthesis of information, assessing the value of information, effective communication and collaboration.
- **Behavioral outcomes:** This reflect a manifestation of knowledge, attitudes and skills, as shown by performance. Focus on student behavior and use simple, specific action verbs to describe what students are expected to demonstrate.

Examples of learning outcomes:

a. The learner will be able to collect and organize appropriate clinical data

b. The learner will be able to apply principles of evidence-based medicine to determine clinical diagnoses, and formulate and implement acceptable treatment modalities.

c. The learner will be able to articulate cultural and socioeconomic differences and the significance of these differences for instructional planning.

d. The learner will be able to use technology effectively in the delivery of instruction, assessment, and professional development.

e. The learner will be able to evaluate the need for assistance technology for their

students.

f. The graduates will be able to evaluate educational research critically and participate in the research community.

g. The learner will appreciate the value of outcomes assessment in assuring quality across the health profession and in facilitating movement of the health professionals across national borders.

The importance of learning outcomes

- When the learners know what is expected of them, they tend to focus their time and energy studying better in other to improve learning.
- The student learning outcomes support a "learner-centered" approach to instructional activity;
- The student learning outcomes communicate to prospective students, their parents, and the public what is valuable about academic programme.
- The assessment of student learning outcomes can provide information to students on their strengths and weaknesses in relationship to specific learning dimensions.
- The assessment of student learning outcomes can provide faculty with information that can be used to improve educational programs and demonstrate their effectiveness.

(j) Assessment of student learning outcomes

Assessment methods are tools and techniques used to determine the extent to which the stated learning outcomes are achieved. There is a slogan commonly used stating that "assessment drives learning", but this is a limiting concept. Learning outcomes assessment provides evidence of student learning and progression, and prioritize recommendations for continuous curriculum improvement (Cummings, Maddux and Richmond, 2008). Learning outcomes is essential for the validity of a test that the items measure the objectives and content of the course/programme as outlined in the test blue print. Valid critical thinking items reflect the definition of the construct, the objectives that is established to measure learner achievement, and the content domain as specified by the blue print. It is essential to make use of the learning outcomes that was carefully prepared at the inception of the test development process to frame the critical thinking essay/multiple choice items.

The application of the specific behaviours that define the learning outcomes as the basis for the development of the item is critical, this is to ensure that the developed items are measuring critical thinking as reflected in the definition. There are different methods of assessing the student, inform of direct and indirect; qualitative and

quantitative methods, examples of direct assessment methods are licensure exams, internship evaluations, performance assessment for graduating students, pre and post-tests, thesis/project, and proficiency exams e.t.c. Indirect assessment methods includes exit interviews, focus group discussion, review of curriculum and syllabus and job placement interviews. e.t.c.

The formative and summative evaluation

The formative and summative evaluation addresses different aspects of educational structure, process and outcomes. The formative evaluation provides feedback to the learner by identifying areas of weakness and providing suggestions for improvement. On the other hand the formative programme evaluation provides information and suggestions for improving a curriculum and programme's performance. Moreover, summative evaluation measures specific performance objectives that are accomplished, to certify competency in a particular area, and summative programme evaluation measures the success of a curriculum in achieving learner and process objectives. Generally formative evaluations require the least rigor than summative individual and program evaluation. Establishing validity is the first priority in developing any form of assessment. In simple terms, this means ensuring that it measures what it is supposed to measure. The test must contain a representative sample of what the student is expected to have achieved. This aspect of validity, known as content validity, is the one of most concern to the health teacher. On the other hand, reliability expresses the consistency and precision of the test measurements. There are a number of factors, which contribute to the reliability of a test item. In a clinical examination, the students, the examiners and the patients are required.

Administration requirements of a test

The main target for administering a test is to provide the students with a fair opportunity to demonstrate their achievement of the learning outcomes. For assessment to be fair, it is necessary to provide a test taking environment that is conducive to the students' best efforts, thereby minimizing the factors that introduced error in measurement. The systematic approach to the administration of the testing process will limit the problems that can interfere with the reliability and validity of the test results. The key factor to the test development process is planning ahead.

Physical environment

The environmental conditions of the physical space for administering the test must be appropriate. The physical space must be large enough with adequate seats and space between the desks, lighting and ventilation. Also, the test environment should be free from noise and interruptions. All distractions should be eliminated or minimized as much as possible by placing a sign on the door to the hall or room stating that test/examination is in progress. The test scripts should be ready days before the examination. The teacher should arrive thirty(30) minutes before the commencement of the test to arrange the sitting arrangement of the students to maximize the distance between them.

Psychological environment

Students who are anxious during a test/examination may not be able to demonstrate their maximum performance. Linn and Gronlund (2000) discovered that many teachers behaviuors can increase test anxiety in the student and should be avoided. Teachers behaviours to be avoided are as follows: The use of test to threaten the student, giving dire warnings, stressing the time limits for the test and the consequences of failure.

The teacher's role is to motivate the students to do their best in every test. A positive approach to a test is to make the learner focus on their abilities. A positive psychological environment can be established for the learner by preparing students ahead of the test. The test anxiety is reduced if the student perceive that a test is a fair assessment. Clear instructions to the student that are positively focused help to reduce anxiety. There should be minimum use of negative words by the teachers. It is important to stress what the students should do and not what they should avoid doing. Furthermore, it is necessary to communicate with the learner in a positive manner, this is to show to them that they are responsible and also to boost their confidence and reduce test anxiety.

The learner should be made to know that the best antidote to test anxiety is prepare adequately for the test /examination. The students should be made to know that they are responsible for their own learning. The anxiety of the student will be reduced to a healthy level if they are made to accept the challenge of attaining the learning outcomes of a course and given a fair opportunity to demonstrate that attainment. The student motivation is improved if they are made to know that they must achieve their own success in spite of the facilitation of the learning process by the teacher

Tool for Evaluation

The theoretical knowledge and clinical assessment of a learner should be balanced; otherwise it may result in conflicts of learning and the curriculum. Evaluation requires specific construction of instruments for measurement in form of questionnaires, interview guides, tests and rating forms. The validity and reliability of the instruments are affected by the way they are constructed and administered. The feasibility of available resources is important to the method of measurement chosen. Evaluators must be knowledgeable of the various rating biases that could influence the reliability and validity of an instrument. The quality of clinical assessment is improved by the use of structured and standardized instruments in form of checklists and rating forms for marking. Also, the content specification and careful observation of the activities performed are essential.

In other to evaluate the individuals or educational programmmes, the methods of measurement mostly used are questionnaires, essays, rating forms/checklists, computer-interactive tests, oral examinations, interviews/ discussions groups, direct observation, and performance auditing. The most popular objective method used in clinical assessment is Objective Structured Clinical Examination. (OSCE).

Summary

The assessment of students' performances will require the proper selection of measurement methods and instruments. The ideal evaluation strategy will endorse the use of multiple approaches to avoid threats to the reliability and validity of the instruments that are measured.

4. Empirical review on predictors of Reproductive health learning outcomes

(a) Institutional factors determining learning outcomes in Reproductive health programme

(i) **Curriculum content knowledge**

The philosophy and curriculum determine the choice of content, learning experiences and learning outcomes of each course or programme to a great extent. This provides for and inspire the best development and self-realization of the individual student (Ajala, 2012). The curriculum content is germane to education quality. The knowledge, attitudes and skills imparted by learning subjects, the approaches and other co-curricular activities is a bedrock to systematic and comprehensive learning. The advantages of curriculum structuring and sequential learning stands as an important asset for the acquisition of sustainable learning. This

surpasses learning from other informal ways and sources such as from the internet and media. Given the many perspectives on learning and achievement that may exist in a society, defining the appropriate content of the curriculum is very often a source of tensions. However, it may also become an occasion for working together on consensus building.

Content descriptions describe what is to be taught and what students are expected to learn. Content descriptions include knowledge, understanding and skills, described at a year level or band of years. The content descriptions are accompanied by content elaborations, which are optional, and are provided to give teachers ideas about how they might teach the content. According to Adegbile (2016) curriculum is defined as the planned learning experiences provided by the school to assist the students in attaining the designated learning outcomes to the best of their ability. The midwifery curriculum enable the students to acquire the essential knowledge, skills and behaviours in a logical, systematic manner. The midwifery curriculum has been upgraded to include Obstetric Emergencies Care, life saving skills and post abortion care (NMCN, 2014). Registered midwives must undergo regular assessment of their knowledge, skills and judgment to ensure that they are competent to practice.

According to (OECD, 2013) students are encouraged to assess their learning especially at higher educational level while teachers also have the pedagogical autonomy to assess the student's ongoing progress. Traditionally, educational curricula are based on content areas structured by courses, credit hours, and terms, and students' learning outcomes vary based on how much they learn in a given amount of time. The idea of focusing on the end goals first referred to as 'back ward design' enables learners to succeed in mastering competencies irrespective of time.

Everhart (2014) revealed that many competency based educational programmmes have common focus as learner and outcome based though they make take diverse approaches. A well defined learning outcomes forms the basis of competency based education that is effectively designed. The design commences with appropriate learning outcomes, followed by analytic scaffolding of the learning activities towards achievement of the outcomes. Therefore, the competencies are aligned to content, assessment and performance. The learners performance can be tracked by developing sets of robust learning outcomes and competences, curriculum design reorientation that is first based on learning outcomes; identifying effectively the risk in students' progress toward achievements of learning outcomes and the

achievement of short and long term academic performance improvements that is focused on outcomes rather than inputs. Others are supporting learning outcomes, Fostering authentic assessment including demonstrated mastery of competencies.

Institutions make use of accreditation standards to evaluate quality and effectiveness of programmes in other to enhance improvement. Institutional outcomes refers to statements of what it delivers and expects in the learner after graduation which are are observed and measured. Competency based educational programmes are designed to support and align with the institution's overall goals. learning outcomes are observable and measurable statements of what a student knows and is able to do as a result of an educational experience. Competency is a specific skill, knowledge, or ability that is both observable and measurable.

Moon (2002) summarised the key components of a learning outcome stating that each learning outcome should have a verb to demonstrate accurately what the learner is expected to be able to do at the end of a period of learning. A word to indicate the skill that is required and the standard to which the skill is to be performed

Tasks assessment design

Drafting the learning outcomes will make one think about appropriate assessment tasks. The idea of thinking about assessments helps to clarify what the teachers are planning to teach the students. Allen and Friedman (2010) emphasized three essential aspects of learning outcomes including cognitive, affective and behavioral in order to prepare students for their social work and professional life. Tam (2007) specified four dimensions of learning outcomes namely, vocational gains, personal development gains, general educational gains, and intellectual gains. Vocational gains is considered as cognitive learning outcomes since it includes the extent to which knowledge and skills are gained in training, while personal development gains, general educational gains and intellectual gains are related to the affective and behavioral learning outcomes. Learning outcomes are central to the development of an efficient and effective framework for continuous improvement of the curriculum

(ii) Teachers continuous professional development

Teachers' continuous professional development is highly relevant both for improving educational performance and effectiveness, and for enhancing teachers' commitment, identity and job satisfaction. In-service training and motivation of teachers to attend seminars and workshops in Reproductive health programme are

crucial. According to Rivkin, Hanushek and Kain, (2005) and OECD (2009) teachers' competences have powerful effects on student achievement, up to three quarters of school effects on student outcomes can be explained by teacher effects. However, teachers' perceived need for professional development seems to be greater than the actual opportunities they have. Many teachers either do not find suitable professional development, or cannot attend because of conflicting work schedules. A considerable proportion of teachers feel that they require more professional development than they currently receive (OECD, 2009)

Therefore, initial teacher education should provide all student teachers with the core of professional competences upon which they can build throughout their career. Beginning teachers should receive a systematic programme of support (induction) during their first years in the profession in order to have opportunities to start the further development of these competences (European Commission, 2010). It is necessary for teachers to be engaged in a process of continuous assessment in further development of their competences. CPD is essential to effective practice and to the individual's development within the profession resulting in career progression. Effective CPD includes learning and being fit to practice.

The nature of CPD

According to Schostak (2009) CPD is depicted as professional update of knowledge, attitude and skills. CPD consists of attendance at conferences and workshops at internal, local and national levels. The activities of CPD are arranged to take place outside of the workplace settings. Continuous or lifelong learning is essential to up date knowledge and skills. CPD constitutes keeping up to date and life long learning professionally, clinically and managerially. The need to emphasize continuous acquisition of knowledge, attitude and skills to enhance competent practice is of paramount importance. The need to encourage teachers on continuous development of their competences is vital in a global world that is fast changing.

Improving the Quality of Teacher

The roles of teachers and schools are changing, and so are expectations about them. Teachers are asked to teach in increasingly multicultural classrooms, integrate students with special needs, use ICT for teaching effectively, engage in evaluation and accountability processes, and involve parents in schools (OECD, 2009). Furthermore, a recent World Summit on Teaching noted that teachers need to help students acquire not only "the skills that are easiest to teach and easiest to test" but more importantly,

ways of thinking (creativity, critical thinking, problem-solving, decision-making and learning); ways of working (communication and collaboration); tools for working (including information and communications technologies); and skills around citizenship, life and career and personal and social responsibility for success in modern democracies" (OECD,2011).

When many teachers undertook their initial education, knowledge about learning and teaching was less developed, many teaching tools were not available and the role of education and training was more narrowly conceived. According to European Commission (2012), it was stated that the increased availability of educational resources via the world wide web, including Open Educational Resources, meant that both teaching staff and learners have, potentially, a much wider range of learning materials at their disposal and teachers will increasingly need the competences to find, evaluate and deploy learning materials from a wider range of sources, and to help learners acquire these competences.

(iii) Learning environment

School resources; Facilities, Equipment and Technology

Facilities, Equipment and Technology are the basic requirement for efficient teaching learning process. Schools having appropriate infrastructure, staff and instructional support services are reputable and have positive impact on their efficiency. Oyedeji (2000) classified school resources into site, building and equipment, which includes permanent and semi- permanent structures such as machines, laboratory equipment, chalk, boards and office assistants' tools such as brooms and clearing materials. School building is said to have positive impact on the comfort, safety and academic performance of the students. UNESCO (2012) stated in a report a number of indicators that adversely affected quality. Those included lack of resources and materials, school mismanagement, insufficient and overcrowded classrooms, poor plant facilities, insufficient water and sanitation facilities, inadequate safety system and ineffective home-school relationship.

Wilson and Sacklokham (2009) described that internal efficiency of schools were affected by physical infrastructure as well as teaching-learning environment. The school effectiveness was also influenced by other considerations such as teacher-student ratio, textbooks and supporting aids for teaching-learning process. Poor school facilities (lack of computers, library, etc) may result in low student outcomes. Access to modern computers and libraries may enlarge a student's knowledge and improve

performance (Osin, 1998). In addition, empirical findings by Lorton and Walley (1979), Hallack (1990), Adeogun and Osifila (2008) suggested that unattractive old school buildings, crowded or, in contrast, empty classes, lack of adequate surrounding infrastructure may contribute to poor students and sub-standard overall school performance

Evidence is emerging about how a school's physical learning environment impacts on community and benefits the long-term health and well being of students and communities (McLaughlin and Talbert, 2006; OECD, 2008). Poorly designed and maintained schools, often found in areas of lowest educational achievement, can also have a detrimental impact on teacher and student morale and engagement, and impact negatively on aggregate student outcomes (Filardo, 2008). Collectively, these factors impact on teachers' work, attitudes and behaviours, and have flow on effects on student learning. Health and wellbeing, affective, social, cognitive and behavioural characteristics of individuals are pre-conditions that can impede or enhance learning. The physical environment is one factor impacting on student learning outcomes (OECD,2008). School effectiveness and improvement studies often neglect context, rely on limited measures of outcomes and ignore the learning environment (Bickford and Wright, 2006; Mooset , Krejsier and Kofod, 2008; Thrupp and Lupton, 2006).

Teaching and learning resources

Library resource

According to Busayo (2011) and Lingam and Lingam (2013) examined the benefits of a functional and good library system as enormous and include the provision of access to books and other reading materials or resources. The immediate benefit of access to reading resources is the promotion of reading culture which in turn underpins the growth and strengthening of literacy skills. The positive outcomes of reading culture is a marked increase in reading fluency, vocabulary acquisition and usage, ability to express ideas and concepts more clearly and accurately (Krolak, 2005 and Busayo, 2011). In a school setting, a functional school library system fulfill a number of purposes such as:

i) Provision of material resource to enhance academic growth and development;

ii) Guidance of students on the choice of relevant materials for study;

iii) Provision of support to the teaching programme of school;

iv) Provision of assistance to pupils in terms of developing of skills in the use of books and libraries;

v) Acquisition of the relevant books and other reading materials relevant to the school curriculum. In other words libraries provide access to supplementary materials that complement and enhance the learning provided by prescribed textbooks;
vi) The library helps to guide students in all aspects of their academic endeavour including developing research skills.

Makotsi (2011) observed that regular access to books while at school and developing the habit of reading for pleasure have dramatic results in terms of increased vocabulary, text comprehension, and improvement in writing skills and self-expression. According to Krolak (2005) libraries in general also contribute to other areas such as lifelong learning, literacy enhancement, informed citizenship, recreation, creative imagination, individual research, critical thinking and ultimately empowerment in an increasingly complex world. Mji and Mkagato (2006) added that library usage contributes to the improvement of the learners' higher order of learning skills such as analysis, problem solving and evaluation. Sadly, in Sub-Saharan Africa, school libraries are either not available or in poor condition or both (Etsey, 2005). However, availability of libraries is one thing and utilising them effectively is another; for instance, Seniwoliba (2013) reports that in Ghana libraries are not fully utilised by either teachers or pupils.

Textbooks resource

The importance of textbooks in the teaching and learning process has been widely recognised (Gichura, 2003). Textbooks provide structure and order in the teaching and learning process (Johansson, 2006; Triyoga, 2010) and in the classroom, they are considered as useful and effective tools or instruments whose purpose is to facilitate the work of the teacher on a daily basis (Johansson, 2006;). Textbooks also provide security and confidence to inexperienced teachers (Triyoga, 2010). Glennerster et al. (2011) observed that an average child does not benefit from textbooks. Triyoga (2010:11) observes that: "There is no ideal textbook, ideal for every teacher, ideal for every group of learners and ideal for every teaching situation". And for that reason it is advisable to use them carefully and alongside other aids or other materials (Triyoga, 2010).

Similar view was echoed by Indoshi (1993) as cited in Mudulia (2012) who argues "that the use of textbooks among other materials raises academic standards and efficiency of a school system". Triyoga (2010) further identifies a number of limitations associated with the use of textbooks. They include in authenticity,

distorting content, may not reflect students' needs and may deskill teachers.

Poor performance in schools in Sub-Saharan Africa has been associated with shortage or lack of core textbooks (Mudulia, 2012). For instance, Eshiwani (2001) as cited in Musasia et al. (2012) argue" poor performance of mathematics in Kenya is attributed to poor teaching methods and acute shortage of textbooks.

Laboratory resource

Kibirige and Hodi (2013) underscore the importance of laboratories in providing learners with opportunities to experience science by employing scientific research procedures. One such opportunity is engaging learners in the inquiry processes through which they can acquire research skills (Kibirige and Hodi, 2013). Also learners gain in terms of understanding the nature of scientific problem solving (Kibirige and Hodi, 2013). Similar views are echoed by Owolabi and Oginni (2012) who observe that one of the activities in science is experimentation because it provides a forum for practising the theoretical knowledge gained in the classroom and for demonstrating the psychomotor skills of a teacher and learner, thus reinforcing the fact that students' engaging in laboratory equipment and processes is key to achieving the learning objectives. Students who are not engaged in the laboratory equipment see science as abstract and irrelevant (Owolabi and Oginni, 2012).

According to World Bank (2010); Ogunmade (2005); Lingam and Lingam (2013); Kibirige and Hodi, (2013) acute shortages of laboratory equipment and consumables have been reported in Zambia, Nigeria, South Africa and Fiji among other countries There are also reports of poor quality of science materials in Fiji (Lingam and Lingam, 2013). Lack of proper use of laboratories has also been reported in South Africa and Portugal (Kibirige and Hodi, 2013).

Other resources

One of such resource is the classroom physical environment. Quality physical environment is very important because studies have shown that it can significantly affect student achievement (Victoria Institute of Technology,). Similar views are echoed by Siddhu (2011) who found in a study in India, that quality of classroom conditions have strong positive effects on girls. Adedeji and Olaniyan (2011) also found that many rural schools across African countries lack essential infrastructure thus making the learning environment less safe, less efficient and less effective.

(b) Students factors predicting learning outcomes.

(i) Academic support seeking

The term academic support may refer to a wide variety of instructional methods, educational services, or school resources provided to students in the effort to help them accelerate their learning progress, catch up with their peers, meet, or generally succeed in school. Schools and teachers are responsible for identifying those who may be falling behind. (OECD, 2013). These students receive additional support, such as remedial instruction. If required, teacher's assistants and special needs teachers are available to provide further support. Kraus, Hartley, James and McInnis (2005) found that while matured students might be new to a course of study, they generally have a clear purpose motivating their study and are more likely to seek assistance from tutors. Students who attend schools in which more students engage in supporting activities will also be more likely to have higher achievement.((Ma and Kerlinger,2000; Williams,1992)

The term support may also be used in reference to any number of academic-support strategies. In practice, academic support encompasses a broad array of educational strategies, including tutoring sessions, supplemental courses, summer learning experiences, after-school programs, teacher advisors, and volunteer mentors, as well as alternative ways of grouping, counseling, and instructing students. Academic support may be provided to individual students, specific student populations (such as non-English speakers or disabled students), or all students in a school. According to the research findings of Muola, Maithya and Mwinzi (2011) on the effect of academic advising on academic performance and the influence of year of study stated that a higher percentage 27% of second year students is likely to seek academic advising as compared to 4% percent of third year students.

At the third year, students may realize that they do not seriously need academic advising since they have been in college long enough to know what is required of them as far as career and academic goals are concerned. A similar study also found out the areas in which students critically need guidance such as maintaining high grades (77%), handling academic workload (74%), setting academic goals (64%) and setting career goals (71%). This information can act as a guide in planning academic advising priorities. The high need for academic advising compared to actual number of students who seek for the service could imply that there are other reasons that prevent students from seeking the service.

The data analysis showed that 21% (11out of 53) of the first year students sought academic advising services as compared to 27% (11 out of 41) of the second year students sampled. State and federal policies may require schools to provide academic support to certain student populations, such as identified special-education students, or schools may voluntarily create support programs to address specific performance results or trends, such as large numbers of dropouts, course failures, behavioral problems. While the term academic support typically refers to the services provided to under performing students, it may be used in reference to "enrichment" programs and more advanced learning opportunities provided to higher-achieving students. The teacher's relationship with his or her students, in many ways, is integral to a student's success and to creating a cooperative learning environment (Hijzen, Boekaerts and Vedder, 2007). While the design and purpose of academic-support programs may vary widely from school to school, the following are some representative examples of common forms of academic support:

- **Classroom-based strategies:** Teachers continually monitor student performance and learning needs, and then adjust what they teach or how they teach to improve student learning.
- **School-based strategies:** Schools create academic-support opportunities during the school day, such as learning labs, to increase the instructional time that academically struggling students receive, while also varying the way that instruction is delivered. For example, if students in a course primarily learn in large or small groups that all work at the same pace, students in a learning lab or other support program might work one-on-one with a teacher and be given more time to practice skills or learn complex concepts.
- **After-hours strategies:** Schools may provide after-school or before-school programs, usually within the school building, that provide students with tutoring or mentoring, or that help students prepare for class or acquire study skills, for example.
- **Outside-of-school strategies:** Community groups and volunteer-based learning programs, often working in partnership with local public schools, may provide a variety of programs, such as reading programs for young children, that are connected to what students are learning in school.

- **Vacation-break strategies:** Strategies such as summer school or "summer bridge programs" may be created to help students catch up (if they fell behind during the previous year) or prepare for the next grade (if there are concerns they might struggle academically or drop out of high school). Similar support programs and learning opportunities may be provided during vacation breaks in the fall, winter, and spring.
- **Technology-assisted strategies:** Schools may use digital and online learning applications, such as visual simulations or gamed-based learning, to help students grasp difficult concepts, or teachers may use course-management programs that allow them to archive course materials and communicate with students online. These options may be self-directed by students or overseen by teachers, or they may be provided during the school day or they may allow students to work from home at their own pace.

In addition to the various support settings and delivery methods described above academic support may also have a specific educational focus or goal.

Examples are as follows:

- **Relationship-based support:** In schools, strategies such as teaming or advisorie may be used to build stronger and more understanding relationships between teachers and students. The general idea is that students will be better served and more effectively taught if teachers know students well and understand their distinct learning needs, interests, and aspirations.
- **Skill-based support:** In some cases, schools may decide to create a literacy program, for example, that provides all students with more concentrated instruction, practice, and guidance in reading, writing, and communicating. The support may be provided during regular classes, during the school day, or after regular school hours. Support that focuses on math skills or technological literacy are two other common examples.
- **Needs-based support:** Many or most forms of academic support are based on identified learning needs, and schools will provide supplemental or intensive instruction, practice, and guidance to students who are struggling academically or who have specialized needs—these can include students with learning disabilities, physical disabilities, or developmental disabilities; students who are learning English or cannot speak English; students who recently immigrated to

the United States, or students who are performing academically or developing intellectually well below or above the expectations for their age or grade level

Reform

The provision of some form of academic support to students is typically one of the principal goals of most contemporary school-reform efforts, since the general intent of these strategies is to improve the performance of schools, the effectiveness of teachers, and the learning of students and increasing the amount of "support" students receive, in whatever form, is one of the many ways schools can improve the educational achievement, aspirations, and attainment of students. From school to school, however, what specifically constitutes "academic support" may not only vary widely in design and execution, but schools may perceive or interpret both the purpose and obligations of academic support in significantly different ways.

For example, one school may provide only a few support options, such as an after-school program and tutoring services, while another school might have been entirely restructured to provide ongoing academic support, both inside and outside the classroom, to all students throughout the school year and over the course of the summer. In the first case, the school may view academic support as something that is "added on" to an academic program and that is provided only upon request or in response to clear evidence of need. Unless school regulations require the provision of academic support, a student, parent, or guardian may be seen as having the primary responsibility for requesting support services. Teachers are responsible for teaching courses and helping students succeed in those courses, but other forms of academic support and guidance are the responsibility of counselors, support specialists, and parents.

In the second example, the school may have an entirely different philosophy. Academic support might be considered a fundamental, inextricable component of an effective school that should to be provided to every student and integrated in some way into every course, learning experience, and student-teacher relationship. In this case, administrators, teachers, counselors, and other staff members would assume responsibility for providing the academic support students need to succeed regardless of whether parents request additional support or whether state and federal policies obligate the school to provide supplemental services. For teachers, providing academic support to students is part of their daily professional responsibilities, and the school may create the necessary conditions that allow teachers to provide that support

by modifying schedules, adjusting workloads, or offering specialized training. In fact, many reform strategies, initiatives, and debates hinge on these two general approaches to support and fall somewhere on the spectrum between these two philosophical poles.

The collection and analysis of academic-performance data is another relevant feature of academic support that intersects with school reform. In recent decades, districts and schools have been placing an increasing emphasis on evidenced-based reform strategies, leadership decisions, and student support. The general idea is that by analyzing school data, reading academic studies, or conduct in action research schools can more precisely determine their programme and instructional weaknesses, and then develop more focused and effective ways to improve those weaknesses. In addition, state and federal policies also affect the kinds of academic support provided in schools. Under the Individuals with Disabilities Education Act, for example, a student with a disability is defined as having intellectual disabilities, hearing impairments, speech or language impairments, visual impairments, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities. For children ages three through nine, based on the discretion of state and local education agencies, the definition of a disability can include any child who is experiencing delays in physical development, cognitive development, communication development, social or emotional development, or adaptive development. In public schools, various forms of specialized academic, emotional, and social support and services are provided to students who meet the criteria outlined in educational regulations.

(ii) Self-regulated learning

Self-regulation (SR) is essential to the learning process (Jarvela and Jarvenoja, 2011; Zimmerman, 2008). Harris, Friedlander, Sadler, Frizzelle, and Graham (2005) and Wolters (2011) stated that SR can help students create better learning habits, strengthen their study skills and enhance academic outcomes. Cheng (2011) investigated the role of self-regulated learning in enhancing learning performance, the result revealed that students' learning performances were closely related to their learning motivation, goal setting, action control and learning strategies. Teachers thus should be familiar with the factors that influence a learner's ability to self-regulate and the strategies they can use to identify and promote self-regulated learning (SRL) in their classrooms.

Self-regulated learning is a process that assists students in managing their

thoughts, behaviors, and emotions in order to successfully navigate their learning experiences. This process occurs when a student's purposeful actions and processes are directed towards the acquisition of information/skills. Self-regulated learners' proactive qualities and self-motivating abilities help to distinguish them from their peers. Research showed that self-regulated students are more engaged in their learning. These learners commonly seat themselves toward the front of the classroom (Labuhn, Zimmerman, and Hasselhorn, 2010). They offer answers to questions voluntarily (Elstad and Turmo, 2010). They seek out additional resources when content is to be mastered (Clarebout, Horz, and Schnotz, 2010).

Most importantly, self-regulated learners also manipulate their learning environments to meet their needs (Kolovelonis, Goudas, and Dermitzaki, 2011). Researchers have found out that self-regulated learners are more likely to seek out advice (Clarebout et al., 2010) and information (De Bruin, Thiede and Camp, 2011). According to Labuhn et al.(2010) they pursue positive learning climates than their peers who display less self-regulation in the classroom. Findings from recent studies also argued that self-regulated learners perform better on academic tests, student performance and achievement (Schunk and Zimmerman, 2007;Zimmerman, 2008).

Self-regulation is a process that keeps people focused on monitoring their task completion progress and assists with multiple areas of human functioning, such as management of a chronic illness, athletic training and learning in academic settings (Bandura, 1991; Caprara et al., 2008). Zimmerman (2000) defines self-regulation as "self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals". Educational researchers in particular have found that students who self-regulate their learning activities perform better than students who do not self regulate their learning, irrespective of their course of study.

Self-regulated learning (SRL) is a process that involves students' intentional efforts to manage and direct complex learning activities toward the successful completion of academic goals (Zimmerman and Schunk, 2001). Zimmerman (1989) referred to SRL as the degree to which students are able to become active participants in the process of monitoring their own learning. Pintrich (2000) describes SRL as an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior in the services of those goals. Some key self-regulatory processes that affect learning outcomes include goal setting and time management, self monitoring and reflection,

modification of learning strategies, regulation of feedback, help seeking, and resource oriented learning (Bandura, 1991; Pintrich,2000;Zimmerman and Schunk, 2001). Self Regulated Learning interventions studied include providing training and prompting students to follow SRL strategies and processes. Prompting is an instructional method for guiding and supporting students to perform a specific activity as part of a learning situation. Essentially, prompts instruct students to stop and reflect on their own thoughts or consider the efficiency of their own learning strategies. Training, by contrast, provides explicit instruction in the components of SRL such as cognition, metacognition, and motivation.

(iii) Academic self-efficacy

Self-efficacy refers to one's personal beliefs in their ability to organize and perform a course of action required to reach a desired target. Self-efficacy is the measure of one's competences to complete tasks and reach goals (Ormrod, 2006). Ersanli (2015) study provided empirical evidence of the relationship between students' self-efficacy beliefs and language learning motivations in Turkey. It was reported that high levels of self-efficacy would contribute to students' academic success. The study also revealed a low level negative correlation between English language learning motivation and self-efficacy beliefs of students. Self-efficacy influences every aspect of human endeavours. It could be referred to as a person's belief in his or her ability to successfully accomplish a specific task.

On the other hand academic self-efficacy refers to the belief one has in their ability to accomplish a task or attain a specific performance outcome. Bandura (1997) defined self-efficacy as people's judgments or beliefs of their capabilities to organize and execute courses required attaining designated types of performances. It is concerned with judgments of what one can do with whatever skills one possesses" Thus academic self-efficacy is operationally defined as a student's belief for his/her own capabilities that he or she can accomplish a given task and can produce desired outcomes. These beliefs are developed on the basis of positive or negative past experiences, by observing other students, teachers or role models who are in similar situations and perform well by receiving positive feedback from others and by their emotional states.

Importance of Self-Efficacy for a Student

Self-efficacy refers to person's belief of being able to perform a specific activity. In contrast to self-esteem which refers to self-worth and respect, self-efficacy reflects to what extent students are assured about performing particular tasks. Salami (2010) found out that students with high self-efficacy and emotional intelligence actively participated in academic activities and therefore developed positive attitudes that resulted in academic success.

The higher self-efficacy one has, the more increased are the amount and durability of one's effort. When faced with difficulties, the ones with stronger self-efficacy invest in more efforts while the ones with anxiety over their abilities lessen their efforts or completely give up (Pintrich and De Groot, 1990). Academic self-efficacy has been defined as the personal judgment on one's ability to self-organize and self-execute the process of activities in the educational assignment. Various researches (,Eccles and Wigfield 2002 ,Yoon and Bae, 2008) argued that self-efficacy had positive effect on the academic performances of students.

Appraisal of literature review

This chapter reviewed the literature that were relevant to the study. The implication of learning outcomes represented a broader set of expectations about what students should acquire from their studies. This would affect teaching and the assessment of students' learning. A conceptual framework was developed to explain the interactions of the two major independent variables(Institutional and students factors) as well as the relationship of each of the independent variable to learning outcomes in Reproductive Health programme. Social learning theory was adopted to explain the theoretical frame work for this study. Theoretical review covered areas such as Concept of Reproductive health, National policy on Reproductive Health, Nursing and Midwifery education in Nigeria, Midwifery education in Nigeria, Contributions of Midwifery education to advancing Reproductive Health in Nigeria and Reproductive health and reproductive rights situation in Nigeria, Maternal and child health in Nigeria, Reproductive health programme in Nigeria, Concept of learning outcomes and assessment of students' learning outcomes.

Empirical review examined institutional factors that predicted learning outcomes in Reproductive Health programme. Such Institutional factors as applied in the study are: Curriculum content, Teachers' continuous professional development and Learning

environment. Students factors are Academic support seeking, Self-regulated learning and Academic self- efficacy. An outcomes-based approach to education clearly specifies what students are expected to learn and arranges the curriculum such that these intended outcomes are achieved (Harden, 2007a). Learning outcomes provide the base for an effectively aligned and integrated curriculum, where instructional activities and assessment strategies are explicitly linked to course-specific and degree-level learning outcomes, which are tied to institutional and provincially-defined graduate degree level expectations. Learning outcomes provide a powerful framework upon which to structure curricula. According to Harden, Crosby, and Davis,(1999; 2007) learning outcomes: help to provide clarity, integration and alignment within and between a sequence of courses; promote a learner-centred approach to curriculum planning; encourage a self-directed and autonomous approach to learning, as students can take responsibility for their studies, and are able to actively gauge their progress; promote a collegial approach to curriculum planning, as instructors collaborate to identify gaps and redundancies; ensure that decisions related to the curriculum and learning environment are streamlined; foster a philosophy of continual monitoring, evaluation and improvement; help to ensure accountability and assure quality of our education programmes. Learning outcomes assessment can yield valuable information that can be used to address learners problems and enhance instructional organization and delivery.

CHAPTER THREE

METHODOLOGY

This study examined the institutional and student factors as predictors of learning outcomes in Reproductive Health programme among trainee midwives in South-Western, Nigeria. The following methods and procedure were adopted. These were discussed under the following sub-headings:

1. Research design
2. Population study
3. Sample and sampling techniques
4. Research Instruments
5. Validity of the Instrument
6. Reliability of the Instrument
7. Ethical consideration
8. Field testing of the Instrument
9. Procedure for Data collection
10. Procedure for Data analysis

Research design

Descriptive survey research design of correlation type was used for this study. This is a research design in which the researcher examined the relationship between variables or factors. It lacked active manipulation of the intervention as the facts had occurred before the study commenced. Kerlinger and Lee (2000) defined non-experimental research as systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations have already occurred. Inferences about relations among variables are made, without direct intervention, from concomitant variation of independent and dependent variables, This design was chosen for this study because the researcher did not have control over the

variables as their manifestations had already occurred and its expected outcome already in existence. Findings were reported without any manipulations.

Population

The population for this study comprised all final year trainee midwives in the schools of Midwifery in South-Western, Nigeria and their teachers.

Sample and Sampling Technique

The sample for this study was Two hundred and fifty eight (258) respondents. Multistage sampling procedure was used. Purposive sampling technique was used to select one out of the seven zones in Nigeria because it has the highest number of schools of Midwifery using the Nursing and Midwifery Council of Nigeria (NMCN) zoning system of 2011 where her zonal offices are located. Total enumeration technique was used in selecting all the states in South Western Nigeria (Oyo, Ogun, Ekiti, Lagos, Ondo and Osun).The sample size for this study was Two hundred and fifty eight (258) respondents. Purposive sampling technique was used in selecting all the thirty (30) teachers. Purposive sampling technique was also used in selecting two hundred and twenty eight (228) trainee midwives who have studied Reproductive Health and were preparing for the final qualifying examination

All the schools offering Post-Basic midwifery programme in South Western Nigeria were purposively selected for this study.

Table 3.1: Selection of accredited Schools for the study.

States	**No of PBM Schools**	**No of accredited PBM by NMCN**	**No of PBM Schools selected**
Lagos	2	2	2
Oyo	5	2	2
Osun	2	2	2
*Ogun	2	Nil	Nil
Ekiti	1	1	1
TOTAL:5 States	12	7	7

Source: Nursing and Midwifery Council of Nigeria,2015.

Key: PBM-------Post Basic Midwifery

*****Schools not accredited at the period of data collection

Table 3.2: List and population of schools that participated in the study

Name of School	Number of teachers in school	Number that participated in the study	Number of trainee midwives in school	Number that participated in the study
School of Midwifery, LUTH, Idi-Araba, Lagos State.	7	7	43	43
School of Midwifery, Nigerian Military Hospital, Yaba, Lagos Sate.	4	3	17	17
School of Midwifery, OAUTH, Ilesa Osun State.	5	4	29	29
School of Midwifery, Osogbo, Osun State.	5	4	38	38
School of Midwifery, Eleyele, Ibadan, Oyo State	6	4	46	46
School of Midwifery, BUTH, Ogbomoso, Oyo State.	3	3	28	28
School of Midwifery, ESUTH, Ado- Ekiti, Ekiti State.	6	5	27	27
Total: 4 states	36	30	228	228
Total respondents: 258				

Source: Heads of Schools of Midwifery, South West, Nigeria. **(**2016)

Inclusion criteria: All post-basic midwifery schools with current accreditation status were included while those without current accreditation were excluded. All the teachers who signed the consent form and all the final year students who have studied Reproductive health and are preparing for the final qualifying examination.

Exclusion criteria: The first year students and other non-teaching personnel were not part of this study. Adjunct teachers were also excluded in the study

Research Instruments

The research instruments for this study were self-structured and adapted questionnaire, knowledge test, procedure checklist and Focus Group Discussion (FGD) guide. Focus group discussion was used to generate items of research instrument, through expressed opinions on critical variables implicated in the study to provide qualitative information for the study. The questionnaire used for the study were the followings:

The Teachers Questionnaire (TQ): The instrument is divided into Sections A, B and C.

Section A: Demographic Information.

This contains questions eliciting the demographic information of the respondents. It entails the age, sex, professional/educational qualification, cadre and years of experience. A total of six (6) items are in this section.

Section B: Continuous Professional Development Questionnaire (CPDQ)

This scale is designed to elicit information on the teachers engagement in continuous professional development. It consist of eight (8) items constructed along a four point modified Likert scale of 4-Strongly agree(SA), 3-Agree(A),2-Disagree(DA),1- Strongly Disagree(SD)

Section C: Teaching Methods Assessment Scale (TMS)

This scale is designed to elicit information on the teachers teaching process. It has a total of sixteen (16) points constructed along a five (5) point modified Likert scale of Always-5, Often-4, Sometimes-3, Rarely-2, Never-1

The Student Questionnaire (SQ): The instrument is divided into 7 sections: A, B, C, D, E, F and G.

Section A: Demographic data. It consist of five items.

Section B: knowledge of Adequacy and Relevance of Curriculum Content on Reproductive Health Programme Questionnaire (KARCCRHPQ). It consists of 4-point rating scale of 4- Strongly Agree(SA), 3-Agree(A), 2- Disagree(D), 1-Strongly Disagree(SD).

Section C: Student Midwife Academic Support Seeking Questionnaire (SMASSQ).

This is to measure the student ability to seek for academic support from teachers, peers and colleagues for academic success in Reproductive Health course. This is measured using 4-point modified Likert scale of 4- Strongly Agree (SA), 3-

Agree(A), 2- Disagree(D), 1-Strongly Disagree(SD).

Section D: Academic Self-Efficacy Scale on Reproductive Health Programme (ASESRHP). This is to measure the academic self-efficacy of the respondents. The scale is adapted from the General Self Efficacy Scale developed by Schwarzer and Jerusalem (1995) with a reliability of 0.90 cronbach alpha. This is to assess the student self-belief ability for academic success in Reproductive Health course. The adapted scale for this study is designed along a five(5) point rating scale with the allotment of 1- Almost never, 2-Rarely, 3- Sometimes, 4- Most often and 5-All the time. It consist of ten items.

Section E: Self-Regulated Learning Scale (SRLS).

The scale is designed to measure the self-regulating ability of the respondents to learning. The scale was adapted from Chemers, Hu, and Garcia, 2001. It has a total of seven items constructed along a four(4) point rating scale of 1-very untrue, 2-untrue, 3-true, 4-very true.

Section F: Reproductive Health Programme Attitude Scale (RHPAS)

The scale is adapted from the attitude scale developed by Edwards, (1957) with a reliability of 0.86 It was developed to measure the attitude of the respondents to Reproductive health programme. It was constructed as a four(4) point modified Likert rating scale of 4- Strongly Agree(SA), 3-Agree(A), 2- Disagree(D), 1-Strongly Disagree(SD).

Section G: Learning Environment Assessment Scale for Reproductive Health Programme (LEASRHP). It is designed to ascertain the availability and sufficiency of the teaching and learning resources for reproductive health course. It consists of fifteen items with four(4) point rating scale of 4-Quite sufficient, 3-Sufficient, 2-Not Sufficient, 1-Not available.

Knowledge test on Reproductive Health: Student knowledge test on Reproductive health programme was constructed. A table of specification was developed for the programme. The table of specification reflected the behavioural objectives of knowledge, understanding and application. The multiple test items generated are 60(sixty) with 4 (four) options per item. The questions were drawn from the question bank. Each of the behavioural objectives comprises of 20 items each. The test items were reviewed for the content, structure, adequacy and relevance. The respondents are to tick or circle the right option. A correct answer attracts one(1) mark while a wrong answer attracts zero mark. The test will be conducted strictly under examination

conditions and time allotted is 30 minutes. The selected test items was administered to 30 students for reliability test using Kuder-Richardson scale.

Practical Skills : A practical procedure checklist was used by the researcher and the assistants to evaluate how well the trainee midwife performed the skill in the demonstration room. The checklist is graded zero for wrong/poor skill performance and half (½) mark for correct skill. Five(5) minutes was allotted to the trainee for each procedure station. There are five procedure stations with appropriate scores.

Focus Group Discussion (FGD) was used to elicit information on the factors predicting their learning outcomes in Reproductive Health programme.

Validity of the Research Instruments

The face and content validity of the instruments was ascertained by the researcher's supervisor, other lecturers from the department of Human Kinetics and Health Education, Guidance and Counseling, Nursing, Institute of Education and experts in psyhometrics for comments and suggestions. The suggestions made were carefully considered and finally integrated to improve the quality of the instruments. The instrument was subjected to factor analysis with 0.06 as criterion for retention of items. For the Teachers Questionnaire (TQ), 24 items met the criterion and were retained while others were expunged. While for the Students Questionnaire (SQ), 63 items were retained and others expunged.

Reliability of the Research Instruments

The researcher administered the corrected version of the instruments to 30 students and 5 teachers from School of Midwifery, Anyingba, Kogi state who were not part of this study. The data collected was subjected to Cronbach Alpha in order to establish the internal consistency of the instrument. Continuous Professional Development Questionnaire (CPDQ) had reliability coefficient of 0.91, Teaching Methods Questionnaire 0.92, knowledge of Adequacy and Relevance of Curriculum Content on Reproductive Health Course Questionnaire (KARCCRHCQ) has reliability of 0.70, Student Knowledge of Academic Self Support-Seeking Questionnaire (SKASSSQ) has reliability of 0.83, Academic Self-Efficacy Scale on Reproductive Health Course (ASESRHC), is 0.73, Self Regulated Learning Scale (SRL), has reliability of 0.86, Reproductive Health Attitude Scale(RHAS) has a reliability of 0.86 and Learning Environment Assessment Scale for Reproductive Health Course (LEASRHC) 0.86 The knowledge test questionnaire on Reproductive health programme was analyzed using Kuder-Richardson test and had reliability of

0.70. Practical skill test reliability is 0.70.

Field Testing of the Instruments

The field testing of the research instrument was carried out on 5 teachers and 30 students of School of Midwifery, Anyingba, Kogi state who possessed similar characteristics like the actual respondents but who were not part of the respondents for the study. This was to ensure that all ambiguities were corrected before commencing the research work. For the Teachers Questionnaire (TQ), 24 items met the criterion and were retained while others were expunged. While for the Students Questionnaire (SQ), 63 items were retained and others expunged.

Procedure for Data collection

The researcher obtained a letter of introduction from the Head of Department of Human Kinetics and Health Education, University of Ibadan, for identification purpose and easy access. The researcher and six (6) research assistants administered the questionnaires to the respondents in the selected schools. The administered questionnaires were retrieved immediately on completion from the respondents to ensure high rate of return. The students' knowledge test was conducted under strict supervision of the researcher and assistants in various schools and were collected after expiration of the time allowed. Performance based test in form of objective structured clinical examination(OSCE) was also conducted under strict supervision of the researcher and assistant to measure the students' skill/clinical competence; scores were collated and recorded. The data collection lasted for six weeks.

Focus Group Discussion was used to elicit more information from the respondents. Permission was obtained from the head of schools and consent from the students before commencing the discussion. Six students each from the two selected schools were used for the focus group discussion. The students were duly informed about the topic for discussion. The questions itemized under the guide was discussed in details. The research assistant noted down all the responses from the participants. A tape recorder was used to record responses. A time limit of one hour each was used for the two groups.

Ethical consideration

The researcher completed the process for ethical approval from the Ethics Committee, University of Ibadan. The ethical approval number is **UI/SSHEC/2015/0032.** The study maintained the principles of voluntariness and confidentiality.

Procedure for Data Analysis

The data collected was collated and analyzed using descriptive statistics of frequency counts, percentages and charts for section A which consists of demographic characteristics of the respondents and research questions and Inferential statistics of Multiple Regression Analysis was used for the hypotheses set at 0.05 alpha level. Thematic-content analysis was used for qualitative data. Identified patterns and themes were supported by direct quotes from respondents.

CHAPTER FOUR

RESULTS AND DISCUSSION OF FINDINGS

This chapter presents the results of data analysis in line with the earlier stated research questions and hypotheses. The results on demographic information, research questions and hypotheses are presented as follows:

DEMOGRAPHIC INFORMATION OF THE TEACHERS

Table 4.1: Distribution of the teachers according to selected demographic Characteristics

s/n	Variables	Labels	Frequency	Percentages
1.	**Age**	25-30 years 31-35 years 36-40 years 41-45 years 46-50 years 51years and above **Total**	1 4 7 6 5 7 **30**	3.3 13.3 23.3 20.0 16.7 23.3 **100.0**
2.	**Gender**	Male female **Total**	2 28 **30**	6.7 93.3 **100.0**
3.	**Educational Qualification**	Reg. Nurse/Midwife /Diploma in Nursing Education RN/M/B.Sc. Nursing/B.Ed RN/RM/M.Sc.Nursing/M.Ed RN/RM/Ph.D **Total**	22 5 2 1 **30**	73.3 16.7 6.7 3.3 **100.0**
4.	**Years of clinical experience.**	1-5years 6-10years 11-15years 16-20years 21-25years **Total**	29 0 0 0 1 **30**	96.7 0 0 0 3.3 **100.0**
5.	**Years of Teaching**	1-5 years 6-10 years 11-15 years 16-20 years 21-25 years **Total**	10 10 6 3 1 **30**	33.3 33.3 20 10 3.3 **100.0**
6.	**Cadre**	Midwife Educator Senior Midwife Educator Principal Midwife Educator Chief Midwife Educator Assistant Director Training **Total**	12 2 4 8 4 **30**	40 6.7 13.3 26.7 13.3 **100.0**

Table 4.1 above showed that out of the 30 respondents, 1 (3.3%) of the respondents was between the ages of 25 and 30 years, 4 (13.3%) were between ages of 31and 35years, 7 (23.3%) were between ages 36 and 40 years, 6 (20.0%) were between ages 41and 45 years, 5 (16.7%) were between ages 46-50 years and 7 (23.3%) were between ages 51and above respectively, showing that majority of the teachers were between the ages of 36 and 40years and 51years and above. Concerning gender, 2 (6.7%) of the teachers were males while 28 (93.3%) were females, showing that majority of the teachers were females. On educational qualification, all the teachers were registered Nurse/Midwives, in addition 22 (73.3%) had Diploma in Nursing Education, 5 (16.7%) had first(1st)degree, 2 (6.7%) had Masters, while 1 (3.3%) had Ph.D, showing that majority of the respondents had Diploma in Nursing Education. Concerning years of previous clinical experience of the participants before becoming an educator, 29 (96.7%) of the respondents had between 1and 5 years while 1 (3.3%) had between 21and 25 years of clinical experience respectively, showing that majority of the respondents had between 1 and 5 years of clinical experience before becoming an educator. This table also revealed that 10 (33.3%) of the respondents had between 1 and 5 years teaching experience, 10 (33.3%) had between 6 and 10 years, 6 (20.0%) had between 11 and 15 years, 3 (10.0%) had between 16 and 20 years and 1 (3.3%) had between 21 and 25 years respectively, showing that majority of the teachers 20 (66.9%) had between 1 and 10years teaching experience. In respect of the cadre, 12 (40.0%) of the respondents were Midwife /Nurse Tutor, 2 (6.7%) were Senior Midwife/Nurse Tutor, 4 (13.3%) were Principal Midwife/Nurse Tutor, 8 (26.7%) were Chief Midwife/Nurse Tutor and 4 (13.3%) were Assistant Director Training, showing that majority of the respondents were in the cadre of midwife/nurse tutor.

DEMOGRAPHIC INFORMATION OF THE STUDENTS

Table 4.2: Distribution of the students according to selected demographic characteristics

S/n	Labels	Frequency	Percentage
Age	20-25	86	37.7
	26-30	85	37.3
	31-35	37	16.2
	36-40	14	6.1
	41 and Above	6	2.6
	Total	**228**	**100.0**
Religion	Christianity	200	87.7
	Muslim	28	12.3
	Total	**228**	**100.0**

Table 4.2 above showed that out of the 228 respondents, 86 (37.7%) of the respondents were between the ages of 20 and 25 years, 85 (37.3%) were between the ages of 26 and 30 years, 37 (16.2%) were between the ages of 31 and 35 years, 14 (6.1%) were between the ages of 36 and 40 years and lastly 6 (2.6%) were 41years and above, showing that majority of the respondents 171 (65%) were between the ages of 20 and 30 years. Concerning religion, 200 (87.7%) of the respondents were Christians while 28 (12.3%) of the students were Muslims, showing that majority of the respondents were Christians.

Section B

This section provided answers to the research questions
Research Question One: How relevant and adequate is the curriculum content for predicting student midwives learning outcomes of Reproductive Health in Schools of Midwifery, South-West, Nigeria?

Table 4.3: Students responses on knowledge of adequacy and relevance of curriculum content of Reproductive Health

S/N		SD	D	A	SA	Mean	S.D
1	It prepares learners for future tasks and responsibilities	4 1.8%	4 1.8%	69 30.3%	151 66.2%	3.61	.62
2	The content empowers students to perform skills associated with the job needs	2 .9%	9 3.9%	97 42.5%	120 52.6%	3.47	.62
3	The content is adequate	2 .9%	8 3.5%	103 45.2%	115 50.4%	3.45	.61
4	The content covers expected tasks and learning outcomes	5 2.2%	7 3.1%	129 56.6%	87 38.2%	3.31	.64
5	The content has sharpened my analytic skills	2 .9%	10 4.4%	137 60.1%	79 34.6%	3.29	.59
6	The content is comprehensive	2 .9%	18 7.9%	133 58.3%	75 32.9%	3.23	.63
7	The course content present information that is scientifically and medically accurate	7 3.1%	6 2.6%	147 64.5%	68 29.8%	3.21	.64
8	Incorporate instructional sound and participatory approach	13 5.7%	31 13.6%	91 39.9%	93 40.8%	3.16	.87
9	The course content covers topics in a logical sequence	10 4.4%	63 27.6%	95 41.7%	60 26.3%	2.90	.84
10	The content is enormous	11 4.8%	53 23.2%	134 58.8%	30 13.2%	2.80	.72
	Criterion 2.5 Weighted Grand mean=3.2						

Table 4.3 above revealed that majority 220 (96.5%) of the trainees agreed that it prepared learners for future task and responsibilities while 8 (3.6%) failed to give affirmation. Similarly 217 (95.1%) agreed that the content empowered students to perform skills associated with the job needs while 11 (4.9%) disagreed. Furthermore, 218 (95.6%) participants agreed that the content is adequate while 10 (4.4) disagreed. Another 216 (94.8%) participants agreed that the content covered expected tasks and learning outcomes while 12 (5.2%) disagreed. Again, 216 (94.8%) participants agreed that the content had sharpened their analytic skills while only 12 (5.2%) disagreed.

208 (91.2%) agreed that the content is comprehensive while 20 (8.8%) disagreed. 215 (94.3%) agreed that the course content present information that is scientifically and medically accurate while 13 (5.7%) disagreed. 184 (80.7%) agreed that the programme incorporates instructional sound and participatory approach while 44 (19.3%) disagreed. 155 (68%) agreed that the course content covers topics in a logical sequence while 73 (32%) disagreed and lastly164 (72%) agreed that the content is enormous while 64 (28%) disagreed.

In conclusion, the table showed that the obtained weighted mean score of 3.2 is higher than the criterion of 2.5; hence, it could be deduced that students' knowledge of the curriculum content of reproductive health was adequate and relevant for predicting the learning outcomes of Reproductive health programme.

Research Question 2: What is the students' assessment of the adequacy of the learning environment for Reproductive health programme in Schools of Midwifery South West, Nigeria?

Table: 4.4: Distribution of the students' responses on the assessment of the adequacy of the learning environment for Reproductive Health programme.

S/N		Not available	Not sufficient	Sufficient	Quite sufficient	Mean	S.D
1	White Board/Screen	20 8.8%	17 7.5%	103 45.2%	88 38.6%	3.14	.89
2	Capacity to accommodate 25 (Twenty-five) students comfortably	15 6.6%	35 15.4%	118 51.8%	60 26.3%	2.98	.83
3	Multimedia projector	27 11.8%	41 18.0%	80 35.1%	80 35.1%	2.93	1.00
4	Audio-visual aids	28 12.3%	42 18.4%	81 35.5%	77 33.8%	2.91	1.00
5	Classrooms: capacity to sit minimum of 50 (fifty) students each comfortably	21 9.2%	40 17.5%	118 51.8%	49 21.5%	2.86	.86
6	Administrative staff: Secretary	18 7.9%	37 16.2%	146 64.0%	27 11.8%	2.80	.75
7	Current text-books and journals on reproductive health	23 10.1%	52 22.8%	113 49.6%	40 17.5%	2.75	.86
8	Clerical officers	23 10.1%	41 18.0%	145 63.6%	19 8.3%	2.70	.76
9	Teaching staff: Ratio of practicing midwife teachers to student midwives, 1:6	19 8.3%	69 30.3%	110 48.2%	30 13.2%	2.66	.81
10	Adequate provision of equipment e.g. Midwifery kit	32 14.0%	49 21.5%	114 50.0%	33 14.5%	2.65	.90
11	Typists	34 14.9%	39 17.1%	134 58.8%	21 9.2%	2.62	.85
12	Computers and accessories including Internet connectivity	37 16.2%	46 20.2%	112 49.1%	33 14.5%	2.62	.92
13	Adequate Laboratory Facilities e.g. Reagents	29 12.7%	62 27.2%	111 48.7%	26 11.4%	2.59	.85
14	Desktop Computers	46 20.2%	50 21.9%	105 46.1%	27 11.8%	2.50	.95
15	Trained Librarian	84 36.8%	46 20.2%	76 33.3%	22 9.6%	2.16	1.03
	Criterion= 3.7 Weighted Grand mean=2.7						

Table 4.4 above showed that majority 191 (83.8%) of the students responded as “sufficient” for White Board/Screen, and 37 (16.3%) as not sufficient. Also 178 (78.1%) responded as “sufficient” to capacity to accommodate 25 (Twenty-five) students comfortably for practicals and 50 (22%) as not sufficient. Furthermore, 160 (70.2%) responded as “sufficient” to Multimedia projector while 68 (29.8%) responded as not sufficient. Moreover, 158 (69.3%) responded as “sufficient” to Audio-visual aids while 70 (30.7%) responded as not sufficient. Also, 167 (73.3%) responded as “sufficient” to Classrooms: capacity to sit minimum of 50 (fifty) students each comfortably while 61 (26.7%) responded as not sufficient. Also, 173 (75.8%) responded as “sufficient” to Administrative staff: Secretary while 55 (24.1%) responded as not sufficient. Moreover, 153 (67.1%) responded as “sufficient” to Current text-books and journals on reproductive health course while 75 (32.9%) responded as not sufficient. Also, 164 (71.9%) responded as “sufficient” to Clerical officers while 64 (28.1%) responded as not sufficient. Also, 140 (61.4%) responded as “sufficient” to Teaching staff: Ratio of practicing midwife teachers to student midwives, 1:6 while 88 (38.6%) responded as quite sufficient. Moreover, 147 (64.5%) responded as “sufficient” to Adequate provision of equipment e.g. Midwifery kit while 81 (35.5%) responded as not sufficient. Also, 155 (68%) responded as “sufficient” to Typists while 73 (32%) responded as not sufficient. Also, 145 (63.8%) responded as “sufficient” to Computers and accessories including Internet connectivity while 83 (36.4%) responded as not sufficient. Also, 137 (60.1%) responded as “sufficient” to Adequate Laboratory Facilities e.g. Reagents. Also, 132 (57.9%) responded as sufficient to Desktop Computers while 96 (42.1%) responded as not sufficient. Also, 98 (42.9%) responded as “sufficient” to Trained Librarian while 130 (57%) responded as not sufficient

In totality, the table showed that the obtained weighted mean score of 2.7 was less than the criterion of 3.7; hence it could be inferred that the learning resources in the environment was not adequate for Reproductive health programme.

Research Question 3: What are the teaching methods mostly used by the teachers to teach Reproductive Health in Schools of Midwifery South-West, Nigeria?

Table 4.5: Responses of teachers on Teaching Methods mostly used in Teaching/ Learning Process of Reproductive Health

S/N	Teaching method	Never	Rarely	Sometimes	Often	Always	Mean	S.D
1	Practical demonstration	-	1 3.3%	-	12 40.0%	17 56.7%	4.50	.68
2	Lecture/discussion	-	-	3 10.0%	10 33.3%	17 56.7%	4.47	.68
3	Clinical instruction	-	-	3 10.0%	13 43.3%	14 46.7%	4.37	.67
4	Client care studies	-	1 3.3%	5 16.7%	10 33.3%	14 46.7%	4.23	.86
5	Seminar	-	1 3.3%	6 20.0%	16 53.3%	7 23.3%	3.97	.76
6	Individual and group project	-	1 3.3%	9 30.0%	12 40.0%	8 26.7%	3.90	.84
7	Tutorial	-	2 6.7%	6 20.0%	16 53.3%	6 20.0%	3.87	.82
8	Computer soft ware	-	7 23.3%	9 30.0%	7 23.3%	7 23.3%	3.47	1.11
9	Group discussion	-	4 13.3%	13 43.3%	9 30.0%	4 13.3%	3.43	.90
10	Role modeling	-	9 30.0%	7 23.3%	7 23.3%	7 23.3%	3.40	1.16
11	Role play	-	5 16.7%	13 43.3%	7 23.3%	5 16.7%	3.40	.97
12	Clinical round	-	4 13.3%	16 53.3%	8 26.7%	2 6.7%	3.27	.78
13	Home/health visit	-	7 23.3%	13 43.3%	10 33.3%	-	3.10	.76
14	Field trip	-	7 23.3%	16 53.3%	5 16.7%	2 6.7%	3.07	.83
15	Internet / e-mail	2 6.7%	10 33.3%	9 30.3%	7 23.3%	2 6.7%	2.90	1.06
16	Simulation	1 3.3%	3 10.0%	15 50.0%	4 13.3%	7 23.3%	.43	1.07
	Criterion= 3.2 Grand mean= 3.5							

Table 4.5 above revealed that majority of the teachers responded that Practical demonstration with (mean =4.50) ranked highest as 17 (56.7%) responded as “always” in the use of this teaching method and was followed by Lecture/discussion, (mean =4.47) where 17 (56.7%) responded as “always”. Clinical instruction, (mean =4.37) as 14(46.7%) responded as “always”. Client care studies, (mean =4.23) as 14(46.7%) responded as “always”. Seminar, (mean =3.97) as 16(53.3%) responded as “often”. Individual and group project, (mean =3.90) as 12 (40%) responded as “often”. Tutorial (mean = 3.87) as 16(53.3%) responded as “often”. Computer software (mean =3.47) as 9(30.0%) responded as “sometimes”. Group discussion (mean =3.43) as 13(43.3%) responded as “sometimes”. Role modeling (mean =3.40) as 9(30%) responded as

"rarely" Role play (mean =3.40) as 13(43.3%) responded as "sometimes". Clinical round (mean =3.27) as 16(53.3%) responded as "sometimes". Home/health visit, (mean =3.10) as 13(43.3%) responded as "sometimes". Field trip (mean = 3.07) as 16(53.3%) responded as "sometimes". Internet E-mail (mean =2.90) as 10(33.3%) responded as "rarely". and lastly by Simulation (mean =.43) as 15(50%) responded as "sometimes". The findings revealed that practical demonstration, lecture and discussion methods, clinical instruction, client care studies were always used in teaching the trainee midwives Reproductive health. Internet E-mail and Role modeling were rarely used by the teachers, while computer software, role play, clinical round, home/health visit and simulation were sometimes used. In conclusion, the table showed that the obtained weighted mean score of 3.5 was higher than the criterion of 3.2; thus, it could be inferred that practical demonstration, lecture/discussion and clinical instruction methods were mostly used by teachers to teach Reproductive Health.

Research Question 4: What is the attitude of students towards Reproductive Health in Schools of Midwifery, South-West Nigeria?

Table: 4.6: Distribution of students' attitude towards Reproductive health

S/N		SD	D	A	SA	Weighted Mean	S.D
1	Reproductive health course is very interesting to me	7 3.1%	2 0.9%	63 27.6%	156 68.4%	3.61	.66
2	In general, I have a good feeling towards Reproductive Health course	7 3.1%	3 1.3%	71 31.1%	147 64.5%	3.57	.69
3	I have always enjoyed studying Reproductive Health course in school	10 4.34%	4 1.8%	70 30.7%	144 63.2%	3.53	.74
4	I really like Reproductive Health course	10 4.4%	6 2.6%	67 29.4%	145 63.6%	3.52	.75
5	Reproductive Health course is fascinating	12 5.3%	10 4.4%	80 35.1%	126 55.3%	3.40	.80
6	Reproductive Health course is stimulating	14 6.1%	4 1.8%	126 55.3%	84 36.8%	3.23	.76
7	I approach Reproductive Health course with a feeling of hesitation	64 28.1%	63 27.6%	86 37.7%	1 5 6.6%	2.23	.93
8	Reproductive Health course makes me feel uncomfortable, restless, irritable and impatient	58 25.4%	155 68.0%	8 3.5%	7 3.1%	1.84	.62
9	I am always under a terrible strain in a Reproductive health course class	66 28.9%	148 64.9%	10 4.4%	4 1.8%	1.79	.60
10	I don't like Reproductive Health course, and it scares me to have to take it	68 29.8%	149 65.4%	6 2.6%	5 2.2%	1.77	.60
11	I have a feeling of dislike toward Reproductive Health course	108 47.4%	101 44.3%	11 4.8%	8 3.5%	1.64	.73
	Criterion=2.7 Weighted grand mean=2.7						

Table 4.6 above revealed that majority 219 (96%) trainees agreed that reproductive health is very interesting while 9 (4%) disagreed, followed by 218 (95.6%) who agreed to have had a good feeling toward reproductive health while only 10 (4.4%) disagreed. Another 214 (93.9%) agreed that they have always enjoyed studying reproductive health in school although 14 (6.14%) disagreed. Similarly 212 (93%) really liked reproductive health while 16 (6%) of the participants disagreed. Furthermore, 206 (90.4%) agreed that reproductive health is fascinating while 22 (9.6%) disagreed. Again 210 (92.1%) agreed that reproductive health is stimulating while 18 (7.9%) disagreed. Another 101(44.3%) participants agreed that they approached reproductive health with a feeling of hesitation while 127 (55.7%) disagreed. 15 (6.6%) agreed that reproductive health makes them feel uncomfortable, restless, irritable and impatient while 213 (93.4%) failed to give affirmation. Only 14 (6.2%) agreed that they are always under a terrible strain in a reproductive health class while 213 (93.8%) felt otherwise. Furthermore, 11 (4.8%) agreed that they don't like reproductive health, and that it scares them to have to take it while 217 (95.2%) disagreed. and lastly only 19 (8.3%) of the participants agreed that they have a feeling of dislike toward reproductive health while 209 (91.7%) disagreed. In conclusion, the table revealed that the obtained weighted mean score of 2.7 is similar to the criterion of 2.7; hence, it could be inferred that the trainee midwives had positive attitude towards the Reproductive health proramme.

Hypotheses testing:

This section presents the result of the tested hypotheses

Hypothesis 1a: Institutional factors (curriculum content knowledge, teachers continuous professional development and learning environment) would not significantly predict knowledge of Reproductive health programme among trainee midwives in South-West, Nigeria.

Table 4.7: Regression showing joint effect of the Institutional Factors (Curriculum Content knowledge, Learning Environment Assessment and Continuous Professional Development) on trainee midwives knowledge of Reproductive Health.

R=.412
R Square=.169
Adjusted R square=.158
Std. Error of the Estimate=3.0865

ANOVA

Model	**Sum of Squares**	**DF**	**Mean Square**	**F**	**Sig.**	**Remark**
Regression	435.364	3	145.121	15.234	.000	Sig.
Residual	2133.882	224	9.526			
Total	2569.246	227				

Significant at 0.05 level

Table 4.7 showed that the joint effect of the institutional factors (curriculum content knowledge, learning environment assessment and continuous professional development) on the prediction of the knowledge of Reproductive health was significant. The table also showed a coefficient of multiple correlation (R = .412 and a multiple R^2 of .169). This means that 16.9% of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at $P < .05$. The table also showed that the analysis of variance (ANOVA) for the regression yielded F-ratio of 15.234 (significant at 0.05 level). This implied that the institutional factors of curriculum content knowledge, learning environment assessment and continuous professional development when taken together had significant effect on trainee midwives knowledge of Reproductive health. Therefore the null hypothesis which stated that institutional factors (curriculum content knowledge, teachers continuous professional development and learning environment) would not significantly predict knowledge of Reproductive health among trainee midwives in South-West, Nigeria is rejected.

Table 4.8: Relative contribution of the institutional factors (curriculum content knowledge, learning environment assessment and continuous professional development) on trainee midwives knowledge of Reproductive health

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	11.150	2.330		4.786	.000
Curriculum Content knowledge	.398	.062	.393	6.375	.000
Learning Environment Assessment	0.02419	.019	.079	1.295	.197
Continuous Professional Development	0.02913	.050	.036	.588	.557

Significant at the 0.05 level

Table: 4.8 revealed the relative contribution of the institutional factors on the prediction of the trainee midwives knowledge of Reproductive health, expressed as beta weights, viz: Curriculum Content, (β =.393, P <.05), significant relationship existed; Learning Environment Assessment, (β =.079, P >.05), no significant relationship existed; and lastly. Continuous Professional Development, (β =.036, P >.05), no significant relationship existed.

The result from table 4.8 above showed that variable 1(curriculum content knowledge) made the most potent contribution to the prediction of the trainee midwives knowledge of Reproductive health, followed by variable 2 (learning environment assessment) and least contribution by continuous professional development.

In conclusion, it showed that curriculum content knowledge made a significant contribution to the prediction of the trainee midwives knowledge of Reproductive health while learning environment assessment and continuous professional development did not.

Hypothesis 1b: Institutional factors(curriculum content knowledge, teachers continuous professional development and learning environment assessment) would not significantly predict the attitude towards Reproductive health among trainee midwives in South-West, Nigeria.

Table 4.9: Regression showing joint effect of the Institutional Factors (Curriculum Content knowledge, Learning Environment Assessment and Continuous Professional Development) on trainee midwives attitude towards Reproductive health

R=.431 R Square= .186 Adjusted R Square= .175 Std. Error of the Estimate= 5.0643						
ANOVA						
Model	Sum of Squares	DF	Mean Square	F	Sig.	Remark
Regression	1309.273	3	436.424	17.016	.000	Sig.
Residual	5744.973	224	25.647			
Total	7054.246	227				

Significant at the 0.05 level

Table 4.9 above indicated that the joint effect of the Institutional Factors (Curriculum Content knowledge, Learning Environment Assessment and Continuous Professional Development) on the prediction of the trainee midwives attitude towards Reproductive health was significant. The table also showed a coefficient of multiple correlation (R =.431 and a multiple R^2 of .186) This meant that 18.6% of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at $P < .05$. The table also showed that the analysis of variance (ANOVA) for the regression yielded F-ratio of 17.016 (significant at 0.05 level).This result revealed that the institutional factors of curriculum content knowledge, learning environment assessment and continuous professional development when taken together had significant effect on trainee midwives attitude towards Reproductive health. Therefore the null hypothesis which stated that institutional factors (curriculum content knowledge, teachers continuous professional development and learning environment) would not significantly predict attitude towards Reproductive health among trainee midwives in South-West, Nigeria is hereby rejected.

Table 4.10: Relative contributions of the institutional factors (Curriculum content knowledge, Learning environment assessment and Continuous professional development) on trainee midwives attitude towards Reproductive Health.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	7.844	3.823		2.052	.041
Curriculum content knowledge	.563	.102	.336	5.502	.000
Learning Environment	.131	.031	.258	4.268	.000
Continuous Professional Development	-0.05285	.081	-.040	-.650	.516

Significant at the 0.05 level

Table 4.10 revealed the relative contributions of the institutional factors on the prediction of the trainee midwives attitude towards Reproductive health, expressed as beta weights, viz: Curriculum Content knowledge, (β =.336, P <.05) indicated that significant relationship existed; Learning Environment Assessment, (β =.258, P <.05) also showed that significant relationship existed. Lastly Continuous Professional Development, (β =-.040, P >.05) indicated that no significant relationship existed.

The result from table 4.10. indicated that variable 1 (curriculum content knowledge) was the most potent contributor to the prediction of the trainee midwives attitude towards Reproductive health, followed by variable 2 (learning environment assessment) and lastly by (continuous professional development).

In conclusion, two (2) variables; (Curriculum content knowledge) and (Learning Environment Assessment) are significant at 0.05 alpha level. Both made significant contribution to the prediction of the trainee midwives attitude towards Reproductive health while (continuous professional development) did not.

Hypothesis 1c: Institutional factors(curriculum content knowledge, teachers continuous professional development and learning environment assessment) would not significantly predict skills in Reproductive health among trainee midwives in South-West, Nigeria.

Table 4.11: Regression showing joint effect of the institutional factors (Curriculum Content knowledge, Learning Environment Assessment and Continuous Professional Development) on trainee midwives skills in Reproductive health

R =.380 R Square=.144 Adjusted R Square=.133 Std. Error of the Estimate=3.1256						
ANOVA						
Model	Sum of Squares	DF	Mean Square	F-ratio	Sig.	Remark
Regression	368.336	3	122.779	12.568	.000	Significant.
Residual	2188.344	224	9.769			
Total	2556.680	227				

Significant at the 0.05 level

Table 4.11 revealed that the joint effect of the institutional factors (Curriculum Content knowledge, Learning Environment Assessment and Continuous Professional Development) on the prediction of trainee midwives skills in Reproductive health was significant. The table also showed a coefficient of multiple correlation (R = .380 and a multiple R^2 of .144) This meant that 14.4% of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at $P < .05$. The table also showed that the analysis of variance (ANOVA) for the regression yielded F-ratio of 12.568 (significant at 0.05 level). This result indicated that the institutional factors of curriculum content knowledge, learning environment assessment and continuous professional development when taken together significantly predicted trainee midwives skills in Reproductive health. Therefore the null hypothesis which stated that institutional factors (curriculum content knowledge, teachers continuous professional development and learning environment) would not significantly predict skills in Reproductive health among trainee midwives in South-West, Nigeria was not confirmed.

Table 4.12: Relative contributions of the institutional factors (Curriculum Content knowledge, Learning Environment Assessment and Continuous Professional Development) to the prediction of trainee midwives skills in Reproductive health

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	10.067	2.359		4.267	.000
Curriculum Content knowledge	.371	.063	.368	5.868	.000
Learning Environment Assessment	0.01960	.019	.064	1.036	.301
Continuous Professional Development	0.01601	.050	.020	.319	.750

Significant at the 0.05 level

Table 4.12. above revealed the relative contributions of the institutional factors to the prediction of the trainee midwives skills in Reproductive health, expressed as beta weights, viz: Curriculum Content knowledge (β =.368, P <.05) indicated that a significant relationship existed where as Learning Environment Assessment, (β =.064, P >.05) and Continuous Professional Development, (β =.020, P >.05) did not show that any significant relationship existed.

The result from table 4.12. showed that variable 1(curriculum content knowledge) was the most potent contributor to the prediction of the trainee midwives skills in Reproductive health, followed by variable 2 (learning environment assessment) and lastly by (continuous professional development).

It revealed that only curriculum content knowledge (significant at 0.05 alpha level) made a significant contribution to the prediction of the trainee midwives skills in Reproductive health while learning environment assessment and continuous professional development did not.

Hypothesis 2a: Student factors (Academic support-seeking, Self-regulated learning and Academic self-efficacy) would not significantly predict knowledge of Reproductive health programme among trainee midwives in South-West, Nigeria.

Table 4.13: Regression showing joint effect of the student factors (Academic Support Seeking, Academic Self-Efficacy and Self-Regulated Learning) on trainee midwives knowledge of Reproductive Health.

R = .698 R Square=.488 Adjusted R Square=.481 Std. Error of the Estimate= 2.4245						
A N OV A						
Model	Sum of Squares	DF	Mean Square	F-ratio	Sig.	Remark
Regression	1252.575	3	417.525	71.032	.000	Significant
Residual	1316.671	224	5.878			
Total	2569.246	227				

Significant at the 0.05 level

Table 4.13 above indicated that the joint effect of the student factors (Academic Support Seeking, Academic Self-Efficacy and Self Regulated Learning) to the prediction of the trainee midwives knowledge of Reproductive Health was significant. The table also showed a coefficient of multiple correlation (R = .698 and a multiple R^2 of .488) This means that 48.8% of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at $P < .05$. The table also showed that the analysis of variance (ANOVA) for the regression yielded F-ratio (f-calculated value) of 71.032 (significant at 0.05 level). This implied that academic support seeking, self-regulated learning and academic self-efficacy when taken together significantly predicted the trainee midwives knowledge of Reproductive health. Hence, the null hypothesis which stated that student factors (academic support-seeking, self-regulated learning and academic self-efficacy) would not significantly predict knowledge of Reproductive health among trainee midwives in South-West, Nigeria was not supported.

Table 4.14: Relative contributions of the student factors (Academic Support Seeking, Academic Self-Efficacy and Self-Regulated Learning) to the prediction of trainee midwives knowledge of Reproductive Health.

Model	Unstandardized Coefficients		Stand. Coefficients	t	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	10.174	1.156		8.803	.000
Academic Support Seeking	0.03098	.043	.039	.723	.470
Academic Self-Efficacy	.244	.026	.481	9.227	.000
Self Regulated Learning	.471	.047	.505	10.025	.000

Significant at the 0.05 level

Table 4.14 above revealed the relative contributions of the student factors to the prediction of the trainee midwives knowledge of Reproductive Health, expressed as beta weights, viz: Academic Support Seeking, (β =.039, P >.05) indicated no significant relationship existed where as Academic Self-Efficacy, (β =.481, P <.05) and Self-Regulated Learning, (β =.505, P <.05) showed significant relationship existed.

The result from table 4.14 showed that variable 3 (self-regulated learning) was the most potent contributor to the prediction of the trainee midwives knowledge of Reproductive health followed by variable 2 (academic self-efficacy) and lastly by variable 1 (academic support seeking).

In conclusion, only two(2) variables; (academic self-efficacy) and (self-regulated) significant at 0.05 level made significant contributions to the prediction of the trainee midwives knowledge of Reproductive health while academic support seeking did not.

Hypothesis 2b: Student factors (Academic support-seeking, Self-regulated learning and Academic self-efficacy) would not significantly predict attitude towards Reproductive Health among trainee midwives in South-West, Nigeria.

Table 4.15: Regression showing joint effect of the student factors (Academic support-seeking, Academic self-efficacy and Self-regulated learning) on trainee midwives attitude towards Reproductive Health

R=.328 R^2 =.108 Adjusted R^2=.096 Std. Error of the Estimate= 5.3007						
A N O V A						
Model	Sum of Squares	DF	Mean Square	F-ratio	Sig.	Remark
Regression	760.484	3	253.495	9.022	.000	Sig.
Residual	6293.762	224	28.097			
Total	7054.246	227				

Significant at the 0.05 level

Table 4.15: above showed that the joint effect of the Student Factors (Academic Support Seeking, Academic self-efficacy and Self-regulated learning) to the prediction of the trainee Attitude towards Reproductive Health was significant. The table also showed a coefficient of multiple correlation (R = .328 and a multiple R^2 of .108). This meant that 10.8% of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at P < .05. The table also showed that the analysis of variance (ANOVA) for the regression an F-ratio (f-calculated value) of 9.022 (significant at 0.05 level). This implied that academic support seeking, self-regulated learning and academic self-efficacy when taken together significantly predicted the trainee midwives attitude towards Reproductive health. Hence, the null hypothesis which stated that student factors (academic support-seeking, self-regulated learning and academic self-efficacy) would not significantly predict attitude towards Reproductive health among trainee midwives in South-West, Nigeria was not confirmed.

Table 4.16: Relative contributions of the student factors (Academic support-seeking, Academic self-efficacy and Self-regulated learning) to the prediction of trainee midwives attitude towards Reproductive Health

Model	Unstandardized Coefficient		Stand. Coefficient	t	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	20.113	2.527		7.959	.000
Academic Support Seeking	-.167	.094	-.127	-1.786	.075
Academic Self-Efficacy	.284	.058	.337	4.905	.000
Self Regulated Learning	.248	.103	.150	2.414	.017

Significant at the 0.05 level

Table 4.16 above revealed the relative contributions of the student factors to the prediction of the trainee midwives attitude towards Reproductive Health, expressed as beta weights, viz: Academic Support Seeking, (β =-.127, P >.05) indicated no significant relationship existed where as Academic Self-Efficacy, (β =.337, P <.05) and Self Regulated Learning, (β =.150, P <.05) indicated significant relationship existed.

The result from table 4.16. showed that variable 2 (academic self-efficacy) was the most potent contributor to the prediction of the trainee midwives attitude towards Reproductive health followed by variable 2 (self-regulated learning) lastly by variable 3 (academic support seeking).

Therefore, only two (2)variables; (academic self-efficacy) and (self-regulated learning) significant at 0.05 level made significant contributions to the prediction of the trainee midwives attitude towards Reproductive health while academic support seeking did not.

Hypothesis 2c: Student factors (Academic support-seeking, Self-regulated learning and Academic self-efficacy) would not significantly predict skills in Reproductive Health among trainee midwives in South-West, Nigeria.

Table 4.17: Regression showing joint effect of the Student Factors (Academic Support Seeking, Academic Self-Efficacy and Self Regulated Learning) on trainee midwives Skills in Reproductive Health

R =.654 R^2 =.428 Adjusted R^2 =.420 Std. Error of the Estimate=2.5555						
A N O V A						
Model	Sum of Squares	DF	Mean Square	F-ratio	Sig.	Remark
Regression	1093.788	3	364.596	55.827	.000	Significant.
Residual	1462.892	224	6.531			
Total	2556.680	227				

Significant at the 0.05 level

Table 4.17 indicated that the joint effect of the Student Factors (Academic Support Seeking, Academic Self-Efficacy and Self Regulated Learning) to the prediction of the trainee midwives Skills in Reproductive Health was significant. The table also showed a coefficient of multiple correlation (R = .654 and a multiple R^2 of .428). This meant that 42.8% of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at $P < .05$. The table also showed that the analysis of variance (ANOVA) for the regression yielded F-ratio of 55.827 (significant at 0.05 level). This indicated that academic support seeking, self-regulated learning and academic self-efficacy when taken together significantly predicted the trainee midwives skills in Reproductive health. Hence, the null hypothesis which stated that student factors (academic support-seeking, self-regulated learning and academic self-efficacy) would not significantly predict skills in Reproductive health among trainee midwives in South-West, Nigeria was not supported.

Table 4.18: Relative contributions of the independent variables (Academic Support Seeking, Academic Self-Efficacy and Self Regulated Learning) to the prediction of trainee midwives Skills in Reproductive Health

Model	Unstandardized Coefficient		Stand. Coefficient	T	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	8.894	1.218		7.301	.000
Academic Support-Seeking	0.07976	.048	.101	1.767	.079
Academic Self-Efficacy	.183	.028	.362	6.580	.000
Self Regulated Learning	.466	.050	.501	9.409	.000

Significant at the 0.05 level

Table 4.18 above revealed the relative contributions of the student factors to the prediction of trainee midwives Skills in Reproductive Health, expressed as beta weights, viz: Academic Support Seeking, (β =.101, P >.05) indicated no significant relationship existed; Academic Self-Efficacy, (β =.362, P <.05) and Self Regulated Learning, (β =.501, P <.05) showed that significant relationship existed.

The results from table 4.18 showed that variable 3(self-regulated learning) was the most potent contributor to the prediction of the trainee midwives skill in Reproductive health, followed by variable 2 (academic self-efficacy) and lastly by variable 1(academic support seeking).

In conclusion, only two(2) variables; (academic self-efficacy) and (self-regulated learning) significant at 0.05 level made significant contributions to the prediction of the trainee midwives skill in Reproductive health while academic support seeking did not.

Hypothesis 3a: The composite contributions of institutional and students factors would not significantly predict knowledge of Reproductive Health among trainee midwives in South- West, Nigeria.

Table 4.19: Regression showing joint effect of the Institutional and Student Factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and Self-regulated learning) on trainee midwives knowledge of Reproductive Health

R =.794 R^2 =.630 Adjusted R^2 =.620 Std. Error of the Estimate=2.0746						
A N O V A						
Model	Sum of Squares	DF	Mean Square	F	Sig.	Remark
Regression Residual Total	1618.072 951.174 2569.246	6 221 227	269.679 4.304	62.658	.000	Sig.

Significant at the 0.05 level

Table 4.19: above indicated that the joint effect of the institutional and student Factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and self-regulated) to the prediction of the trainee Knowledge of Reproductive Health was significant. The table also showed a coefficient of multiple correlation (R = .794 and a multiple R^2 of .630). This means that 63.0% of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at $P < .05$. The table also showed that the analysis of variance (ANOVA) for the regression yielded F-ratio of 62.658 (significant at 0.05 level). This implied that the joint effect of the institutional and student Factors (Curriculum Content knowledge, Learning Environment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and self-regulated) when taken together significantly predicted the trainee midwives knowledge of Reproductive health. Hence, the null hypothesis stating that composite contributions of institutional and students factors would not significantly predict knowledge of Reproductive Health among trainee midwives in South-West, Nigeria was not supported.

Table 4.20: Relative contribution of the institutional and student factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and Self-regulated learning) to the prediction of trainee midwives knowledge of Reproductive Health

Model	Unstandardized Coefficient		Stand. Coefficient	T	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	-1.555	1.766		-.880	.380
Curriculum Content Knowledge	.387	.043	.383	8.911	.000
Learning Environment Assessment	-0.01109	.013	-.036	-.864	.388
Continuous Professional Development	0.02107	.033	.026	.630	.530
Academic Support Seeking	0.01595	.037	.020	.434	.665
Academic Self-Efficacy	.211	.023	.416	9.049	.000
Self Regulated Learning	.521	.041	.558	12.778	.000

Significant at the 0.05 level

Table 4.20 above revealed the relative contributions of the institutional and student factors on trainee midwives knowledge of Reproductive health, expressed as beta weights, viz: Curriculum Content knowledge, (β =.383, P <.05) indicated that significant relationship existed, Also, Academic Self-Efficacy, (β =.416, P <.05) and Self-Regulated Learning, (β =558, P <.05) indicated that significant relationship existed where as Learning Environment Assessment, (β =-.036, P >.05), Continuous Professional Development, (β =.026, P >.05) and Academic Support Seeking, (β =.020, P >.05) indicated that no significant relationship existed.

The result from table 4.20 showed that the institutional and student factors of variable 6 (self regulated learning) was the most potent contributor to the prediction of the trainee midwives knowledge of Reproductive health, followed by variable 5 (academic self-efficacy), and variable 1(curriculum content knowledge),

In conclusion, only three (3) variables of the institutional and student factors; (curriculum content knowledge), (academic self-efficacy) and (self-regulated learning) significant at 0.05 level made significant contributions to the prediction of the trainee midwives knowledge of Reproductive health. while learning environment assessment, continuous professional development and academic support seeking did not.

Hypothesis 3b: The composite contribution of Institutional and Students factors would not significantly predict attitude towards Reproductive Health among trainee midwives in South-West, Nigeria.

Table 4.21: Regression showing joint effect of the Institutional and Student Factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and Self-regulated learning) on trainee midwives attitude towards Reproductive Health

R=.504 R^2 =.254 Adjusted R^2 =.233 Std. Error of the Estimate=4.8812						
A N O V A						
Model	Sum of Squares	DF	Mean Square	F	Sig.	Remark
Regression	1788.635	6	298.106	12.512	.000	Sig.
Residual	5265.610	221	23.826			
Total	7054.246	227				

Significant at the 0.05 level

Table 4.21: above indicated that the joint effect of the Institutional and Student Factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and Self- regulated learning) to the prediction of the trainee attitude towards Reproductive health was significant. The table also showed a coefficient of multiple correlation (R = .504 and a multiple R^2 of .254. This meant that 25.4% of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at $P < .05$. The table also showed that the analysis of variance (ANOVA) for the regression yielded F-ratio of 12.512 (significant at 0.05 level).This implied that the joint effect of the institutional and student Factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and self- regulated learning) when taken together significantly predicted the trainee midwives attitude towards Reproductive health. Hence, the null hypothesis stating that composite contribution of institutional and students factors would not significantly predict attitude towards Reproductive Health among trainee midwives in South-West, Nigeria was not upheld.

Table 4.22: Relative contributions of the Institutional and Student Factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and Self-regulated learning) to the prediction of trainee midwives attitude towards Reproductive Health

Model	Unstandardized Coefficient		Stand. Coefficient	T	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	2.840	4.154		.684	.495
Curriculum Content knowledge	.551	.102	.329	5.390	.000
Learning Environment Assessment	.111	.030	.219	3.674	.000
Continuous Professional Development	-0.06387	.079	-.048	-.811	.418
Academic Support Seeking	-.204	.087	-.155	-2.359	.019
Academic Self-Efficacy	.197	.055	.234	3.578	.000
Self Regulated Learning	.303	.096	.196	3.163	.002

Significant at the 0.05 level

Table 4.22 above revealed the relative contribution of the Institutional and Student Factors on trainee midwives attitude towards Reproductive Health expressed as beta weights, viz: Curriculum Content knowledge, (β =.329, P <.05) indicated that significant relationship existed; Learning Environment Assessment (β =.219, P <.05) also showed that significant relationship existed. Also, Academic Self-Efficacy, (β =.234, P <.05) and Self- Regulated Learning, (β =196, P <.05) indicated significant relationship existed. and lastly Continuous Professional Development, (β =-.048, P >.05) indicated that no significant relationship existed. Also, Academic Support Seeking, (β =-.155, P <.05) revealed that no significant relationship existed;

The results from table 4.22 indicated that variable 1 (curriculum content knowledge) was the most potent contributor to the prediction of the trainee midwives attitude towards Reproductive health programme followed by variable 5(academic self-efficacy). This is followed by variable 3 (learning environment assessment) and lastly by variable 6 (self- regulated learning).

In conclusion, only four(4) variables: (curriculum content knowledge, learning environment assessment, academic self-efficacy and self regulated learning) significant at 0.05 alpha level made significant contributions to the prediction of the trainee midwives attitude towards Reproductive health. while (continuous professional development and academic support seeking) did not.

Hypothesis 3c: The composite contribution of Institutional and Students factors would not significantly predict skills in Reproductive Health among trainee midwives in South-West, Nigeria.

Table 4.23: Regression showing joint effect of the institutional and student factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and Self-regulated learning) on trainee midwives Skills in Reproductive Health

R=.750 R^2 =.562 Adjusted R^2 =.550 Std. Error of the Estimate=2.2507						
A N O V A						
Model	Sum of Squares	DF	Mean Square	F	Sig.	Remark
Regression	1437.139	6	239.523	47.282	.000	Sig.
Residual	1119.541	221	5.066			
Total	2556.680	227				

Significant at the 0.05 level

Table 4.23 above indicated that the joint effect of the Institutional and Student Factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and Self-regulated learning) to the prediction of trainee midwives Skills of Reproductive Health was significant. The table also showed a coefficient of multiple correlation (R = .750 and a multiple R^2 of .562). This meant that 56.2% of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at $P < .05$. The table also showed that the analysis of variance (ANOVA) for the regression yielded F-ratio of 47.282 (significant at 0.05 level). This implied that the joint effect of the institutional and student Factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and self regulated learning) when taken together significantly predicted the trainee midwives skills in Reproductive health. Hence, the null hypothesis stating that composite contribution of institutional and students factors would not significantly predict skill in Reproductive Health among trainee midwives in South-West, Nigeria is rejected.

Table 4.24: Relative contribution of the institutional and student factors (Curriculum Content knowledge, Learning Environment Assessment, Continuous Professional Development, Academic Support Seeking, Academic Self-Efficacy and self regulated) to the prediction of trainee midwives skill in Reproductive health

Model	Unstandardized Coefficients		Standard Coefficients	T	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	-2.207	1.916		-1.152	.250
Curriculum Content knowledge	.379	.047	.376	8.049	.000
Learning Environment Assessment	-0.01078	.014	-.035	-.775	.439
Continuous Professional Development	0.005808	.036	.007	.160	.873
Academic Support Seeking	0.06412	.040	.081	1.607	.109
Academic Self-Efficacy	.151	.025	.299	5.972	.000
Self Regulated Learning	.516	.044	.554	11.662	.000

Significant at the 0.05 level

Table 4.24 above revealed the relative contributions of the institutional and student factors on trainee midwives skills in Reproductive health expressed as beta weights, viz: Curriculum Content Knowledge, (β =.376, P <.05) indicated that significant relationship existed; Also, Academic Self-Efficacy, (β =.299, P <.05) and Self Regulated Learning, (β =554, P <.05) showed that significant relationship existed. Learning Environment Assessment, (β =-.035, P >.05) indicated no significant relationship existed; Also, Continuous Professional Development, (β =.007, P >.05) and Academic Support Seeking, (β =.081, P >.05) indicated that no significant relationship existed.

The result from table 4.24 indicated that variable 6(Self Regulated Learning) was the most potent contributor to the prediction of the trainee midwives skills in Reproductive health, followed by variable1(curriculum content knowledge) and variable 5(academic self-efficacy).

It is concluded that only three(3) variables; (curriculum content knowledge, academic self-efficacy and self regulated learning) significant at 0.05 level made significant contributions to the prediction of the trainee midwives skills in Reproductive health while (learning environment assessment, continuous professional development and academic support seeking) did not.

Report of focus group discussion

Focus group discussion was held in two schools, eight students were selected from each school for each session. The guide prepared for FGD was used in probing the discussants and the questions raised under the guide were thoroughly and comprehensively discussed by the discussants(students). Each session had a time limit of one hour, while the responses were noted. These two(2) groups provided more qualitative data.

Results of the discussion described under the following sub-headings:-

(a) The opinion of the discussants on learning outcomes of Reproductive health.

Majority of the discussants expressed their opinion on learning outcomes of reproductive health to be the knowledge acquired, the attitude towards the programme and the skills expected of them. A few of them are of the opinion that reproductive health is too broad and the time for skills acquisition (practicals) is too short as they do not have enough exposure to practicals. Below are some of their qoutes:

1. " The reproductive health course is interesting, but there are some topics that are difficult to understand"
2. "There are new trends in reproductive health that are yet to be included in the course"
3. "The course is too cumbersome, the topics are rarely covered before our final examinations"
4. "The topics are very relevant, they are integrated with other units such as normal midwifery, complicated midwifery, child health and family planning in Midwifery education"

(b) The opinion of the discussants on the institutional factors.

A good number of the discussants expressed their opinion on institutional factors to be the teaching and learning resources necessary for the promotion of student learning outcomes of reproductive health. Majority of the discussants reported that their school was not well equipped with the necessary facilities for effective teaching and learning. Some of them expressed they lacked adequate tutors for the programme. Some of them mentioned that their teachers attended life saving skills seminars on reproductive health and other mandatory continuing professional training for teachers. Below are some of their quotes:

1. “The curriculum content for reproductive health is enormous”
2. “We do no have adequate facilities for our training”
3. “Our teachers do attend seminar on life saving skills on reproductive health and come to teach us new things”
4. “The school is not well equipped, we do not have enough classrooms”
5. “We do not have access to computers, no internet facilities and the demonstration room for skill acquisition is small and not well equipped”
6. “We do not have enough teachers”

(c) Perception of the discussant on student factors

Majority of the discussants expressed their opinion on student factors as the individual characteristics of the learner necessary for enhanced academic performance. Below are some of the quotes:

1.“ The course is interesting and we are properly taught, our teachers come to class when it is their period on the timetable”
2. “We have the challenge of time management as we have a lot of topics to read”
3. “ We are determined to excel despite the stress encountered in the course”
4. “We do have group discussion to improve our outcomes in this programme”

(d) The opinion of the discussants on the instructional methods used in teaching.

Majority of the discussants expressed that lecture, demonstration and discussion methods were mostly used by the teachers. Below are some of the responses

1. “We do not have access to computers, no internet facilities and the demonstration room for skill acquisition is small and not well equipped”
2. “The mannekins for practical teaching are not available”
3. “We do not have enough teaching aids for the demonstration class”
4. “The teachers rarely use role play and role modelling for teaching”

(e) Opinion of the discussants on the skills required to promote work force development of Reproductive health programme.

Majority of the discussants attested to the use of problem solving method. They made use of the clients' case studies. A good number of them affirmed to the use of practical demonstration for teaching clinical procedure. Below are some of the quotes:

1. “ Competency in the demonstration of clinical skills are inevitable”
2. “The performance of clinical procedure is important to promote clinical skills”
3. “Observation and demonstration of skills are necessary for work force development”
4. “More time should be allotted for practical demonstration and performance of clinical procedure in reproductive health”
5. “We cover much topics in the programme outline both in theory and practical sessions”

Conclusion:-

From the above results of the FGDs it was observed that the above obtained results showed common similarities in terms of responses which were collected through the questionnaires. This provided a strong justifiable base for the data collected from the respondents.

Discussion of findings

The findings revealed that the students had positive attitude towards Reproductive health programme in Schools of Midwifery, South-West Nigeria. This is accounted for by learner friendly content of the course, determination to excel, quality teachers and improved teaching. This is in line with Popham (2011) who earlier found that the reason students’ attitudes, interest and values are important is because they typically influence future behavior. He further highlighted that it is necessary to promote positive attitudes towards learning because students who have positive attitudes towards learning today will be inclined to pursue learning in the future. The result also corroborated Oermann (2010) who earlier found out that learner-content interaction is considered a good predictor of student satisfaction and included the degree of ease learners perceived their efforts in accessing reproductive health course materials, and the extent to which they perceive that the course materials bring them to a better understanding or stimulated their interest for the programme.

Findings on the students' assessment of the adequacy of the learning environment for reproductive health programme in Schools of Midwifery revealed that the learning environment is adequate. This is in terms of the teaching and learning resources and a conducive environment provided for learning This is in line with the view of Lewis (2010) whose results showed that factors such as motivation, a supportive environment for learning, teaching methods, curriculum design, previous academic

success and learning abilities are facilitators of learning. The result also tallied with the findings of Adesoji and Olatunbosun (2008) stating that in any teaching- learning situation, the students, the teachers, the curriculum and the learning environment are the four pivots for educational advancement.

Findings on the teaching methods mostly used by the teachers to teach Reproductive Health in Schools of Midwifery South-West, Nigeria revealed that practical demonstration, lecture and discussion methods, clinical instruction, client care studies were always used in teaching the trainee midwives. Internet E-mail and Role modeling were rarely used by the teachers, while computer soft ware specifically role play, clinical round, home/health visit and simulation were sometimes used. The teachers responses revealed that they are deficient in the use of modern methods of teaching in this era of modern technology. This also corroborated the findings of Ajayi (2009) who stated that the quality of teachers, facilities, instructions, evaluation procedure, morality, and administration and management are indicators for assessment of quality in higher education system.

Findings on the relevance and adequacy of the curriculum content in predicting student midwives learning outcomes in Reproductive Health in Schools of Midwifery, South-West, revealed that the students' knowledge of the curriculum content of reproductive health was adequate and relevant. The curriculum course content was updated and made available to each student to enable them have fore knowledge of the content and prepare ahead of the class. This result also further confirmed earlier view of Ajala (2005) who stated that one unique strategy to improve dwindling educational standard, is through quality curriculum content and process. This is also supported by Cummings, Maddux and Richmond (2008) stating that learning outcomes assessment can provide evidence of student learning progression, and prioritize recommendations for continuous curriculum improvement when implemented effectively.

The findings on institutional factors as predictors of knowledge, attitude and skills of Reproductive health programme by students revealed that curriculum content knowledge, learning environment assessment and continuous professional development jointly and significantly predicted learning outcomes of Reproductive health programme However, curriculum content knowledge was the most potent contributor in predicting trainee midwife knowledge of reproductive health. It would be necessary to promote the trainees knowledge of the adequacy and relevance of the curriculum content in other to improve their achievement in reproductive health

programme. Moreover, curriculum content knowledge and learning environment were potent contributors in predicting trainee attitude towards reproductive health. This is in support of Ezeowu (2013) who revealed that theoretical learning supports and reinforces clinical training in skills related to midwifery care. The continuous professional development of the teachers did not significantly determine the student achievement in Reproductive health programme. The teacher's additional training and attendance of relevant conferences as stipulated by the regulatory body may have accounted for this. This is because the tutors are mandated by the regulatory body to go for professional development in form of in-service training every 1-3years to enable them update their teaching skills. It further revealed that curriculum content knowledge was the most potent contributor in predicting the trainee skill in reproductive health. This study also further confirmed the findings of UNFPA(2010) stating that the critical intervention in reducing maternal morbidity and mortality and for ensuring a healthy start in life for the new born was to have a competent health care provider with midwifery skills at birth. This is in support of Ezeowu (2011) who revealed that theoretical learning supports and reinforces clinical training in skills related to midwifery care. This was supported by the findings of the focus group discussion *"we cover as much as possible topics in the course outline both in theory and practical sessions" "we also use problem solving methods"* The need for the trainee to have adequate knowledge of the relevance of the curriculum content of reproductive health necessary for skill performance. The implication of this findings is that the combination of the institutional factors is very important in the prediction of learning outcomes of Reproductive health programme among trainee midwives.

The result of student factors as predictors of learning outcomes of reproductive health programme by trainees revealed that the student factors (academic support seeking, academic self-efficacy and self-regulated learning) jointly and significantly predicted learning outcomes of reproductive health programme among trainee midwives in south-west, Nigeria. This result also tallied with the findings of Allen and Friedman (2010) that emphasized the three essential aspects of learning outcomes including cognitive, affective and behaviour necessary to prepare students for their social work and professional life. The outcome of this study also corroborated the findings of Pajares (2008) and (Bouffard-Bouchard, Parent, and Larivee, 1991; Zimmerman and Martinez-Pons, 1990) stating that the use of self-regulation strategies can lead to increase in self-efficacy beliefs and academic achievement. This result also

confimed earlier findings of Bandura, and Martinez-Pons,(1992); Adeyemo (2007); Hodges, (2008); Akomolafe, Ogunmakin, and Fasooto (2013) who found that high self-efficacy positively affected effort, persistence, goal setting and performance. Furthermore, it was revealed that higher self-efficacy directly influenced academic performance by increasing the quality of information processing as well as its quantity. This also corroborated the findings of Graham and Harris(2000); Kistner, Rakoczy, and Otto (2010) stating that self-regulated learning can make the difference between academic success and failure for many students. A student's sense of self efficacy could influence several aspects of behaviour that are important to learning. The result also confirmed the assertion of Zimmerman (2008); Schunk and Zimmerman (2007) that self-regulation and motivation could have a pivotal impact on students' academic outcomes. The results revealed that self-regulated students were more engaged in their learning.

However, the analysis of the relative contribution of student factors (academic self-efficacy and self-regulated learning) were potent contributors in predicting learning outcomes of reproductive health among trainee midwives while academic support seeking did not. It can be deduced that the students as adult learners with previous basic nursing training were independent. This was also supported by the focus group stating; *"We do have group discussion amidst ourselves to improve our performance in this course".* This finding corroborated the findings of Harden, Crosby, and Davis,(1999; 2007) stating that learning outcomes encouraged a self-directed and autonomous approach to learning, as students could take responsibility for their studies, and were able to actively gauge their progress. It revealed that academic self-efficacy and self-regulated learning were potent in predicting learning outcomes of reproductive health among trainee midwives in South-west, Nigeria. This result also corroborrated the findings of Locke and Latham,(1990) as cited in Redmond (2010) stating that high self-efficacy individuals generated more effective task strategies to facilitate goal attainment and respond more optimistically to negative feedback than low self-efficacy individuals. This also result affirmed the findings of Lunenburg (2011) who stated that Self-efficacy had influence over people's ability to learn, their motivation and performance, as people will often attempt to learn and perform only those task for which they believed they would be successful. Hodges (2008); Pintrich and De Groot (1990) stated that students' perceptions of self-efficacy in traditional classroom learning was found to have positive influence on learning

outcomes such as task persistence, task choice, skill acquisition, and academic achievement. According to Kolovelonis, Goudas, and Dermitzak, (2011) self-regulated learners also manipulated their learning environments to meet their needs. *This finding corroborated with the result of the focus group discussion stating "We improvise some of the equipment that are not available".* Also, this result corroborated the study of Schunk and Zimmerman(2007); Zimmerman (2008) stating that self-regulated learners performed better on academic tests and measures of student performance and achievement. Based on the findings the correlation analysis of the predictor variable and the outcome variables shows that academic self efficacy and learning outcomes in RHP were significantly correlated. This findings were in line with Chu and Choi's (2005) study which found significant positive relationship between academic self efficacy and learning outcomes. Also Cao (2012) found that academic self efficacy predicts learning outcomes in Reproductive Health Programme. However, Gendron's (2011) study found no significant relationship between self efficacy for learning and performance. Moreover self regulated learning was found to be significantly correlated with performance. This is in line with the observation of many studies that self-regulated learning is an important variable associated with academic performance. In addition based on the self-regulated learning perspective Pitric2000; Zimmerma 2008) . The hypothesized indirect relationship of the independent and dependent variable through self -regulation have been tested. The result revealed that self regulation, as mediator plays a significant role in the prediction of learning outcomes in Reproductive health Programme. These findings also revealed that self-efficacy plays a facilitative role in relation to learning outcomes as found by Schunk (1985). The motivational influences of self-efficacy via the process of organized goals (Bandura 1997) which lay the foundation for self-regulation of efforts by providing a standard for judging the sufficiency and effectiveness of goal relevant efforts and strategy could be a possible reason for the outcome of this study. Thus, self-efficacy influences academic motivation and learning (Parajes, 1996). Its significant positive contribution to academic performance is not surprising. Another possible reason is that self-efficacious students participate more readily, work harder, persist longer and have fewer adverse emotional reactions when they encounter difficulties than those who doubt their capabilities (Bandura, 1997). An individual with high sense of self-efficacy believes in his or her capability to carry out a task, invests effort in the activity, persist in the face of difficulty and has an

optimistic outlook (Bandura 1997 and Parajes, 1996). Even, Schunk (1994) noted that students with a high sense of self-efficacy beliefs study harder and persist longer when they approach difficulties, whereas students who have low self-efficacy beliefs perform worse at learning tasks and tend to avoid difficult tasks. Therefore, a significant and positive effect of academic self-efficacy on the academic performance is justifiable.

The result of the composite contribution of institutional and student factors as predictors of learning outcomes of Reproductive health by students revealed that the institutional and student factors (curriculum content knowledge, learning environment assessment, continuous professional development, academic support seeking, academic self-efficacy and self regulated learning) had cumulative and significant effect on trainee midwives learning outcomes of Reproductive health programme. The result of this study further confirmed the view of Salami (2010) who concluded that students with high self-efficacy and emotional intelligence used to participate in academic activities actively and developed positive attitudes that resulted in academic success.

However, the institutional and student factors of (curriculum content knowledge, academic self-efficacy and self regulated learning) were potent contributors in predicting the knowledge of Reproductive health among trainee midwives in South-west, Nigeria, while learning environment continuous professional development and academic support seeking were not significant. It was concluded that curriculum content knowledge, academic self-efficacy and self- regulated learning predicted the knowledge of Reproductive Health programme among trainee midwives in south-west more than learning environment, continuous professional development and academic support seeking.

Furthermore, the institutional and student factors of curriculum content knowledge, learning environment assessment, academic self-efficacy, and self-regulated learning were potent contributors in predicting trainees attitude towards Reproductive health programme while continuous professional development and academic support seeking were not significant. It was confirmed that curriculum content, learning environment assessment, academic self-efficacy, and self-regulated learning had better prediction on the trainees attitude towards Reproductive health programme than continuous professional development and academic support seeking. In support of these findings, trainee midwives attested to interest of the course, good

time management and determination to excel as suggestions that enhanced academic performance. According to some of the participants in the group: *"We do have group discussion amidst ourselves to improve our performance in this course".*

Moreover, the relative contribution of the institutional and student factors revealed that curriculum content knowledge, academic self-efficacy and self-regulated learning were potent contributors in predicting skills in Reproductive health programme among trainee midwives while continuous professional development, academic support seeking and learning environment were not significant. It affirmed that curriculum content knowledge, academic self-efficacy and self-regulated learning had more positive influence than continuous professional development, academic support seeking and learning environment. The significant contribution of academic self-efficacy to the prediction of academic performance of trainee midwives in Reproductive health is in consonance with the outcome of many previous research works (Pintrich and De Groot; Schunk, 1994; Pajares, 1996; Chemers, Hu and Garcia, 2001; Adeyemo, 2007; ; Akomolafe, 2010; Akomolafe, Ogunmakin and Fasooto, 2013). However, the current findings are inconsistent with the findings of Reynolds and Weigand (2010) and Jeffreys (1998) who found no significant relationship between academic self-efficacy and academic performance. One possible reason for the inconsistency might have been the reliability of the instruments which Jeffreys (1998) used in her research. Witt-Rose (2003) commented on the reliability measures of the academic variables in Jeffreys' study. The reliability coefficient reported was slightly below an acceptable limit and this might have affected the relationship between self-efficacy and academic achievement. This result negates the findings of Ofori , Ofori and Charlton (2002) who viewed academic support seeking as a good determinant of student nurses' achievement in a psychology course. This variable appeared not to be a good predictor of student midwives' achievement in reproductive health programme. The implication of this result is that the combination of these factors were imperative in the prediction of learning outcomes in the Reproductive health programme among trainee midwives.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presented the summary, conclusion and recommendations which were drawn based on the findings of the study. The contributions to knowledge as well as suggestions for further studies were made on the identified limitations in this study.

Summary

The study examined the institutional and student factors as predictors of learning outcomes in Reproductive health programme among trainee midwives in south-west, Nigeria. The variables for the study were institutional factors, which included; (curriculum content knowledge, teachers continuous professional development, learning environment) and student factors (academic support seeking, self-regulated learning and academic self-efficacy. The study included the introductory part of the background and the need for the development of appropriate human resources to provide quality reproductive health services to the community. The guiding principle of education in Nigeria is to equip every learner with relevant knowledge, skills, attitude and values. This is done so as to derive maximum benefits from any academic programme, lead a fulfilling life and contribute to the development and welfare of the community. The extent to which this could be realized is tied to continuous evaluation of the achievement of learning outcomes and objectives as well as understanding factors shaping this achievement. The midwifery education embraces the concept of reproductive health for proper development of trainee midwives with appropriate skills. This is to fulfil their roles and responsibilities in providing midwifery care within the broader concept of reproductive health.

The study raised four research questions and three hypotheses. The first hypothesis tested the joint and relative contributions of each of the sub variables of the institutional factors predicting the trainee midwives knowledge attitude and skills in Reproductive health. The second hypothesis tested the joint and relative contributions of each of the sub variables of the student factors predicting the learning outcomes in Reproductive health programme. The third hypothesis tested the

composite contributions of both institutional and student factors predicting the learning outcomes in Reproductive health programme.

A conceptual framework was developed for the study with theoretical and empirical review of relevant literature. They included Concept of reproductive health, National policy on Reproductive Health Education in Nigeria, Nursing and Midwifery Education in Nigeria, Contributions of Midwifery Education to advancing Reproductive Health in Nigeria, Reproductive Health and Reproductive Rights situation in Nigeria, Reproductive health programme in Nigeria, Maternal and Child health in Nigeria , Maternal Morbidity and Mortality in Nigeria, Concept of learning outcomes and Assessment of students' f learning outcomes.

Empirical review included Institutional factors of Curriculum content knowledge, Teachers' continuous professional development, Learning environment and Students factors; Academic support seeking, Self-regulated learning and Academic self-efficacy. Appraisal of literature reviewed was done.

The study employed the use of descriptive survey research of expost-facto design. Total enumeration and purposive sampling technique was employed to select the sample of thirty(30) teachers and two hundred and twenty eight (228) final year trainee midwives from schools of midwifery, South west, Nigeria. The instruments for data collection included self developed and adapted questionnaire, procedure checklist and focus group discussion guide. The data collected was subjected to Cronbach Alpha in other to establish the internal consistency of the instrument. The reliability coefficients of the instruments are: Continuous Professional Development Questionnaire (CPDQ) 0.91, Teaching Methods Questionnaire 0.92, knowledge of Adequacy and Relevance of Curriculum Contents on Reproductive Health Course Questionnaire (KARCCRHCQ) 0.70, Student Knowledge of Academic Self Support-Seeking Questionnaire (SKASSSQ) 0.83, Academic Self-Efficacy Scale on Reproductive Health Course (ASESRHC), is 0.73, Self Regulated Learning Scale (SRL), 0.86, Reproductive Health Attitude Scale (RHAS) 0.86 and Learning Environment Assessment Scale for Reproductive Health Course (LEASRHC) 0.86. The achievement test questionnaire on Reproductive health was analyzed using Kuder-Richardson 20 test and reliability of 6.0

The data collected were analysed using the descriptive statistics of frequency counts and percentages for demographic characteristics of the respondents with research questions and Inferential statistics of Multiple Regression Analysis was used

along with Analysis of Variance (ANOVA) while the hypotheses were tested at 0.05 alpha level of significance. The qualitative information from focus group discussion was analyzed using thematic-content analysis approach.

The study provided answers to four research questions and tested three hypotheses each with sub variables. The study revealed the positive attitude of the students to Reproductive health programme. The teaching methods employed by the teachers were not adequate due to lack of resources. The joint contributions of the sub variables were significant on knowledge, attitude and skills, hence the null hypotheses were confirmed.

Conclusion

Based on the findings of the study, it was therefore concluded that the trainee midwives had positive attitude towards Reproductive health programme. Also it was concluded that the trainee midwives found the learning environment to be adequate for Reproductive health programme. It was also concluded that practical demonstration, lecture, discussion method, clinical instruction, client care studies were mostly used in teaching the trainee midwives Reproductive health. Moreover, it was concluded that the students knowledge of the curriculum content of reproductive health was adequate and relevant in predicting the learning outcomes of Reproductive health programme.

It was also concluded that institutional factors of curriculum content knowledge, learning environment assessment and continuous professional development and student factors of academic support seeking, academic self-efficacy and self-regulated learning made joint significant predictions on the knowledge, attitude towards and skills in Reproductive Health programme among trainee midwives in south-west, Nigeria.

Finally, it was concluded that relatively and compositely the independent variables: curriculum content knowledge, learning environment, academic self-efficacy and self regulated learning made potent contributions to the predictions of learning outcomes in Reproductive health programme while continuous professional development, academic support seeking made least contributions among trainee midwives in schools of midwifery, South west Nigeria.

Recommendations

The following recommendations were made based on the findings and the conclusion of this study:

1. To improve the quality of educators in schools of midwifery by continuous professional development through workshops and seminars.
2. Modern teaching approaches should be used to enhance teaching and learning including the use of electronic instructional materials and use of internet facility and other modern and learner centred methods of teaching of trainee midwives.
3. The provision of conducive environment by stakeholders in schools of midwifery.
4.. To affirm the importance of self-efficacy beliefs and self-regulated learning behaviour in students' learning.
5. In order to enhance self-regulated learning behaviour, teachers need to help students maintain high but accurate self-efficacy beliefs in their academic work.
6. The policy makers and institutional stake holders should ensure adequate funding of schools of midwifery in response to the dynamic needs of the society, to produce quality midwives
7. The integration of current RH issues into the curriculum content of Reproductive health programme for trainee midwives
8. Teachers are to promote positive help-seeking behaviours by providing students with on-going progress feedback in Reproductive health programme
9. Teachers should make use of evidenced-based strategies that promote critical thinking and active learning in Reproductive Health programme for the classroom, practical laboratory and clinical setting.

Contribution to Knowledge

- The study established the need for curriculum review in Reproductive Health Programme of trainee midwives.
- It affirmed the behavioural strategy of self efficacy as a potent contributor in the skill development of trainee midwives
- It confirmed that self regulated learning enhanced trainee midwives skill acquisition in Reproductive Health.
- The study also established that the teachers are yet to adopt the modern teaching approaches in schools of Midwifery in Reproductive Health Programme.

Suggestion for Further Studies

Based on the finding of this study, the following suggestions were made:

1. An intervention study could be carried out on the use of different modes of teaching for Reproductive health programme.
2. The study could be replicated in other geo-political zones to establish a valid generalization of the findings
3. The use of other psychological skills such as locus of control on student academic performance was equally suggested.

REFERENCES

Adebayo, S.B., Gayawan, E., Ujuju, C. and Ankomah, A. 2013. Modelling geographical variations and determinants of use of modern family planning methods among women of reproductive age in Nigeria. *Journal of Biosocial Science* 45.1: 57-77.

Adedeji, S. O., and Olaniyan, O. 2011. Improving the conditions of teachers and teaching in rural schools across African countries. United Nations Education and Scientific and Cultural Organisation (UNESCO). Retreieved Dec. 24, 2013, from http://unesdoc.unesco.org/images/0021/002260/2160 62e.pdf.

Adegbile, J. A. 2016. Evaluation of teacher preparation and teacher morale as factors of English language achievement in secondary schools. *Nigerian journal of Educational Research and Evaluation*. 3 (1), 15-22

Adegoke, A. A. and Van den Broek, N. 2009. Skilled birth attendance-lessons learnt. BJOG: *An International Journal of Obstetrics and Gynaecology* 116.1: 33-40.

Adeniran, G.O. 2012. Student and School performance indicators as determinants of student midwives achievement in core midwifery courses in Nigeria. An unpublished Ph.D thesis, University of Ibadan, Ibadan.

Adeogun, A. A. and Osifila G.I. 2008. Relationship between educational resources and students' academic performance in Lagos State Nigeria. *International Journal of educational management. 5 and 6.*

Adesoji, F. A.,and Olatunbosun, S. M. 2008. Student, Teacher and School environment factors as determinants of achievement in senior secondary school chemistry in Oyo state, Nigeria. *Uluslararasi Sosyal Aratirmalar Dergisi. The Journal Of International Social Research 1:2*

Adeyemo, D.A. 2007. Moderating influence of emotional intelligence on the link between academic self-efficacy and achievement of university students. *Psychology Developing Societies 19.*2: 199-213.

Ajala, J.A. 2002. *Designing content of the curriculum:* A Guide to practice. Ibadan :May Best publishers.

Ajala, J.A. 2005. *Evaluation in Student Classroom Performance*: Evaluation in Theory and Practice. Ibadan: May Best publishers.

Ajala, J.A. 2012. *Reflection on human kinetics and health education: One most vital to education, academic achievement, wellness and better society.* A valecdictory address delivered at University of Ibadan, Ibadan

Ajayi, I.A. 2009. *Efficiency of education.*in J.B. Babalola and A.O.Ayeni (Eds) Educational Management: Theories and tasks. Nigeria: Macmilllian publishers.

Akpa,G. O., Udoh.,S.U., and Fagbamiye.,E.O. 2005. *Deregulating the provision and management of education in Nigeria*. Jos: NAEAP.

Akomolafe, M.J., Ogunmakin, A.O. and Fasooto, G.M. 2013. The role of academic self-efficacy, academic self-concept and academic motivation in predicting secondary school students' academic performance, *Journal of Educational and Social Research* 3.2: 335-342.

Allen, K. N., and Friedman, B. D. 2010. Affective learning: a taxonomy for teaching social work values. *Journal of Social Work Values and Ethics 7*.2: 1-12.

American Nurses Association. 2014. *Nursing: Scope and Standards of Practice*. New York: Silver Spring.

Anderson, H. M., Moore, D. L., Anaya, G., and Bird, E. 2005. Student learning outcomes assessment: a component of program assessment. *American Journal of Pharmaceutical Education 69.*2 :256-268.

Astin, A. W., Banta, T. W., Cross, K. P., El-Khawas, E., Ewell, P. T., Hutchings, P.,and McClenney, K. M. 1996. 9 Principles of good practice for assessing student learning. Retrieved Aug.10, 2013, from: http://www.aahe.org/assessment/princ ipl.htm.

Bandura, A. 1997. *Self efficacy* . New York: Academic Press. 4:71-81 Retrieved Mar. 3, 2015 from http://www.des.emory.edu/mfp/BanEncy.html

Bandura, A. 2006. *Self-efficacy beliefs of adolescents*. New York: Information Age Publishing.

Bandura, A. and Martinez-Pons, M. 1992. Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal-setting. *American Educational Research Journal*, *29*, 663-676. doi: 10.3102/00028312029003663

Bickford. D. and Wright, D. 2006, Community: the hidden context for learning, in D.G. Oblinger (ed.), *Learning Spaces*, Educause:Boulder

Bloom, B. S. 1956. *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York: Longman.

Bouffard-Bouchard, T., Parent, S., and Larivee, S. 1991. Influence of self-efficacy on self-regulation and performance among junior and senior high-school age students. *International Journal of Behavior Development* 14:153-164.

Bruner, J.S. 2012. Simply psychology: Cognitivism and Constructivism. Retrieved April 19, 2012, from www.learning-theories.com

Busayo, I. 2011. The school library as a foundational step to children's effective reading habits. Library, philosophy and practice. Retrieved Dec.17, 2013, from http://www.webpages.uidaho.ud/~mbolin/busayo-reading.htm

Chamorro-Premuzic, T. and Furnham, A. 2006. Intellectual competence and the intelligent personality: A third way in differential psychology. *Review of General Psychology* 10: 251–267.

Chemers, M. M., Hu, L. and Garcia, B. F. 2001. Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology, 93*(1), 55-64.

Cheng E. C. K. 2011. The Role of Self-regulated Learning in Enhancing Learning Performance. *The International Journal of Research and Review. 6 (1)*

Clarebout, G., Horz, H., and Schnotz, W. 2010. The relations between self-regulation and the embedding of support in learning environments. *Educational Technology Research and Development* 58.5: 573-587

Cummings, R., Maddux, C.D., and Richmond, A. 2008. Curriculum-embedded performance assessment in higher education: maximum efficiency and minimum disruption. *Assessment & Evaluation in Higher Education* 33: 599-605.

De Bruin, A.B., Thiede, K.W., and Camp, G. 2011. Generating keywords improves metacomprehension and self-regulation in elementary and middle school children. *Journal of Experimental Child Psychology* 109.3: 294-310.

De Corte, E., Mason, L., Depaepe, F., and Verschaffel, L. 2011. *Self-regulation of mathematical knowledge and skills.* in B. J. Zimmerman, and D. H. Schunk (Eds.), Handbook of self-regulation of learning and performance. New York: Routledge. 155-172.

Diaconu, M., and Pandelica, A. 2011. Marketing approach in the management of higher education institutions. *Scientific Bulletin – Economic Sciences 10.*2: 98-107.

Eccles, J. S. and Wigfield, A. 2002. "Motivational beliefs, values, and goals, *Annual Review of Psychology* 53.1:109-132.

Edwards, A. L. 1957. Techniques of attitude scale construction. Appleton-Century-Crofts, New York. Retrieved Aug. 23, 2015.
From *http://www.jstor.org/stable/pdf/4445229.pdf?acceptTC=true*

Elstad, E., and Turmo, A. 2010. Students' self-regulation and teacher's influence in science: Interplay between ethnicity and gender. *Research in Science and Technological Education* 28. 3: 249-260.

Emeke, E. A. and Adeniran, G.O. 2013. A path analytic study of student and school performance indicators as determinants of student midjwives' performance in Anatomy and Physiology *British Journal of Education, Society and Behavioural Science* 3.1:18-32

Eom, S. 2009. Effects of interaction on students' perceived learning satisfaction in university online education: an empirical investigation. *International Journal of Global Management Studies 1.3:* 60-74.

Ersanli, C. Y. 2015.The relationship between students' academic self-efficacy and language learning motivation: A study of 8th graders. *Social and Behavioral*

Sciences 19.9:472 – 478

Etsey, K. 2005. Cause of low academic performance of primary school pupils in the Shama Sub-Metro of Shama Ahanta East Metropolitan Assembly (SAEMA) in Ghana. *Regional Conference in Education in West Africa, Dakar, Senegal, 1st-2nd Nov.*

European Commission, 2010. *Developing coherent and system-wide induction programmes for beginning teachers: a handbook for policymakers.* European Commission Staff Working Document 538 final. Brussels.

European Commission, 2012. *Supporting the Teaching Professions for Better Learning Outcomes.* Strasbourg, SWD 374 final.

Everhart, D. 2014. Investing in quality competency -based education Retrieved on Nov. 15, 2015 from http://er educause

Ewell, P. T. 2009. *Assessing educational outcomes. New directions for institutional research.* San Francisco: Jossey-Bass.

Ezeonwu, M. C., 2013. Nursing education and workforce development: Implications for maternal health in Anambra State, Nigeria. *Health Care Women Int*. 5.3: 35-45.

Ezeonwu, M. C., 2011. Maternal birth outcomes: Processes and challenges in Anambra State, Nigeria. *Health Care Women Int*. 32.6: 492-514

Fatusi, A. O., Ijadunola, K.T., Ojofeitimi, E.O., Adeyemi, M.O., Omideyi, A.K., Akinyemi, A., and Adewuyi, A. A., 2003. Assessment of andropause awareness and erectile dysfunction among married men in Ile-Ife, Nigeria. *Aging Male* 6.2: 79 – 85.

Federal Ministry of Health Nigeria. 2015. National HIV and AIDS and Reproductive Health Survey. Nigeria: Federal Ministry of Health, Abuja.

Federal Republic of Nigeria. 2010. *MDG Report 2010: Nigeria Millennium Development Goals.* Abuja, Nigeria: Government of Federal Republic of Nigeria.

Federal Ministry of Health Nigeria. 2008. National HIV and AIDS and Reproductive Health Survey, (NARHS). Nigeria: Federal Ministry of Health, Abuja.

Federal Ministry of Education. 2009. *Roadmap for the Nigerian education sector.* Consultative draft. Retrieved Dec. 15, 2015.

Federal Ministry of Health. 2007. National Policy on the Health and Development of Adolescents and Young People in Nigeria. Federal Ministry of Health Nigeria.

Fenwick, T., and Parsons, J. 2000. *The Art of Evaluation: A Handbook for Educators and Trainer.* Toronto: Thompson Educational Publishing.

Filardo, M. 2008. Good buildings better schools. *Economic Policy Institute Briefing Paper.* 216

Fullerton, J., Gherissi, A., Johnson, P., Thompson, J. 2010. Quality considerations in midwifery pre- service education: Exemplars from Africa. *International Journal of Childbirth* Retrieved Jan.10,2010 from doi:10.1016/j.midw.

Gannicott, K. and Throsby, D. 1992. Educational quality in educational development: Propositions and an application to the South pacific. *International review of Education* 38.30:233- 239

Gichura, S. 2003. The turning point: free primary education in Kenya. Network for International Policies and Cooperation in Education and Training. *Norrag News* Retrieved Dec. 15, 2013, from http://www.norrag/en/publications /norrag-news/online-version/crtical-perspectives-on-education-and skills-in. 37-41

Glennerster, R., Kremmer, M., Mbiti, J. and Takavarasha, L. 2011. Access and quality in the Kenyan education system: A review of the progress, challenges and potential solutions. Prepared for the office of the prime minister of Kenya.Retrieved Dec. 18, 2013, from http://www.povertyactionlab.org /publication/access-and- quality-kenyan-education-system.

Global Summit on Education, 2013. (e-ISBN 978-967-11768-0-1) 11-12 March 2013, Kuala Lumpur. Organized by WorldConferences.net.

Gronlund and Brookhart, 2008. *Writing instructional objectives for teaching and assessment.* Upper Saddle River, New Jersy: Prentice Hall.

Goddard, R. D. 2003. Relational networks, social trust, and norms: A social capital perspective on students' chances of academic success. *Educational Evaluations and Policy Analysis 25:* 59-74.

Graham, S. and Harris, K. R. 2000. The role of self-regulation and transcription skills in writing and writing development. *Educational Psychologist* 35.1: 3-12.

Griffith, G.K and Nguyen, D.A. 2006. Are Educators Prepared to Affect the Affective Domain? National Forum of Teacher Education, *Journal-Electronic.* 16. 3: 2005-2006.

Gronlund, N. E. 2008. *Writing instructional objectives for teaching and assessment*. Upper Saddle River, NJ: Prentice Hall.

Gronlund, N. E. 2000. *How to write and use instructional objectives* (6th ed) Upper Saddle River, NJ: Prentice Hall.

Hallack, J. 2015. School Facilities and Academic Achievement of Secondary School Agricultural Science in Ekiti State Nigeria. Retrieved on Nov. 10, 2015 from http;//www/researchgate.net

Harden, R.M., Crosby, J.R., and Davis, M.H. 1999;2007 AMEE Guide No. 14: Outcome-based education: Part 1 – An introduction to outcome-based education. *Medical Teacher* 21.1:7-15

Harden, R.M. 2002. Learning outcomes and instructional objectives: is there a difference? *Medical Teacher* 24(2):151-155.

Harden, R.M. 2007a. Outcomes-based education: the future is today. *Medical Teacher* 29:625-629.

Harden, R.M. 2007b. Outcome-based education – the ostrich, the peacock and the beaver. *Medical Teacher* 29:666-671.

Harris, K. R., Friedlander, B.D., Saddler, B., Frizzelle, R. and Graham, S. 2005. Self-monitoring of attention versus self-monitoring of academic performance: Effects among students with ADHD in the general education classroom. *Journal of Special Education* 39.3: 145-156.

Hidden curriculum 2014. In S. Abbott (Ed.), The glossary of education reform. Retrieved Mar. 08, 2015, from http://edglossary.org/hidden-curriculum.

Hijzen, D., Boekaerts, M., and Vedder, P. 2007. *Scan J Psychol* 47.1:9-21

Hodges, C. B. 2008. Self-efficacy in the context of online learning environments: A review of the literature and directions for research. *Performance Improvement Quarterly 20.*3: 7-25.

Hou, A. Y. 2010. The development of a student learning outcomes based accreditation model in Taiwan higher education. *Asian Journal of University Education 6.*1: 29-48.

Hussein J, McCaw-Binns A, Webber R, 2012. eds. Maternal and Perinatal Health in Developing Countries; 96-113.

International confederation of midwives. 2011. Revised 2013. Essential competencies for basic midwifery practice. Retrieved Nov. 10, 2016, from www.internationalmidwives.org

International confederation of midwives. 2010. Global Standards for Midwifery Education. Retrieved Nov. 10, 2016, from www.internationalmidwives.org

ICPD 1994. United Nations Report. Cairo. 5-13 September. New York. Retrieved Oct. 10, 2015

Jarvela, S. and Jarvenoja, H. 2011. Socially constructed self-regulated learning and motivation regulation in collaborative learning groups. *Teachers College Record* 113.2:350-374.

Johansson, M. 2006. Teaching mathematics with textbooks: A classroom and curricular perspectives. Lulea University of Technology: Doctoral Thesis Unpublished. Retrieved Dec. 16, 2013, from http://citeseerx.lst. psu.edu/viewdoc/download?doi=10.1.1.106.9354&rep=rep1&type=pdf

Kerlinger, F. N., and Lee, H. B. 2000. *Foundations of behavioral research* (4th ed.). Holt, NY: Harcourt College Publishers.

Kistner, S., Rakoczy, K., and Otto, B. 2010. Promotion of self-regulated learning in classrooms: Investigating frequency, quality, and consequences for student performance. *Metacognition and Learning* 5.2: 157-171.

Krathwohl, D. R., Bloom, B. S., and Masia, B. M. 1964. *Taxonomy of educational objectives: The classification of educational goals. Handbook II: Affective domain*. New York, NY: Longman.

Kibirige, I., and Hodi, T. 2013. Learners' performance in physical sciences using laboratory investigation. *International Journal of Education Science* 5.4: 425-432

Kim, J.K. and Yan, L.N. 2014. The Relationship among learner characteristics on academic satisfaction and academic achievement in SNS learning environment *Advanced Science and Technology Letters* 47.52: 227-23 Retrieved Nov. 10, 2015, from http://dx.doi.org/10.14257/astl.

Kofi, A. 2006. United nations' Secretary General's message for the new millenium. Retrieved June 09, 2015, from http://ww.unorg/millennium/sg/report.

Knowles, M. 1984. *Andragogy in action.* San Francisco: Jossey-Bass.

Kolovelonis, A., Goudas, M., and Dermitzaki, I. 2011. The effect of different goals and self-recording on self-regulation of learning a motor skill in a physical education setting. *Learning and Instruction* 21.3: 355-364.

Krause, K. L., Hartley R., James, R., McInnis, C. 2005 The first year experience in Australian universities: findings from a decade of national studies 2005 Canberra: DEST Retrieved Oct. 17, 2015. from http//www.cshe.unimelb.edu.au.

Krolak, L. 2005. The role of libraries in the creation of literate environments. UNESCO. Retrieved Dec. 16, 2013, from http://www.fla.org/files/assets/literary-and-reading/publication/role-of-libraries-in-creation-of-literateenvironments.pdf.

Labuhn, A.S., Zimmerman, B.J., and Hasselhorn, M. 2010. Enhancing students' self-regulation and mathematics performance: The influence of feedback and self-evaluative standards *Metacognition and Learning* 5.2: 173-194.

Ladipo O. A. 2005. The Cairo consensus and Millennium Development Goals: Reality or mirage- The Second Olusola Adewale Ojo memorial oration. *Trop. J. Obstet Gynaecol* 22.2:89 – 99.

Letcher, D. W., and Neves, J. S. 2010. Determinants of undergraduate business student satisfaction. *Research in Higher Education Journal 6.*1: 1-26.

Lewis, E. J. 2010. How accelerated nursing student learn: a comparative case study of the facilitators, barriers, learning strategies, challenges and obstacles of students in an accelerated nursing program. PhD Dissertation, the University of Wisconsin-Milwaukee.

Lingam, G., and Lingam, N. 2013. Making learning and teaching a richer experience: a challenge for rural Fijian primary schools. *Education Research Reviews* 8.21:2160-2168.

Linn, R. L., and Gronlund, N. E. 2000. Measurement and assessment in teaching. Upper Saddle River, NJ: Prentice Hall

Lizzio A. Wilson, K. and Simons, R. 2002. University Students Perception of the Learning Environment and Academic Outcomes Implications for Theory and Practice. *Studies in higher education* 27, 27-52 from dx doi. Org/10.1080/03075070120099359

Locke, E. A., and Latham, G. P. 2002. Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist 57.*9: 705-717.

Lunenburg, F. 2011. Self-efficacy in the workplace: implications for motivation and performance. *International Journal of Management, Business, And Administration 14.*1. Retrieved Feb. 04, 2017. from http://www.google.com/url

Lupton, R. 2005, Social justice and school improvement: improving the quality of schooling in the poorest neighbourhoods. *British Educational Research Journal* 31.5: 588-560.

Ma X., Klinger D.A. 2000. Hierarchical linear modeling of student and school effects on academic achievement. *Canadian Journal of Education* 24.1: 41-55

Majid, F. A. 2010. Creativity and innovation in research: the perceptions of Malaysian postgraduate students. *Asian Journal of University Education 6.*1: 49-73.

Makotsi, R. 2011. Sharing resources-how library networks can help reach education goals.Retrieved Dec.17,2017,from Book International. http://www.bookaid.org/ wpcontent/uploads/2011/06/sharing-Resources-how- library-networks- can-help-reach-education-goals.pdf (Access.

McLaughlin, M. and Talbert, J. 2006. *Building school-based teacher learner communities professional strategies to improve student achievement.* Thousand Oaks. Teachers college press,

Merriam, S. and Caffarella, R.1991. *Learning in adulthood.* San Francisco: Jossey-Bass.

Mezirow J.1985. *Fostering critical reflection in adulthood*. San Francisco: Jossey-Bass.

Midwifery and Psychiatric Nursing in Nigeria. 2013. (13th ed) 6th Dec. *NMCN Newsletter.*

Moon, J. 2002. *The module and programme development handbook.* Kogan Page: London.

Mooset, L. J. Krejsier and K. Kofod, 2008. Successful principals: telling or selling? Or the importance of context for school leadership. *International Journal for Leadership in Education* 11.4: 341-352

Moronkola, O. A. 2004. Evaluation of learning outcomes through examination moderation, Monitoring and Coordination In O.A. Afemikhe and J.G Adewale (Eds.) *Issues in Educational Measurement and Evaluation In Nigeria*_Ibadan: Institute of Education, University of Ibadan, Ibadan. 461-468.

Moronkola, O.A. 2012. *School health programme* (ed). Ibadan: Royal People publishers

Mji, A. and Makgato, M. 2006. Factors associated with high school learners' poor performance: A spotlight on mathematics and physical science. *South Africa Journal of Education* 26.2: 253-266.

Mudulia, A. 2012. The relationship between availability of teaching/learning resources and performance in secondary school science subjects in Eldoret Municipality, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPs) 3.4:530-536.*

Mundia, L. 2012. Assessment of GenNEXT learning outcomes at the University of Brunei Darussalam: a qualitative review of selected opportunities, benefits and challenges in human resource development. *Journal of International Education and Leadership* 2.3: 1-21.

Muola, J. M. Maithya, R. and Mwinzi, A. M. 2011. The effect of academic advising on academic performance of University students in Kenyan Universities *International Multidisciplinary Journal, Ethiopia 5.22: 332-345* Retrieved Dec. 10, 2015, from http://dx.doi.org/10.4314/afrrev.v5i5.26

Musasia, A., Nakhunu, S., and Wekesa, W. 2012. Investigation of factors that influence syllabus coverage in secondary school mathematics in Kenya. *International Journal of Humanities and Social Science* 2.1: 51-59.

National Reproductive Health policy for Nurses and Midwives.2001. Nigeria: Federal ministry of Health.

National Population Commission and ORC Macro. 2004. Nigeria: Federal Ministry of Health.

Nigerian Demographic and Health Survey, 2013. Key Findings. Nigeria:NDHS

National Population Commission. 2006. Provisional report. 2005 population census of the Federal Republic of Nigeria. Abuja:National Population Commission

National Population Commission and ICF Macro. 2009. *Nigeria demographic and* 817 *health survey 2008*. Abuja: National Population Commission and ICF Macro.

Noohi, E., Karimi-Noghondar, M.,and Haghdoost, A. 2012. Survey of critical thinking and clinical decision making in nursing student of Kerman University. *Iran Journal of Nursing Midwifery and Research* 17.6: 440–444.

Nolting. P. 2007 *Winning at math.* 5th ed. Bradenton, FL: Academic Success Press Inc.

Nursing and Midwifery Council of Nigeria. 2006. *The Revised Post-Basic Midwifery Curriculum*. Nigeria: NMCN.

Nursing and Midwifery Council of Nigeria.1995. T*he Revised General Nursing Education Curricula.*

Nursing and Midwifery Council of Nigeria, 2005. Accreditation Status of Schools of Nursing. Nigeria:NMCN.

Nursing and Midwifery Council of Nigeria, 2006. Accreditation Status of Schools of Nursing, Midwifery and Psychiatric Nursing in Nigeria. (13th ed). 15.6:18-21, *NMCN Newsletter*

Nursing and Midwifery Council of Nigeria. 2010. *Rules and Regulations guiding the nursing and midwifery education in Nigeria*. Nigeria:Nursing and Midwifery Council of Nigeria.

Nursing and Midwifery Council of Nigeria. 2010. *Standards of Nursing and Midwifery education and practice in Nigeria.* Nigeria: Nursing and Midwifery Council of Nigeria.

Nursing and Midwifery Council of Nigeria. 2016. *Revised Post basic Midwifery curriculum*. Nigeria: Nursing and Midwifery Council of Nigeria.

Nursing and Midwifery Council of Nigeria. 2014. *Strenghtening Midwifery in Nigeria* Gap Analysis Report and Strategic Plan 2015-2019.

Nwafor, C.E., Obodo, A. C. and Okafor, G. 2015. Effect of self regulated learning approach on junior secondary school students' achievement in basic science. *Journal of Education and Practice* 10.2: 56-58

Obanya, P. 2002. *Revitalizing Education in Africa* Ibadan :Stirling-Horden Publishers.

OECD 2013, *Education at a Glance 2013: OECD Indicators. Paris:* OECD Publishing. Retrieved Mar.23, 2014, from http://dx.doi.org/10.1787/888932848039

OECD 2011. *Preparing Teachers and Developing School Leaders for 21st Century – Lessons from around the world.* Background Report for the International Summit on the Teaching Profession. Rertieved Sep. 10, 2015, from doi: 10.1787/9789264190658en.

OECD 2013. *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Reviews of Evaluation and Assessment in Education. Paris: OECD Publishing. Rertieved Sep. 10, 2015, from doi: 10.1787/9789264190658en.

OECD 2013a. *General Guidelines for the Availability and Uses of the PISA-based Test for School*s. Rertieved Sep. 10, 2015, from http://www.oecd.org/pisa/pisa-basedtestforschools/PBTS%20Guidelines

OECD 2010a. *The Nature of Learning. Using Research to Inspire Practice.* Paris: OECD Publishing.

OECD 2007b. *Evidence in Education: Linking Research and Policy.* Paris :OECD Publishing.

OECD 2008. *Improving School Leadership*, OECD Publishing, Paris.

OECD 2009. *Creating Effective Teaching and Learning Environments.* First Results from *TALIS*. Paris :OECD Publishing. Retrieved on Oct. 2015. from http://www.oecd.org/dataoecd/17/51/43023606.pdf

Oermann M. H. 2010. Psychomotor skill development. *Journal of continuing education in Nursing 21.5: 202-204*

Oermann M. H. 1990. *Evaluation and testing in nursing education.* New York:Springer.

Ofori R, and Charlton A. 2002. Path models of factors influencing the academic performance of nursing students. *Journal of Advanced Nursing* 38.5:507

Ogunmade, T. 2005. The status and quality of secondary science teaching and learning in Lagos State, Nigeria. Perth: Edith Cowan University: PhD Thesis (Unpublished) Retrieved on Oct. 10, 2015 from http://ro.ecu.edu/cgi/viewcontent.cgi?article=1086&content=theses

Olubor, R.O. and Ogonor, B.O. 2007. Instructional activities of staff personnel in the affective domain in selected secondary schools in Southern Nigeria. *International Education Journal* 8.1: 82-88.

Ormrod, J. E. 2006. *Educational psychology: Developing learners* (5th ed.). Upper Saddle River, N.J.: Pearson/Merrill Prentice Hall.

Osin, L. 1998. Computers in education in developing countries: Why and how? Education and Technology Series 3 (1). Washington, D.C.: The World Bank

Owolabi, T., and Oginni, I. 2012. Improvisation of science equipment in Nigerian schools. *Universal Journal of Education and General Studies,* 3: 44-48.

Oye–Adeniran B.A., I.F. Adewole, K.A., Odeyemi., E.E. Ekanem and A.V. Umoh,. 2005. Contraceptive prevalence among young women in Nigeria. *Journal of Obstetrics and gynaecology* 25. 2: 182 -185.

Oyedeji N. B. 2000. The role of school plant in educational productivity. In Fagbamiye, E.O and Durosaro DO (Eds) Education and productivity in Nigeria. Ilorin: *Nigerian Association for Educational Administration and Planning, Unilorin.* 128-133.

Pajares, F. 2008. *Motivational role of self-efficacy beliefs in self-regulated learning.* D. H. Schunk and B. J. Zimmerman (Eds.), *Motivation and self-regulated learning: Theory, research and applications.* New York: Erlbaum 111-139

Pajares, F. 2009. *Toward a positive psychology of academic motivation: The role of self-efficacy beliefs*. R. Gilman, E. S. Huebner and M. J. Furlong (Eds.), *Handbook of positive psychology in schools* (pp. 149-160). New York: Taylor and Francis. Retrieved Feb. 2, 2017, from http://books.google.com/books?id=5qhjolwnQIEC

Pintrich, P. R. and De Groot, E. V. 1990. Motivational and self-regulated learning components of classroom academic performance. *Journal of educational psychology 82*.1: 3340.

Pintrich, P. R. 2000. *The role of goal orientation in self-regulated learning.* In M., Boekaerts, and P. R., Pintrich. (Eds.) Handbook of Self-regulation. 451-502. San Diego: Academic Press.

Popham, W.J. 2011. *Classroom Assessment: What teachers need to know. Boston.* M.A: Pearson.

Postmontier B. 2008. *Discovery-based learning: Student manual.* Philadephia: University of Pennsylvania School of Nursing

Pritchard A. 2009. Ways of learning: learning theories and learning styles in the classroom 2 Edition. London: Routledge. Innovative Learning. Learning theories. Retrieved Mar. 30, 2010, from: http://www.innovativelearning.com/teaching/learning_theories.html

Redmond, B.F. 2010. Self-efficacy and Social Cognitive Theories. Retrieved Nov. 30, 2015, from Psych 484 Work attitude and Job Motivation html

Rivkin, S.G., Hanushek, E.A. and Kain, J.F. 2005. Teachers, Schools, and Academic Achievement. *Econometrica*,73:2, 417–458. Retrived Oct.10, 2015 from http://edpro.stanford.edu/Hanushek/admin/pages/files/uploads/teachers.econometrica.pdf

Salami, S. O. 2010. Emotional intelligence, self efficacy, psychological well-being and students' attitudes: implications for quality education. *European Journal of Educational Studies, 2*(3). Kampala International University. Retrieved Nov.10, 2014, from http://ozelacademy.com/EJES_v2n3_8.pdf

Schostak, J. 2009, *Effectiveness of continuing professional development*: a literature review. London: College of Emergency Medicine.

Schunk, D. H. 1984. Self-efficacy perspective on achievement behavior. *Educational Psychologist* 19: 48-56.

Schunk, D. 2005. Self-regulated learning: The educational legacy of Paul R. Pintrich. *Educational Psychologist 40.*2 :85-94

Schunk, D. and Zimmerman, B. 2007. Influencing children's self-efficacy and self-regulation of reading and writing through modeling. *Reading and Writing Quarterly* 23.1: 7-25.

Schwarzer, R., and Jerusalem, M. 1995. Generalized Self-Efficacy scale. In J. Weinman, S.Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs.* 35-37. Retrieved on Nov. 10, 2016. from http://userpage.fu-berlin.de/~health/engscal.htm

Scott, I. 2011. The learning outcome in higher education: time to think again? *Worcester Journal of Learning and Teaching* 5:1-8.

Seniwoliba, A. 2013. Assessing the impact of the quality of improvement in primary schools programme on teachers and communities in the northern sector of Ghana. *Merit Research Journal of Education and Review* 1.10: 208-226.

Siddhu, G. 2011. Who makes it to secondary schools? determinants of transition to secondary schools in rural India. *International Journal of Educational Development* 31:394-401.

Singh, J. S. 2009. *Creating a New Consensus on Population – the politics of reproductive health, reproductive rights and women's empowerment.* London: Earthscan.

Tam, M. 2007. Assessing quality experience and learning outcomes: Part II: findings and discussion. *Quality Assurance in Education 15.*1: 61-76.

Thrupp, M. and Lupton, R. 2006. Taking school contexts more seriously: the social justice challenge. *British Journal of Educational Studies* 54.3: 308-328

Torkzadeh, G., and Van Dyke, T. P. 2002. Effects of training on internet self-efficacy and computer user attitudes. *Computers in Human Behavior 18*.5: 479-494.

Triyoga, A. 2010. Some hindrances in using ready-made textbooks. Post Graduate program. English Education Department. Ahmed Dahlan University. Blogspot. Retrieved Oct. 30, 2015, from http://arilia.blogspot.co.uk/2010/06/some-hindrances-in-using-ready-made.html.

Ugochukwu, C. G. 1995. Principles of evaluation: continuous assessment in Nursing education. Paper presented at the NMCN workshop on the implementation of the Revised General I Psychiatric Nursing Curricula. Akure:Nursing and Midwifery Council of Nigeria.

UNESCO, 2013. *Teaching and learning: Achieving quality for all.* Education for All Global Monitoring Report. Retrieved April. 10, 2015, from: http://www.
. org/new/en/education/themes/leading-the-international-agenda/efareport/reports/2013

UNESCO, 2012. *Education Policy Analysis Report Of Khyber Pakhtunkhwa. Pakistan:*Final Draft, Pakistan.

UNESCO, 2011. School and teaching resources in Sub-Saharan Africa: An analysis of the 2011 UIS regional data collection on education. UIS Information Bulletin No.9,UNESCO. Retrieved Dec. 18, 2013, from http://www.uis.unesco.org/education/documents/1b9regional-education-africa-2012-en-v5.pdf.

United Nations.1994. International Conference on Population and Development, ICPD. Programme of Action. Retrieved July, 17, 2014, from http://www.un.org/popin/icpd2.htm.

United Nations. 2000. *The Millenium Development Goals.* New York: United Nations

United Nations. 2013. *The Millennium Development Goals Report 2013*. New York: United Nations.

United Nations, 2008. *The Millennium Development Indicators*: The new MDG Framework. New York: United Nations Statistics Division.

United Nations, 2008. *The Millennium Development Goals Report 2008. GOAL 5: Improve maternal health.* High-level Event on the Millennium Development Goals, United Nations Headquarters. Retieved May, 25, 2015, from www.un.org/millenniumgoals.

UNFPA, 2005. State of the World's Population. The Promise of Equality: Gender Equity, Reproductive Health and the Millennium Development Goals. New York, United Nations Population Fund.

UNFPA, 2010. Investing in Midwives and others with midwifery skills to accelerate progress towards MDG5. Retrieved May, 25, 2015, from: www.unfpa.org.

UNFPA, 2011. *State of World Population*: *The Promise of Equality- Gender Equity, Reproductive Health and the Millennium Development Goals.* New York: United Nations Population Fund

UNFPA, 2014. *The State of the World's Midwifery.* New York, United Nations Population Fund**:** 228.

United Nations General Assembly 2000. United Nations Millennium Development Declaration. Resolution 55/2. Retrieved June, 15, 2015, from http://www.un.org/millennium/declaration/area. 552E pdf.

United Nations, 1994. *Programme of Action adopted at the International Conference on Population and Development.* Cairo 5 - 13 September, 1994. New York: United Nations.

United Nations, 2005. The Millennium Development Goals Report.Retrieved June, 15, 2015, from http://www.un.org/milleniumgoals.

United Nations, 2010. The Millennium Development Goals Report 2010. New York, United Nations**:** 24.

United Nations, 2012. The Millennium Development Goals Report 2012. New York, United Nations. from http://www.un.org/milleniumgoals.

Watson, J. B., Pavlov, I., Skinner, B.F. and Thorndike, E.L., 2012. Learning Theories Retrieved April, 19, 2014, from www.learning- theories.com/behaviorism.html

Williams J. D. 1992. *Monitoring school performance. A Guide for Educators.* Washington, DC:The Palmer Press.

Wilson, J. D., and Sacklokham K. 2009. *Education sector development framework sector study: human resource management*. Lao PDR:Ministry of Education

Wolters, C.A., 2011. Regulation of motivation: Contextual and social aspects. *Teachers College Record* 113.2: 265-283.

World Bank 2010. *The Education System in Malawi*: World Bank Working Paper

No.182 Washington, DC: World Bank, USA.

World Health Organisation, 2011. *State of the World Midwifery*. Geneva: World Health Organisation.

World Health Organisation, 2005. *World Health Report 2005. Make every mother and child count.* Geneva: World Health Organization

World Health Organisation, 2004. A glossary of terms for community health care and services.Retrieved Aug. 25, 2015, from www.who.int/kobe-center/ageing/ahp-vlo5-glossary.pdf.

World Health Organization, 2006. *Accelerating progress towards the attainment of international reproductive health goals. A framework for implementing the WHO Reproductive Health Strategy.* Geneva: World Health Organization

World Health Organization, 2009. Global standards for the initial education of professional nurses and midwives, Geneva. Retrieved June, 10, 2015, from: /http://whqlibdoc. who.int/hq/2009/WHO_HRH_HPN_08.6_eng.pdfS.

World Health Organization, 2012. Trends in Maternal Mortality: 1990 to 2010. WHO, UNICEF, UNFPA and The World Bank estimates. Geneva, World Health Organization.

World Health Organization, 2013. Regional professional regulatory framework: nursing and midwifery. Draft document. Brazzaville: World Health Organization Regional Office for Africa.

Yoon, K. H. and Bae, J. H. 2008. The relationships among attributional style, self-efficacy, and academic achievement by the school levels. *Korean Educational Psychology Association* 22.1: 235-257.

Zimmerman B. J. and Martinez-Pons, M. 1990. Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal-setting. *American Educational Research Journal* 29: 663-676.

Zimmerman B. J. and Pons, M. M. 1986. Development of a structured interview for assessing student use of self-regulated learning strategies. *American educational research journl* 23.4: 614-628.

Zimmerman, B. J., and Schunk, D. H. (Eds.). 2001. *Self-regulated learning and academic achievement: Theoretical perspectives.* Hillsdale, New Jersey: Erlbaum.

Zimmerman, B. J. 2008. Investigating self-regulation and Motivation: Historical Background, Methodological development and future prospects, *American Edu.Res. J* 45.1: 166-183

APPENDIX I

QUESTIONNAIRE ON INSTITUTIONAL AND STUDENT FACTORS AS PREDICTORS OF LEARNING OUTCOMES IN REPRODUCTIVE HEALTH PROGRAMME AMONG TRAINEE MIDWIVES IN SOUTH-WESTERN, NIGERIA

DEPARTMENT OF HUMAN KINETICS AND HEALTH EDUCATION, FACULTY OF EDUCATION UNIVERSITY OF IBADAN, IBADAN

TEACHERS QUESTIONNAIRE(TQ)

Dear Respondent,

I am a doctoral student of the above named institution. I am conducting a research on Institutional and Student Factors as predictors of Learning Outcomes in Reproductive Health programme among Trainee Midwives in South-west Nigeria. This questionnaire is designed to collect information on Institutional and Student Factors as predictors of Learning Outcomes in Reproductive Health Programme. I solicit for your co-operation in responding to the items in this questionnaire. It is purely for academic and research purpose. The outcome of this study will be made available to the necessary authorities as input to improve the teaching and learning process of Reproductive Health in schools. All information supplied will be for the purpose of this study and will be treated confidentially.

Thanks for your anticipated co-operation

Yours sincerely,

Uponi Martha I.

SECTION A

DEMOGRAPHIC INFORMATION

Instruction: Please tick as (√)appropriate in the boxes provided and fill in where necessary.

1. Age: 25-30years ( ) 31-35years ( ) 36-40years ( )
   41- 45years ( ) 46-50years ( ) 51-55years ( )
   56-60years ( ) 60years and above
2. Sex: Male ( ) Female ( )
3. Professional/Educational Qualifications:
   Registered Nurse/Registered Midwife ( )
   Diploma in Nursing Education ( )

Bsc Nursing ( )

Bsc/ B.Ed Health Education( )

Masters (Specify Field)_____

Ph.D (Specify Field)_____

Registered Midwife Tutor( )

Registered Nurse Tutor ( )

4. Years of Clinical Experience before joining the school.(Specify)_____

5. Teaching experience: below 5yrs( ) 6yrs-10yrs( ) 11yrs-15yrs( ) 16yrs-20yrs( ) 21yrs-25yrs( ) 26yrs-30yrs( ) 30yrsand above( )

6. Cadre: Midwife/NurseTutor( ) Senior Midwife/Nurse Tutor( ) Principal Midwife/Nurse Tutor( ) Chief Midwife/Nurse Tutor( ) Assistant Director Training ( )

SECTION B

CONTINUOUS PROFESSIONAL DEVELOPMENT QUESTIONNAIRE (CPDQ)

Please tick (\/) in the box as appropriate in each of the following items.

S/N	ITEMS	YES	NO
	Teachers Continuous Professional Development engaged in the previous 1-3years:		
1	Conference/ workshop attendance on Reproductive health		
2	Life-Saving Skills attendance on Reproductive health emergencies		
3	Additional training(specify)_____		
	Motivations for attendance at CPD:		
4	Career progression		
5	Interest		
6	Mandated		
7	Knowledge/skills gap		
8	Promotion		

SECTION C

TEACHING METHODS USED BY TEACHERS IN TEACHING/LEARNING PROCESS

Please tick (∨) as appropriate the teaching strategy used in teaching students midwives Reproductive Health Course.

Always=5, Often=4, Sometimes=3, Rarely=2, Never=1

S/N	ITEMS	Always 5	Often 4	Sometimes 3	Rarely 2	Never 1
9	Lecture/Discussion					
10	Practical demonstration					
11	Clinical Instruction					
12	Group Discussion					
13	Client care studies					
14	Individual and group project					
15	Home/Health visit					
16	Clinical round					
17	Field trip					
18	Role modeling					
19	Role play					
20	Seminar					
21	Tutorial					
22	Simulation					
23	Computer software					
24	Internet/E-mail					

APPENDIX II

QUESTIONNAIRE ON INSTITUTIONAL AND STUDENTS FACTORS AS PREDICTORS OF LEARNING OUTCOMES IN REPRODUCTIVE HEALTH PROGRAMME AMONG TRAINEE MIDWIVES IN SOUTH-WESTERN, NIGERIA

DEPARTMENT OF HUMAN KINETICS AND HEALTH EDUCATION, FACULTY OF EDUCATION, UNIVERSITY OF IBADAN, IBADAN

STUDENTS QUESTIONNAIRE(SQ)

Dear Respondent,

I am a doctoral student of the above named institution. I am conducting a research on Institutional and Student Factors as predictors of Learning Outcomes in Reproductive Health programme among Trainee Midwives in South-west Nigeria. This questionnaire is designed to collect information on Institutional and Student Factors predicting Learning Outcomes in Reproductive Health Programme. I solicit for your co-operation in responding to the items in this questionnaire. It is purely for academic and research purpose. The outcome of this study will be made available to the necessary authorities as input to improve the teaching and learning process of Reproductive Health in schools. All information supplied will be for the purpose of this study and will be treated confidentially.

Thanks for your anticipated co-operation

Yours sincerely,

Uponi Martha .I.

Researcher

SECTION A

DEMOGRAPHIC INFORMATION

Please tick (√) as appropriate in the boxes provided

1. Age: 20-25 years ( ) 26-30 years ( ) 31-35 years ( ) 36 – 40 years ( ) 41 years and above ( )

2. Sex: Male ( ) Female ( )

3. Religion: Christianity( ) Islam ( ) Traditional ( ) Others (specify)_____

4. Ethnic group: Yoruba ( ) Ibo ( ) Hausa ( ) Others (specify)_____

5. Marital status: Married ( ) Single ( ) Divorced ( ) Widow ( )

SECTION B

KNOWLEDGE OF ADEQUACY AND RELEVANCE OF CURRICULUM CONTENT ON REPRODUCTIVE HEALTH QUESTIONAIRE (KARCCRHQ)

Please tick (∨) as appropriate in the column provided.

Strongly Agree(SA)=4, Agree(A)=3, Disagree(D)=2, Strongly Disagree(SD)=1.

S/N	ITEMS	SA 4	A 3	D 2	SD 1
6	The course content is comprehensive				
7	The content is adequate				
8	The content has sharpened my analytic skills				
10	The content is broad				
11	The content empowers student to perform skills associated with the job needs				
12	It prepares learners for future tasks and responsibilities.				
13	The content covers expected tasks and learning outcomes.				
14	The course content covers topics in a logical sequence				
15	The course content present information that is scientifically and medically accurate				
16	The content incorporate instructional sound and participatory approach				

SECTION C

STUDENT KNOWLEDGE OF ACADEMIC SUPPORT SEEKING QUESTIONAIRE (SKASSSQ)

Instruction: Please tick (∨) as appropriate in the column provided the extent to which you agree or disagree with the statement below:

Strongly Agree(SA)=4, Agree(A)=3, Disagree(D)=2, Strongly Disagree(SD)=1.

S/N	ITEMS	SA 4	A 3	D 2	SD 1
	Academic Support Seeking				
17	I ask the teacher to explain to me something I don't understand, rather than just give me the answer.				
18	I ask my teacher for help, necessary to complete the work myself.				
19	I ask a student for help in the class, in other to complete the work myself rather than have the work done for me.				
20	I ask a student for help with my assignment, but not to give away the whole answer.				
21	I ask the teacher for help, to do the work for me rather than explain to me how to do it.				
22	I ask my teacher for help with my work, to be given the answer rather than an explanation of how to do the work myself.				
23	I ask the teacher for help with something I don't understand, by doing it for me.				
24	I don't ask for help even when the work is too hard to solve on my own.				
25	If I need help to solve a problem, I prefer to skip it rather than to ask for help.				
26	I don't ask for help even if I don't understand the lesson.				

SECTION D

ACADEMIC SELF-EFFICACY SCALE OF REPRODUCTIVE HEALTH PROGRAMME (ASESRHP)

Instruction: Please tick (∨) as appropriate in the column provided.

Almost never=1, Rarely= 2, Sometimes=3, Most often=4, All the time=5.

S/N	ITEMS	5	4	3	2	1
27	I can always manage to solve difficult problems in reproductive health course.					
28	If someone opposes my decision to study reproductive health course, I can find ways to get what I want.					
29	It is easy for me to stick to my aims and accomplish my goals in reproductive health course.					
30	I am confident that I could deal efficiently with unexpected events in reproductive health course.					
31	In my resourcefulness, I know how to handle unforeseen reproductive health course situations.					
32	I can solve most problems in reproductive health course with myself effort.					
33	I can remain calm when facing difficulties in reproductive health course because I can rely on my coping abilities.					
34	When I am confronted with a problem in reproductive health course, I can usually find several solutions.					
35	If I am troubled about reproductive health task, I can usually think of a solution.					
36	I can usually handle reproductive health task that comes my way.					

SECTION E

SELF-REGULATED LEARNING SCALE ON REPRODUCTIVE HEALTH PROGRAMME (SRLSRHC)

Please tick (\/) in the appropriate column in response to the following items.

VERY UNTRUE -1 UNTRUE -2 TRUE- 3 VERY TRUE-4

S/N	ITEMS	VERY UNTRUE	UNTRUE	TRUE	VERY TRUE
37	I know how to schedule my time to accomplish my tasks.				
38	I am fast at writing notes				
39	I am good at time management				
40	I know how to study to perform well on tests.				
41	I usually do very well in class tasks.				
42	I find my course work interesting and absorbing.				
43	I am very capable of succeeding in this course.				

SECTION F

REPRODUCTIVE HEALTH PROGRAMME ATTITUDE SCALE (RHPAS)

Instruction: Please tick (∨) as appropriate in the column provided.

Strongly agree(SA)=4, Agree(A)=3, Disagree(DA)=2, Strongly Disagree(SD)=1.

S/N	ITEMS	SA 4	A 3	SD 2	D 1
44	Reproductive health course is very interesting to me.				
45	I don't like Reproductive Health course, and it scares me to have to take it				
46	I am always under a terrible strain in a Reproductive Health course class.				
47	Reproductive Health course is fascinating and interesting.				
48	Reproductive Health course is stimulating.				
49	Reproductive Health course makes me feel uncomfortable, restless, irritable, and impatient.				
50	In general, I have a good feeling toward Reproductive Health course				
51	I have a feeling of dislike toward Reproductive Health course				
52	I approach Reproductive Health course with a feeling of hesitation.				
53	I really like Reproductive Health course.				
54	I have always enjoyed studying Reproductive Health course in school.				

SECTION G

LEARNING ENVIRONMENT ASSESSMENT SCALE FOR REPRODUCTIVE HEALTH PROGRAMME(LEASRHP)

INSTRUCTION: Kindly Tick(\/) in the appropriate space as seen

Quite sufficient=4, Sufficient=3, Not Sufficient=2, Not available=1

S/N	ITEMS	Quite Sufficient 4	Sufficient 3	Not sufficient 2	Not available 1
	HUMAN RESOURSES				
55	Teaching staff: Ratio of practicing midwife teachers to students midwives; 1:6				
56	Administrative staff: Secretary				
57	Clerical officers				
58	Typists				
59	Trained Librarian				
	PHYSICAL FACILITIES				
60	**Classrooms:** capacity to sit minimum of 50 (fifty) students each comfortably				
61	Audio-visual aids				
62	Multimedia projector				
63	White Board/Screen				
64	Desktop computers				
	Practical demonstration room and Laboratory				
65	Capacity to accommodate 25(Twenty-five) students comfortably				
66	Adequate Laboratory Facilities e. g. Reagents				
67	Adequate provision of equipment e. g. Midwifery kit				
	Library				
68	Current text-books and journals on reproductive health				
69	Computers and accessories including internet connectivity				

APPENDIX III

STUDENT KNOWLEDGE TEST ON REPRODUCTIVE HEALTH

Instruction: Circle the correct answer.

Time allowed: 30 minutes

Answer all questions. One(1) mark for correct answer and zero(o) for wrong answer

1. Papanicolaou smear test is carried out to diagnose
   (a) cervical polyps
   (b) cervical eversion
   (c) vaginal breast cancer
   (d) carcinoma of the cervix

2. The following are maternal cause of abortion except:
   (a) retroversion of the uterus
   (b) infection
   (c) diabetes
   (d) fatigue

3. Complete abortion occurs when
   (a) part of product of conception is retained in the uterus
   (b) conceptus, placenta and membrane are expelled completely
   (c) conceptus and placenta are expelled and the membrane is retained
   (d) conceptus is expelled but placenta and membrane are retained.

4. Untreated syphilis in pregnancy may result in all of these EXCEPT:
   (a) Spontaneous abortion, stillbirths, and preterm births
   (b)Spontaneous abortion, preterm births and catarract.
   (c) Neonatal deaths, infants morbidity and early rupture of membrannes.
   (d)Neonatal deaths, symphysiotomy and vesico vaginal fistula.

5. Physical signs of violence includes
   (a) unexplainable abdominal pain
   (b) bruises in various stages of healing
   (c) presence of sexually transmitted diseases
   (d) all of the above

6. In developing countries, perinatal HIV infection has been reduced as a result of

(a) improved diet and foreign aid.

(b) provision of essential drugs and debt relief.

(c) counselling, testing, anti-retroviral treatment and infant formula feeding.

(d) resource control, use of condoms and free drugs.

7. The most common sexually transmitted infection in women in this country is

(a) trichomonas vaginalis.

(b)primary syphilis .

(c) candidiasis.

(d)gonorrhoea.

8. Spermatogenesis begins at puberty and continues until

(a) menopause.

(b) throughtout life.

(c) age 70.

(d) andropause.

9. Through which infection-transmission routes are blood-borne diseases commonly spread in the clinic setting?

(a) contact with infected bed linen

(b) injuries from sharp instruments

(c) blood contact with workers' gowns

(d) splashes of blood on intact skin

10. Which of these is not an essential element of infection prevention?

(a) breaking needles before disposal

(b) enviromental cleanliness

(c) handwashing

(d) personal protective barriers

11. Which of the following is not a proper procedure for managing occupational exposure to

blood and body fluids?

(a) immediately flush area with clean water

(b) if exposure caused bleeding wound,allow to bleed briefly

(c) prevent employee from working until HIV status is known

(d) give good exposure prophylaxis when available

12. Which statement best describes safe infectious waste disposal?

(a) infectious waste should be collected and disposed of into an open pile

(b) solid infectious waste should be incinerated in a secure area

(c) solid infectious waste should be buried, but only near a water source

(d) liquid waste should be poured down a well or into a near by standing water

13. One way to demonstrate your commitment to implementing infection-prevention protocol is to:

(a) treat all patients the same,except those that are known to have HIV

(b) insist that all workers share a basin to wash hands

(c) wear a face shield at all times,regardless of the procedure being performed

(d) lead by example and consistently practice standard precautions

14. Which is not true about the decontamination soak?

(a) removes some materials

(b) makes cleansing easier

(c) use of chlorine solution assists with disinfectiond

(d) items are now safe to handle with bare hands

15. The Ipas MVA Plus aspirator

(a) cannot be reused

(b) can be autoclaved ,boiled, soaked in glutaraldehyde or chlorine

(c) must be processedin a differentway from the cannulae

(d) must be HLD or sterile because it comes into contact with the woman

16. Instruments boiled, soaked in chlorine or glutaraldehyde can be stored:

(a) for a week in HLD or sterile containers with tight fitting lids

(b) ideally, they must be reprocessed the next day

(c) for a week if the container has not been opened

(d) indefinitely

17. A woman choosing a fertility awareness based method should be informed that she will need to use another contraceptive method for:

(a) 2 weeks

(b) 2months

(c) 3months

(d) 10 days

18. Which of the following contraceptive methods would not be appropriate for a woman with an infection?

(a) condoms

(b) pills

(c) female sterilisation

(d) patches

19 In case of severe post-partum haemorrhage, the first intravenous fluid to give is:

(a) glucose

(b) blood

(c) normal saline

(d) human fibrinogen

20 The first vital organ to stop functioning if a woman is severely shocked is the:

a) brain

(b) kidney

(c) lungs

(d) liver

21. Which of these would make you suspect a serious psychosis in early post-natal period?

(a) hallucination

(b) fearfulness

(c) mild depression

(d) excessive thirsts

22. The clinical features of a concealed accidental haemorrhage can closely resemble

that of:

(a) Hydramnios

(b) Abortion

(c) Anaemia

(d) Uterine rupture.

23. At the onset of labour in home delivery, the first thing the husband should do is to:

(a) notify the midwife in charge

(b) time the contraction as previously instructed

(c) put the woman in a comfortable position

(d) send the other children away to keep them out of the way.

24. Fatigue in early pregnancy may be due to the following **EXCEPT:**

(a) Poor nutrition

(b) anaemia

(c) stress

(d) moderate activity

25. Family life education addresses:

(a) nutrition and growth

(b) sexuality and choices in reproductive health

(c) family planning

(d) common occurring diseases and their treatment

26. Informed choice means that a person:

(a) is a graduate and is learned

(b) lacks accurate information for decision making

(c) has adequate information to make a choice

(d) Is persuaded to make a choice

27. During physical examination, the midwife examines the right hypochondriac region of the baby's trunk for:

(a) breast engorgement

(b) palpable liver

(c) enlarged kidney

(d) condition of the umbilical stump

28. Midwives play a central role in the diagnosis and treatment of infection in both mother and baby having understood the risk factors which include the following **EXCEPT**:

(a) maternal history of prolonged rupture

(b) chorioamnitis

(c) tachycardia during birth

(d) pyrexia during birth

29. Maternal mortality is the number of maternal deaths which occur per 1000 total births, as a direct result of:

(a) Abortion, delivery and the puerperium

(b) pregnancy, childbirth and the puerperium

(c) Delivery and the postnatal period

(d) abortion and haemorrhage

30. The stillbirth rate is the number of infants who are born dead after 28 weeks of pregnancy per:

(a) 1000 total births

(b) 1000 live births

(c) 100,000 total births

(d) 10,000 live and still births

31. Infant mortality refers to babies who die:

(a) As unexpected ‘’cot deaths’’

(b) as a result of infection

(c) in the first month of life

(d) In the first year of life

32. A cervical smear should be taken from:

(a) The cervical os

(b) the anterior fornix

(c) the posterior fornix

(d) the cervical canal

33. An oxy-toxic drug given to eclamptic patients after delivery to control haemorrhage is:

(a) Ergonovine

(b) syntocinon

(c) syntometrine

(d) ergometrine

34). The latent phase of labour is a:

(a) period of slow cervical dilatation of 0-2cm with gradual shortening of the cervix

(b) period of regular cervical dilatation of 0-2cm with gradual shortening of the cervix

(c) period of slow cervical dilatation of 0-2cm with gradual lengthening of the cervix

(d) period of regular cervical dilatation of 0-2cm with gradual lengthening of the cervix

35). The active phases of labour is a period of:

(a) slow cervical dilatation from 0-10cm

(b) slow cervical dilatation from 1-10cm

(c) faster cervical dilatation from 2-10cm

(d) faster cervical dilatation from 3-10cm

36) An episiotomy is given:

(a) as a routine procedure for women in 2^{nd} stage or labour

(b) to facilitate the 2^{nd} stage of labour when the need arises

(c) to hasten the 1^{st} stage of labour

(d) as a routine procedure for women in labour

37). The loss of heat by a newborn can be reduced if the baby is born to a warm environment of

(a) 20oc, dried carefully and wrapped warmly

(b) 24oc, dried carefully and provided with skin to skin contact with the mother

(c) 26oc, dried carefully and wrapped warmly

(d) 30oc, dried carefully and provided with skin to skin contact with the mother

38) One of the following reflexes is not present at birth

(a) suckling reflex

(b) coughing reflex

(c) swallowing reflex

(d) bladder reflex

39) Patograph is a

(a) graphic record of the progress of labour

(b) part recording of the progress of labour

(c) recording of the progress of labour

(d) recording of the progress of labour in primigravida

40) The parts of the partograph are

(a) fetal heart rate, moulding and pulsometer

(b) fetal heart rate, moulding and descent

(c) fetal heart rate, molding and pulsometer

(d) molding, liquor and pulsometer

41) List the physical measurements done for a pregnant woman

(a) vital signs, height and weight

(b) height, weight and contraction pattern

(c) engagement, vital signs and weight

(d)contraction pattern, vital signs and height

42) Explain why age is necessary during history taking of a pregnant woman

(a) to know when she attained menarche

(b) to compare her age with that of her first child

(c) age predisposes a woman to a number of complications

(d) age determines the duration of labour

43) Describe the state of the uterus immediately following delivery

(a) soft and retracted

(b) hard and retracted

(c) firm and retracted

(d) hard and soft

44) Manual vacuum aspiration(MVA) is a safer technique for uterine evacuation because it:

(a) is associated with lower risk of complications

(b)is associated with no risk of complications

(c) requires general anaesthesia

(d) is performed as inpatient procedure

45) In the MVA technique the cannula performs which three basic functions

(a) serves as passage way for vacuumed tissue, stores vacuumed tissues and measures the depth of the cavity ,

(b) stores vacuumed tissues, measures the depth of the cavity and gently scrapes the lining of the uterus

(c) measures the depth of the cavity ,serves as passage way for vacuumed tissue and gently scrapes the lining of the uterus

(d) none of the above

46) Which of the two Ipas syringes has greater capacity for suction?

(a) the double-valve syringe

(b) the single-valve syringe

(c) suction capacity is the same in both syringes

(d) the double-valve syringe used with 7-12mm cannulae

47) when dilating with Denniston dilators:

(a) hold the dilator in the middle with the thumb and index fingers as if it were a dart, introduce it gently as far as the internal orifice, remove it by placing the hand on the top, then introduce the opposite end

(b) hold the dilator in the middle with the thumb and index fingers as if it were a dart, introduce it gently as far as the internal orifice, remove it by placing

both hands on the bottom, then introduce the opposite end

(c) grasp one end of the dilator firmly and insert the opposite end through the internal orifice ;remove it and insert the opposite end

(d) none of the above

48) What signs indicate that the MVA procedure is complete when treating an incomplete abortion:

(a) the syringe is full, the walls of the uterus feels gritty, the cervix closes

(b) vacuum is lost, bubbles are visible in the cannula, the walls of the uterus feels silky

(c) foam is visible in the cannula, the walls of the uterus feel and sound gritty, the uterus contracts around the cannula

(d) the syringe is full, vacuum is lost, the walls of the uterus feel and sound gritty

49. The most common sexually transmitted infection in women in this country is

(a) trichomonas vaginalis.

(b)primary syphilis .

(c) candidiasis.

(d)gonorrhoea.

50. Untreated syphilis in pregnancy may result in all of these EXCEPT:

(a) Spontaneous abortion,stillbirths, and preterm births

(b)Spontaneous abortion, pretermbirths and catarract.

(c) Neonatal deaths, infants morbidity and early rupture of membrannes.

(d)Neonatal deaths, symphysiotomy and vesico vaginal fistula.

51. In the presence of undiagnosed abnormal genital bleeding, which of the following birth control methods would be contraindicated:

(a) oral contraceptives.

(b) coitus interruptus.

(c) diaphragm.

(d) spermicides.

52. Which of the following contraceptive methods would not be appropriate for a

woman with an infection?

(a) condoms

(b) pills

(c) female sterilisation

(d) patches

53. Family planning education to a group of secondary school pupils is to

(a) prepare them for responsible adulthood

(b) educate them against mixing with youths of opposite sex.

(c) familiarise them with education in a family set up.

(d) prevent them from being promiscuous.

54 Analysis of ten centimeters dilatation of the cervix during labour means:

(a) consistency of the membranes

(b) full dilatation

(c) shallow fore waters

(d) membranes protruding through the cervix

55. Rearrange the following planes involved in the process of descent

(a) the pelvic inlet, the pelvic outlet and the brim

(b)the brim, the pelvic inlet, the pelvic outlet

(c) the pelvic outlet, the brim and the pelvic inlet,

(d) the pelvic inlet, the brim and the pelvic outlet

56. The primary role of the Post-abortion care counselor is:

(a) to convince the woman about the correct course of treatment

(b) to help her clarify her feelings, thoughts, questions and decisions

(c) to ensure she will never have another abortion

(d) to give advice about what the counselor would do in her situation

57. Choose the correct option that demonstrates an open-ended question:

(a) do you understand that all information discussed here is private?

(b) are there any concerns you have about your treatment?

(c) how do you feel about the topics we've covered today?

(d) would you like me to talk to you during the procedure?

58. A counselor should do all of the following when closing a counseling session

EXCEPT:

(a) repeat all of the information covered during the seeeion

(b) ensure the woman understands

(c) provide written instructions or referrals

(d) explain what to expect during clinic visits

59. How can a health care provider's negative biases affect a woman?

(a) decrease the woman's likelihood to listen to recommendations

(b) reduce her satisfaction with her care

(c) lower her chances of seeking future care

(d) all of the above

60. Contraception is critical to women’s health for the following reasons EXCEPT:

(a) reduces maternal morbidity and mortality by helping women avoid unwanted pregnancy

(b) permits partners to decide whether and how many children a woman should have

(c) allows mothers to achieve spacing between births

(d) gives women freedom to improve their quality of life

APPENDIX IV

CHECKLIST FOR PRACTICAL SKILL TEST

CHECKLIST FOR PROCEDURE STATION 1

TIME: 5 MINUTES

INSTRUCTION TO CANDIDATE

TITLE: HEALTH EDUCATION ON SMOKING AND ALCOHOLISM

1. Educate the junior student on how to health educate the expectant mother on the danger of smoking and alcoholism.

S/N	ITEMS	0	¼	½	¾	1	TOTAL
1	Greets and introduces self to junior student (¼mk)						
2	Informs the junior student on the topic to be taught (¼mk)						
	proceeds as follows: - CIGARETTE (¼mk) - CONTENTS- contains nicotine and narcotics (¼mk) - ALCOHOL-contains ethanol (¼mk) - Dangers of smoking and alcohol to the mother:- (a) Infertility (b) Abortion (c) Premature delivery (d) Insomnia (e) Lung cancer (1mark each for any three points) = 3mks BABY:- (a) sudden infant death (b) small for dates babies (c) respiratory disease within the first year of life (d) prematurity, still birth and low birth weight (e) Risk of asthma and otitis media (1mk each for any three point)= 3mks						
3	Summarizes her facts (¼mk)						
4	Allows questions from the junior student and doubts cleared. (¼mk)						
5	Asks student to recall at least 2 points each on the dangers. (¼mk)						

TOTAL: 8MARKS

CHECKLIST FOR PROCEDURE STATION 2

TIME: 5 MINUTES

INSTRUCTION TO CANDIDATE

TITLE: FAMILY PLANNING DEVICES

Identify the following family planning devices stating the usage and contraindications.

S/N		0	¼	½	1	TOTAL
1	Name: Oral contraceptive pills (¼mk)					
	Type: Combined Oestrogen and Progestin pills (¼mk)					
	Explains the usage of the device. - It should be commenced on the 5th day of menstruation (¼mk) - It comes in 28 days tablet pack. 21tablets are active and 7tablets are non-active (¼mk) - One tablet is taken daily at the same time each day (¼mk) - A missed pill should be taken the following day (¼mk)					
	Contraindications. - Pregnancy - Age over 35years - Obesity - High blood pressure and other related medical conditions (¼mk each)					
2	Name: Condom (¼mk)					
	Type: Barrier method of contraception (¼mk)					
	Explains the usage of the device. - Apply condom before any genital contact (¼mk) - Air free space of 1.5cm must be left at the tip (¼mk) - Check expiry date and use only once (¼mk) - It protects against pregnancy, STIs and HIV/AIDS (¼mk)					

TOTAL:4MARKS

CHECKLIST FOR PROCEDURE STATION 3

TIME: 5 MINUTES

INSTRUCTION TO CANDIDATE

TITLE: CLINICAL BREAST EXAMINATION(CBE)

1. Demonstrate how to perform clinical breast examination to the junior student midwife using the model provided.
2. Mention the steps involved and reasons for the examinations
3. Narrate the procedure as it is performed

S/N	STEPS	0mk	¼mk	½mk	1mk
1.	Explain procedure and obtain consent(¼mk)				
2.	A CBE is a thorough examination of the breast and the under arm area by trained health professional to check for abnormalities (½ mk)				
3.	Steps involve in CBE (I) Observation (ii)Palpation (iii)squeezing (¼mk)				
4.	**Reasons for clinical breast examination** -Done if a woman finds a lump or change in her breast (¼mk) -As part of a woman's regular physical examination (¼mk)				
	Step1: Observation: This done while the woman is sitting and when she is lying down. -The woman removes her clothing from the waist up (¼mk) -Wears a gown or covers her with a sheet (¼mk) -Ask client to raise her two arms behind her head (¼mk) Check for the following: Changes in the shape of the breasts (¼mk) Areas of fullness or thickness in only one breast (¼mk) Differences in skin colour, such as redness (¼mk) Rashes (¼mk) Visible lumps or swelling (¼mk) Nipple discharges (¼mk) Nipple changes (¼mk) Note any unusual findings (¼mk)				
	Step 2: **Palpation –** This is done while the woman is lying done which flattens the breast tissue over the chest wall. The entire breast area is examined using the fingers				

	Palpate the breast further away starting from the outer edge of the breast to the nipple using the flat part of the finger in a circular movement (½mk) Candidates feel for the followings: Movable lumps within the tissues (¼mk) Tenderness or pain (¼mk)				
	<u>Step3</u>: <u>Squeezing</u> -Gently examine and squeeze the nipple for watery, bloody or pus discharge (¼mk)				
	Report findings for appropriate action (¼mk)				
	Summarize the procedure, ask questions and allow feedback from the junior student midwife (¼mk)				

TOTAL:6MARKS

CHECKLIST FOR PROCEDURE STATION 4

TIME: 5 MINUTES

INSTRUCTION TO CANDIDATE

TITLE: VISUAL INSPECTION OF THE CERVIX USING ACETIC ACID (VIA)

1. Carry out the inspection of the cervix on the model using the substance (acetic acid) provided.
2. Report your findings along.

STEPS	0mk	¼mk	½mk	1mk
-The procedure is explained and informed consent obtained (¼mk)				
-The reasons for the examination and when to perform it is explained: Within 20weeks of pregnancy, 6weeks post- partum and when a woman is suspected of having an STI (½ mk)				
The examination table should be set which contain, bivalve vaginal speculum, sterile gloves, normal saline or warm water, acetic acid, sterile cotton wool, spatula, sponge holding forceps, gallipots, kidney dish.				
- Position client in dorsal or lithotomy position with her heels on the stir ups and hips on the edge of the table (½mk)				
- Wear gloves on both hands (¼mk)				
- Pick the speculum and lubricate with clean water or Normal saline (½mk)				
-Expose the introitus using the index and middle fingers of the left hand (½ mk)				
- Insert the speculum with bills horizontal, pointing and pressing slightly downward (½mk)				
- Open the bills of the speculum slightly to keep the vaginal walls in sight				

until the cervix is seen. (¼mk) - Secure the speculum by turning the thumb nut. (¼mk)				
VAGINAL SPECULUM EXAMINATION - Perform VIA by cleaning the cervix with clean water or normal saline (½mk) - Carefully observe the cervix and vaginal walls for lesions or discharge (½mk) - Damp the cervix with 3-5% acetic acid, wait for 1 minute and read the result with a light source. (½mk) - If the cervix turns white after the application of acetic acid, this is called ACETO WHITE reaction and it is positive result for cancer precursor cells (½mk) -If there is no change in colour result, it is negative (½mk) - Withdraw the speculum gently (¼mk) - Explain the result to client and give appointment or refer her based on result (½mk) - Tidy the work field and make it ready for the next candidate (½mk)				

TOTAL:8MARKS

CHECKLIST FOR PROCEDURE STATION 5

TIME: 5 MINUTES

INSTRUCTION TO CANDIDATE

TITLE: INSPECTION OF THE PLACENTA, MEMBRANES AND CORD

1. Inspect the Placenta, Membranes and Cord

2. Report your findings along.

S/N	STEPS	0mk	¼ mk	½ mk	1mk
1	- The procedure is performed immediately after birth (½ mk) - Candidate put on gown,apron and glove. (½ mk) - Examines the placenta under running water (½ mk) - Hold the placenta by the cord. (½mk) - Allow the membranes to hang to aid inspection. (¼mk) - A hand is spread outside the membranes to aid inspection. (½mk) - Lay placenta on a flat surface. (¼mk)				
2	**Examine Fetal surface and Report as follows:** -Amnion: should be peeled from the chorion right up to the umbilical cord (½mk) -Distribution of blood vessels. (½mk) - Number of blood vessels in the cord. (½ mk) -State of membranes. (½mk)				
3	**Examine Maternal surface and report as follows:** - Broken fragments of cotyledon should be carefully replaced. (¼mk) - Completeness of the lobes. (½mk) - Attachment of blood vessels. (¼ mk) - Check for abnormalities of the placenta. (½mk) - Report any missing lobe. (½mk) - Wash and dry hands. (½mk) -Tidies the work field after the procedure. (½mk)				

TOTAL:8MARKS

APPENDIX V
FOCUS GROUP DISCUSSION GUIDE
DEPARTMENT OF HUMAN KINETICS AND HEALTH EDUCATION, UNIVERSITY OF IBADAN, NIGERIA

Dear Discussants,

I am a doctoral student of the above named institution. The purpose of the FGD is to collect more information on Institutional and Student Factors as predictors of Learning Outcomes in Reproductive Health Programme among Trainee midwives in South-west, Nigeria. It is purely for academic and research purpose. All information supplied will be for the purpose of this study and will be treated confidentially. I employ all participants to feel free and express themselves on this topic. The outcome of this study may form baseline for the development of policies to improve teaching and learning process in schools of midwifery.

SN	MAIN QUESTIONS	FOLLOW-UP QUESTIONS
1	what is learning outcomes in reproductive health course?	-is it a new course? -how interesting is the course -what other course is it integrated with?
2	What is your perception of the institutional factors?	-Are the tutors adequate in number and skills -Are you aware of any in-service training programme for your tutors -What facilities are available for practical experiences? -How conducive is the environment for effective teaching and learning process?
3	What is your perception of the student factors?	-What motivates you to study this course? -How do you manage your time?
4	What are the instructional methods used in teaching?	-Which methods are commonly used? -Are the instructional materials updated and adequate
5	In your own view, what are the skills required to promote work force development in Reproductive health course?	-Do you employ problem solving method -Does it cover expected task and learning outcome
6	What other topics and recommendations could you make to improve the course curriculum?	

APPENDIX VI

INFORMED CONSENT FORM FOR THE PARTICIPANTS

CONFIDENTIALITY

All information obtained will be treated with utmost confidentiality

VOLUNTARINESS

Only those who indicate genuine interest will be allowed to participate in the study. Also any participant is free to withdraw from participating at any point. However the researcher will make every effort to ensure that participants' wishes are complied with as much as possible

STATEMENT OF THE PERSON OBTAINING INFORMED CONSENT

I have fully explained this research to ---------- and given sufficient information, including the risks and benefits of making informed consent.

DATE---------- SIGNATURE----------

NAME----------

STATEMENT OF PERSON GIVING CONSENT

I have read the description of the research. I understand that my participation is voluntary. I know enough about the purpose, methods, risks, and benefits of the research to judge that I want to take part in it. I understand that I may freely stop being part of the study at any time. I have received a copy of this consent form and additional to keep for myself.

DATE---------- SIGNATURE----------

NAME----------

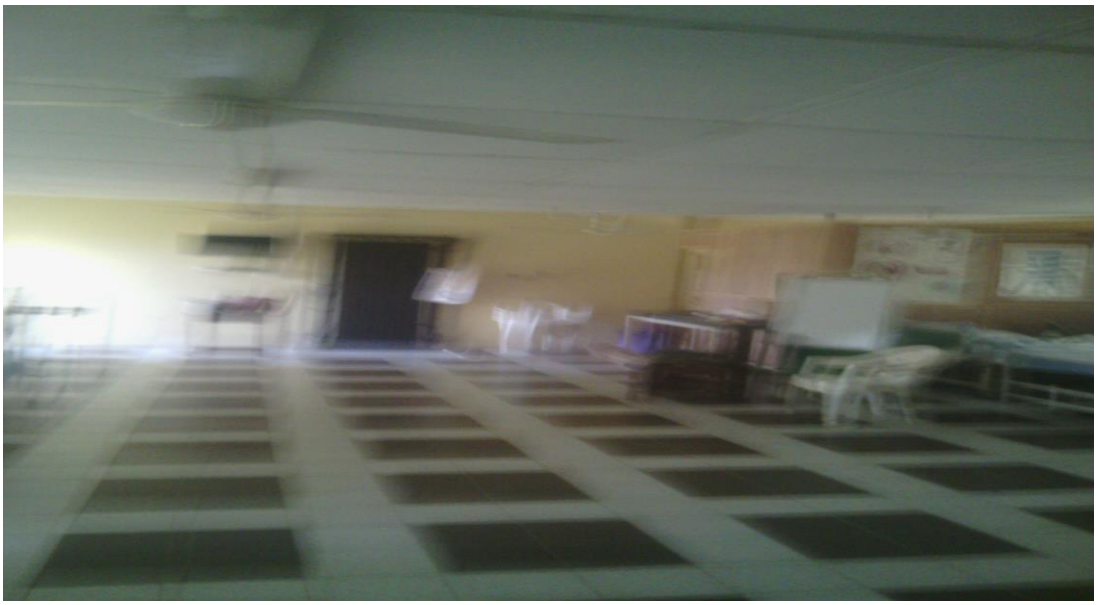
APPENDIX VII

Picture Showing Students Filling the Questionnaire

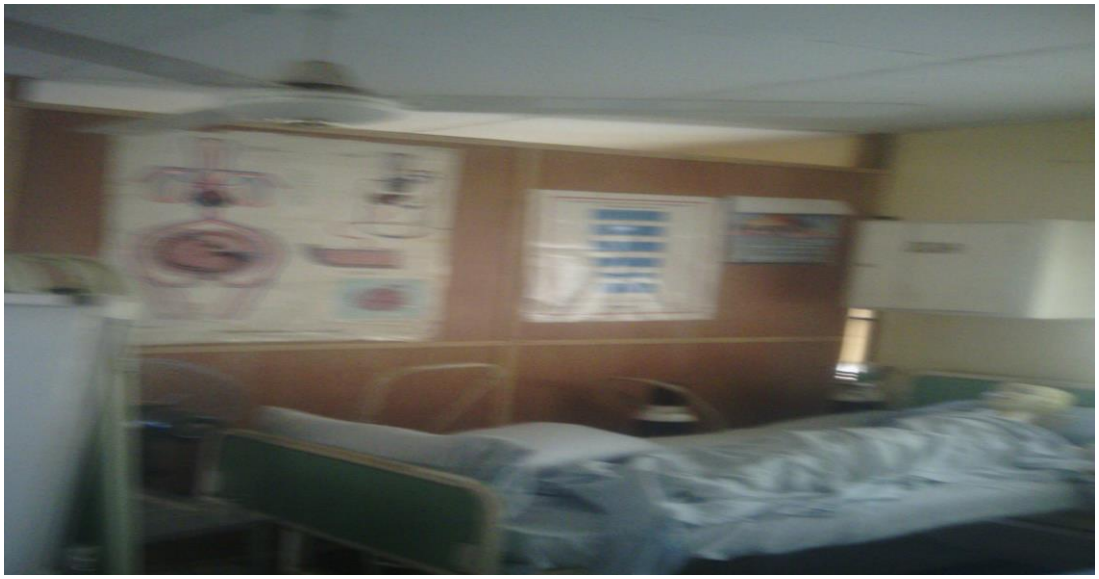
Picture Showing Students Writing Reproductive Health Test

Picture Showing Researcher giving Instruction to the Students on the Questionnaire

Picture Showing Filling of Questionnaire and Knowledge Test



Picture Showing Practical Laboratory



Picture Showing Practical Laboratory

PRACTICAL DEMONSTRATION SKILL ON REPRODUCTIVE HEALTH BY TRAINEE MIDWIFE

Student Demonstrating the Performance of Screening Procedure

Student Demonstrating Basic Reproductive Health Skills

Student Demonstrating Health Education Skills

Student Demonstrating Family Planning Skills

Researcher and Trainee Midwives

Researcher and Research Assistants

Picture Showing School Building