



Roles of Women Education Programmes in the Reduction of Maternal and Child Mortality Rate in Health Centers in Port Harcourt Metropolis.

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ABSTRACT

The study focused on the roles of Women Education Programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis. Three specific objectives, three research questions and three null hypotheses were formulated to guide the study. The study adopted the descriptive survey research design. The population of the study was 1400 comprising 300 health officers and 1100 beneficiaries of women education programmes in Port Harcourt metropolis. The sample size of the study was 508 beneficiaries of women education programmes and health officers in primary and secondary health care centres. This comprised 408 beneficiaries of women education programmes and 100 health officers in primary and secondary health centres in Port Harcourt Metropolis. The proportionate stratified sampling technique was adopted to select the sample size. The instrument for data collection was the questionnaire titled “Roles of Women Education Programmes in Reduction of Maternal and Child Mortality Rate Questionnaire”. The instrument was validated by two experts in adult education and community development and one other experts in Measurement and Evaluation, Rivers State University. The Cronbach Alpha statistics was adopted to test the reliability of the instrument and the reliability coefficient of 0.81, 0.75, 0.88 and 0.72 were obtained for the four clusters of the instrument respectively. Mean and standard deviation were used to answer the research questions and t-test was used to test the hypotheses at 0.05 level of significance. The findings of the study revealed among others that basic literacy education programme helps mothers to know how to read and understand maternal and child mortality, understand and follow medical instructions and also help women to know the right people to consult before, during and after pregnancy for proper medical care to prevent maternal and child mortality. Based on the findings of the study, it was recommended among others that the Federal Government should in collaboration with State and Local Governments establish a remedial literacy education programme for men, women and youths that already parents or up to the age of marriage who cannot read, write or compute figure in order to prepare them to read, understand and apply health information.

Keywords: Roles, women education, programmes, reduction, maternal, child mortality, rate, remedial literacy, metropolis.

INTRODUCTION

Education is a fulcrum on which people, tribe and communities build themselves in order to become better actors on matters affecting them. It can be generally viewed as the process of facilitating learning or the acquisition of knowledge, skills, values, beliefs, and habits in order to create the best positive

possibilities in the life of people and their environment. The current wave of globalization has greatly improved the lives of women worldwide, particularly the lives of women in the developing world. Nevertheless, women remain disadvantaged in many areas of life, including education, employment, health, and civil rights.

Education in its broadest perspective is lifelong learning, both formal and informal, which aims at equipping the individual effectively with acceptable skills, knowledge, attitudes and competences that will enable him/her to cope favorably with the problems of the society. It is one of the main keys to economic development and improvements in human welfare. In developing countries, education is also linked to a whole batch of indicators of human development. Unfortunately, the potential contribution of women in education is undervalued and underutilized (Onyishi, 2017).

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. The 17 SDGs are integrated—they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. Countries have committed to prioritize progress for those who're furthest behind. The SDGs are designed to end poverty, hunger, AIDS, and discrimination against women and girls. The creativity, knowhow, technology and financial resources from all of society is necessary to achieve the SDGs in every context and specifically goal 4, 5 and 10 as it relates to this study.

But it has been argued that women's education should not be treated merely as a proxy for the social determinants of health but as an important force in its own right. Women's educational levels (relative to those of men) have been found to be associated with maternal death (Shen & Williamson, 2019). It is possible that much of the health disadvantage associated with low levels of maternal education can be addressed through universal access to quality health services; however, this hypothesis has not been tested empirically.

Statement of the Problem

The current wave of globalization has greatly improved the lives of women worldwide, particularly the lives of women in the developing world. Nevertheless, women remain disadvantaged in many areas of life, including education, employment, health, and civil rights. According to the U.S. Agency for International Development and the World Bank (2018) 57 percent of the 72 million primary school aged children who do not attend school are females. Additionally, girls are four percent less likely than boys to complete primary schools (Gender statistics, 2010). While many gains have been made with regards to overall level of education worldwide and more children than ever are now attending primary school (King, 2013), there is still not world-wide gender parity in education. In every income bracket, there are more female children than male children who are not attending school. Generally, girls in the poorest 20 percent of household have the lowest chance of getting an education. This inequality does not necessarily change in adulthood. Reports have shown that child mortality, which is the likelihood of a child born alive to die between its first and fourth birthday is still extremely pervasive, especially in the less developed countries. In Nigeria, about 20% of 5.3 million children who are born yearly die before the age of five. Mortality among children under-five years of age remains high in sub-Saharan Africa, with a rate of 84 deaths per 1,000 live births in 2015 (UNDP, 2016). The foregoing reports vividly confirm that half of the world childhood deaths take place in sub-Saharan Africa despite that the region has one-fifth of the world children population.

Given the criticality of children as agents of continuity of any country, childhood mortality or survival is not only a core indicator for child health and wellbeing but also a critical measure of socio-economic development in any country. Hence, the rationales for the then fourth and fifth Millennium Development Goals are to reduce the under-five mortality rate and improvement in maternal health which by implication increases the chance of child survival. Also in October 2008, the Nigerian government National Health Insurance Scheme (NHIS) launched a pilot health project, titled the NHIS/MDG Maternal and Child Health Project, which focuses on reducing maternal and child mortality. Despite these

initiatives, child mortality rates still remain unacceptably high in Africa, Nigeria and Port Harcourt Metropolis in particular. There is therefore need for more committed efforts to tackle the problems. The researcher was motivated to carry this study in order to identify possible solutions to the problem using women education programmes like health education, vocational education, family planning education and pre/post natal women education in Health Centers in Port Harcourt Metropolis.

Purpose of the Study

The purpose of this study was to examine the roles of women education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis. Specifically, the objectives of the study were to:

1. Ascertain the role of basic literacy education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.
2. Find out the role of mother and child care education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.
3. Determine the role of family planning education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

Research Questions

The study was guided by the following research questions:

1. What are the roles of basic literacy education programmes in the reduction of maternal and child mortality rate Health Centers in Port Harcourt Metropolis?
2. What are the roles of mother and child care education programme in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis?
3. What are the roles of family planning education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis?

Hypotheses

The following null hypotheses were developed and are tested at 0.05 level of significance to guide the study:

1. There is no significant difference in the mean response of beneficiaries of women education programmes and health officers on the role of basic literacy education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.
2. There is no significant difference in the mean response of beneficiaries of women education programmes and health officers on the role of mother and child care education in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.
3. There is no significant difference in the mean response of beneficiaries of women education programmes and health officers on the role of family planning education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

Concept of Women Education

Education in its broadest perspective is the lifelong learning, both formal and informal, which aims at equipping the individual effectively with acceptable skills, knowledge, attitudes and competences that will enable him/her to cope favorably with the problems of the society. It is one of the main keys to economic development and improvements in human welfare. As global economic competition grows deeper, education becomes an important source of competitive advantage, closely linked to economic growth, and a way for countries to attract jobs and investment. In addition, education appears to be one of the key determinants of lifetime earnings. Countries therefore, frequently see raising educational attainment as a way of tackling poverty and deprivation.

Women's education can be regarded as a kind of knowledge given to women for enhancing their self-respect and self-dignity. This knowledge can be in form of formal, non-formal and informal education, it can also be in form of adult education, community development, workshops, seminars, conferences and training. Women's education is for making women to become economically independent and self-reliant

(Lawson, 2018). Education for women is a development priority due to the dynamic potential of educated women. Women as mothers, are educators within their families, what they learn, they pass on to their children and their future generations. Women as mothers, are educators within their families, what they learn, they pass on to their children and their future generations. At anytime in any context, women are critical actors in the education process. The roles of women in schools are often defined in terms of their 'natural' affinities with children and their innate love for teaching and nurturing, as well as their ability to do it. Nonetheless, men still dominate women in every country in the world, Nigeria inclusive; resulting in widespread discrimination against women and girls. The impact of unequal power relations and discrimination is often felt most severely when material poverty exists, as this increases vulnerability. Inequality in the Nigerian society inevitably has an impact on the provision and content of education, as well as on the ability of girls to enter, and remain in, school.

Contributions of Women Education Programmes to National Development in Nigeria

Man-power: Women have entered into activities that once were exclusively the domain of men. Today there are no fields of enterprises which they have not entered into, Further still, apart from great contribution to culture by the women, they have made contributions in such fields like science, medicine, nursing, government, welfare, education, literature, journalism, mass communication and sculpture. Other areas include architecture, engineering, art, international relations, aviation, sports and labour organizations.

Politics: Politically, women have held key post in governments and many are still holding such post today. Examples are the Late Indira Ghandi of India, Mrs. Banda Ranaika of Srtlanka, Mrs. Aquino of the Philippines and of course Margaret Thatcher of the United Kingdom. All these countries experienced peace and progress under the women leadership. Here in Nigeria we are aware of the effective leadership of Queen Amina of Zaria, Moreni of Ife, Mikiipi of Igba, Mrs. Ransome Kuti of Egband, Queen Emoton of Benin and Madam Tinibu of Abeokuta. AH these women leaders have gained for womanhood the respect and the prestige it deserves. Even today in Nigeria, women have been appointed Ministers, States' Secretaries, diplomats, ambassadors, commissioners and elected Local Government chairpersons, Governors, Deputy Governors, etc.

Family Up-bringing: Education has contributed a lot to women in their socially delegated maternal roles of upbringing children. All child development specialists recognize primary role of the mother in a child's well-being. Education provides women with supplementary feeding programmes which will improve their children's nutritional status. It helps a woman to develop her mothering skills and attitudes towards family size and child-raising ability. The Nigerian educated woman has the ability to make a modern home, maintain a higher standard of cleanliness and attractive surroundings, socialize with her children, bringing them up healthy, highly motivated and well directed (Ijere, 2011).

Socio-Economic Role: Education provides a woman with communicative, computational and occupational skills needed for her to participate in the social economic and cultural life in her community. It enables her to become more effective, productive and responsible citizen in the community in which she lives, (Cosy 2011). Women's education, combined with employment programmes, coincided with declining population growth, lower child mortality, lower birth rates and better nutritional habits. Others are high living standard and general improvement of the quality of life within the family and rural communities. Development programmes are to take into account women's needs and involve them fully in planning and implementation. Women's education gives women concrete action against negative widowhood practices.

Personal Development: Women's education makes women to know and understand themselves better through counseling which is to know their problems, weakness and capabilities. Women are taught many strategies and they are to choose by themselves the best for the solution of their problems. Education encourages women to speak for themselves. Education qualifies women for promotion into higher levels of skill and responsibility in the occupational structure. It promotes the female well-being and provide women with techniques of social mobilization. Education makes a woman to be a successful wife,

mother, worker and community leader; it makes her more useful to herself, her community and to the nation as a whole, (Mackinnan, 2015).

Education: Women have now taken places in all our formal institutions of learning. Educated women have organized enlightenment programmes to enlighten Nigerian women on their roles in national development. Also, workshops, seminars and conferences are organized to educate women on the means and ways of acquiring political and economic power. Adult Education classes are established in the rural areas. There have been successful and innovative programmes such as using local extensions agents in rural areas or establishing flexible educational initiatives that fit with women's schedules. Other projects include day-care centers for women who otherwise could not have attended courses.

Health: Worldwide, it has been observed that patients under female doctor and female nurses recover quicker from their sickness. This is because women in health sector do not only treat patients physically but also provide them with social and psychological treatment. Women are said to be more sympathetic, emotional and more passionate. Education provides women with the knowledge of health education, emergency health care, treatments of minor ailments, immunization of six killer diseases, and family planning. Others are maintenance and child health care, antenatal clinics, child welfare clinic and oral dehydration therapy (ORT).

Status: Various educational and socialization processes discussed above combine to awaken in the woman an awareness of their rights and obligations, the necessity for a higher standard of health and better quality of life. The status of women has been enhanced by the realization that education rather than deprive women of the means of livelihood confers on them the economic power in the extended family. Therefore, with education they are better to maintain their relations in their families of origin without necessarily depending on their husbands. Education also gives women a higher status in her husband's family. It tends to smoothen the degree of relationship between in-laws and the married couple which will reduce family conflicts to a minimum, (Qlusanya, 2010). Education enables women to be as independent of the men as possible.

Decision-Making: Education which is related to employment and income, affect women's contribution to decision making. Illiterate wives contribute less to household decision-making. In Nigeria and many African countries, the women participation rate at senior management level is still very low in all fields of endeavour. Studies on gender and leadership have revealed a number of barriers to women seeking educational leadership and management positions. This underrepresentation of women in positions of senior management within educational institutions, in particular, continues to be a matter of serious concern. History has it that many occasions where women were given the opportunity, many of them excelled and made dramatic impacts. Some of these will be discussed in the following section.

Concept of Maternal and Infant Mortality

Maternal mortality has been on the increase in recent time with detrimental effects on the socioeconomic development of the nation. According to the World Health Organization (2018), approximately 830 women die every day from preventable causes related to pregnancy and childbirth. More worrisome is the fact that 99% of all maternal deaths occur in developing countries.

Maternal mortality refers to deaths due to complications from pregnancy or childbirth. Even though, the United Nations International Children Emergency Funds (2015), reported that from 1990 to 2015, the global maternal mortality ratio declined by 44 per cent – from 385 deaths to 216 deaths per 100,000 live births, according to UN inter-agency estimates. This translates into an average annual rate of reduction of 2.3 per cent. While impressive, this is less than half the 5.5 per cent annual rate needed to achieve the three-quarters reduction in maternal mortality targeted for 2015 in Millennium Development Goal 5. More worrisome is the fact that maternal mortality, known to be the loss of lives of women in their maternity stage due to pregnancy complication, is classified among preventable deaths. Okeke, Oluwo and Azil (2016) asserted that maternal and infant mortality rates are social indicators used to measure the development of any country, and the situation in Nigeria is of great concern. In spite of resolution and adoption of the Sustainable Development Goals (SDGs), an effort by the United Nations enacted at the

end of the Millennium Development Goals (MDGs) timeline in 2015. Part of its major task is the improvement of the health of pregnant and nursing mothers (maternal health) and reducing maternal and child death by 2030.

Causes of Maternal and Child Mortality

Without healthy mothers, you cannot have healthy children. The issue of maternal health actually begins with the conception of the girl child in the mother's womb. The health of the baby within the mother, the circumstances and events of her birth, her early infancy, childhood, adolescence, early adulthood, her experiences as regards nutrition, child care, education, physical, mental, intellectual and emotional development; all have vital and interdependent roles to play in what we term maternal health (Sariki, 2018). Also children who are raised in physical and emotional nurturing environment will be more likely to survive and less likely to succumb to illness and disease. UNICEF observes that child and maternal mortality have many triggers, both direct and indirect. Poorly funded and culturally inappropriate health and nutrition services, food insecurity, inaccurate feeding practices and lack of hygiene are direct causes of mortality in both children and mothers. The indirect causes may be less obvious externally, but play just as large a role in mortality statistics. Female illiteracy adversely affects maternal and child survival rates and is also linked to early pregnancy. In many countries, especially where child marriage is prevalent, the lack of primary education and lack of access to healthcare contribute significantly to child and maternal mortality statistics. UNICEF also notes that discrimination and exclusion of access to health and nutrition services due to poverty, geographic and political marginalization are factors in mortality rates as well.

Role of Basic Literacy Education in Reduction of Maternal and Child Mortality Rate.

As an educational process aimed at inculcating the skills of reading, writing and computation, literacy is not only a process of learning the literacy skills but interfaces a number of factors that contributes to the liberation of man and his full development. This further presupposes that the acquisition of literacy skills will help in the fight against hunger, ignorance, disease and poverty. Sarumi (2015) explains that literacy can no longer be defined as the ability to read, write and compute alone, but that it must include the adaptation to global information, skills, attitudes and knowledge. Interestingly, Ijere (2011) affirms that literacy is an activity embedded in social and cultural practices. It provides competencies deemed necessary for information societies.

The avalanche of meanings on literacy corroborates with Aderinonye's (2014) explanation that there are almost as many definitions of literacy as there are many practitioners. He further stated that there many languages of literacy and many types of literacy, and that it can attained at different levels. This implies that the definition of literacy has been influenced from time to time, contents and functions. The United Nations Educational Scientific and Cultural Organization (UNESCO) (2003) stipulates that literacy is the ability to identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts.

Role of Mother Child-care Education in the Reduction of Maternal and Child Mortality Rate

It is an undeniable fact that parents are the ones who brought the children in life. They are the ones who reproduce the human kind in a given society, as in this way they contribute to the development of the human history. The family as a cell acts only with love and respect and it dominates the understanding, affection, sacrifice and childcare. So, in this way builds family environment, in which we live, laugh, play and develop children. (Claudia & Eberhard Muhlan. 2018). The contemporary concept over their role and contribution in this regard, in a way rejects the so-called single direction of influence of the parents over their children development, replacing it with an intense interaction of three factors such as; the child, the parent and the wider social environment. This interaction is constantly being seen as a mutual influence and process moving from the parent to the child and the other way around, which as such triggers a variety of factors which in one way or another may impact the children's development and education, in both positive as well as negative sense. The parents take a crucial stand, when it comes to their children's development and education as whole, as the parents themselves are the ones to take care on the overall

children physical and intellectual development, till the point they get independent and ready to face the challenges of the society they live in. Parents are aware of the work on the development of children, but at the same time they need pedagogical information on the right to education of their children.

Role of Family Planning Education in the Reduction of Maternal and Child Mortality

Although there has been a global decrease in maternal mortality, the decrease is slow and the Millennium Development Goal (MDG) 5A target to reduce pregnancy related deaths by three-quarter (75%) and 5B target of achieving universal access to reproductive health by 2015 was not achieved. While maternal deaths continue to remain a major public health problem worldwide, it is a major concern in Nigeria and Rivers State in particular. According to Aaron (2021) the infant mortality rate in Nigeria was about 74.2 deaths per 1,000 live births in 2019.

Every year, nearly 3,000 mothers and 40,000 children under five years die in Nigeria mainly from preventable causes. Although substantial progress has been made in reducing maternal and child mortality in the last few years, this will not be sufficient to reach the sustainable development goals (SDGs). There is now, more than ever, an urgent need to scale up high impact interventions to save the lives of mothers, newborns and children. The failure to meet the target of the millennium development goals (MDG) deadline in 2015, the focus of the international community has shifting to the post-2015 development agenda, the Sustainable Development Goals (SDGs) with calls for family planning to be at the core of the post-2015 goals because of its potential to contribute to sustainable development particularly to goal SDG-3(Ensure healthy lives and promote well-being for all at all ages).

METHODOLOGY

This study adopted the descriptive survey research design. It involves making a survey aimed at determining the influence of women education on reduction of maternal and child mortality rate in Port Harcourt metropolis. The population of the study was 1400 beneficiaries of women education programmes and health officers in primary and secondary health centres in Port Harcourt Metropolies. This comprises 1100 beneficiaries of women education programmes and 300 health officers. The sample size of the study was 508 beneficiaries of women education programmes and health officers in primary and secondary health which comprised 408 beneficiaries of women education programmes and 100 health officers in primary and secondary health centres Port Harcourt Metropolies. The stratified sampling technique was used to select the sample size of the study. The instrument for data collection was a self-designed questionnaire. The questionnaire was titled 'Role of Women Education Programmes in the Reduction of Maternal and Child Mortality Rate Questionnaire'. The questionnaire had two sections (A and B). Section A elicited data on respondents' demography while Section B elicited responses to items drawn from the research questions. The questionnaire was constructed based on the modified Likert rating scale of Strongly Agree (4-point) Agree (3-points), Disagree (2-points) and Strongly Disagree (1-point). The instrument was validated by the researcher's supervisor and two other experts in Measurement and Evaluation, Rivers State University. The suggestion and modifications of the experts helped in correcting the research instrument before producing the final copies. A test of internal consistency was carried out using Cronbach Alpha method to establish the reliability of the instrument. The instrument was administered on 20 women in Emohua L.G.A. of Rivers State which is outside the study. The responses of the respondents were analyzed using Cronbach Alpha statistics. Reliability coefficient of 0.81, 0.75, 0.88 and 0.72 were obtained for the four clusters of the instrument respectively. The mean and standard deviation were adopted to analyze the data for the research questions. A criterion mean score of 2.5 and above were regarded as agree while the mean scores below 2.5 were regarded as disagree. The t-test statistic was used to test the null hypotheses at 0.05 level of significance.

RESULTS

Research question 1: *What are the roles of basic literacy education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis?*

Table 1: Descriptive Statistics on the Roles of Basic Literacy Education Programmes in the Reduction of Maternal and Child Mortality Rate in Health Centers in Port Harcourt Metropolis.

S/N	Items	Beneficiaries(n=405)		Health Officers(n=95)		Remark
		Mean	SD	Mean	SD	
1	Basic literacy education creates in mothers the ability to read and understand infant and maternal mortality rate of the country.	3.26	0.69	3.25	0.71	Agree
2	Basic literacy education help mother to read, understand and follow medical instructions to reduce infant mortality.	3.07	0.73	3.06	0.74	Agree
3	Basic literacy education help mothers to understand the risks involved in not taking proper medical instructions to reduce maternal and infant mortality	2.82	0.83	2.84	0.84	Agree
4	Basic literacy helps mothers to make decisions with respect to health and wellbeing of their children and themselves in order to prevent child and maternal mortality.	3.24	0.75	3.23	0.75	Agree
5	Female literacy education is among a number of core programs that yield sustainable reduction of child and maternal deaths	3.35	0.67	3.32	0.68	Agree
Grand Mean		3.17		3.16		Agree

The data in table 1 showed the role basic literacy education programmes on reduction of maternal and child mortality rate Health Centers in Port Harcourt Metropolis. The table also showed that the respondents agree that Basic literacy education creates in mothers the ability to read and understand infant and maternal mortality rate of the country., Basic literacy education help mother to read, understand and follow medical instructions to reduce infant mortality, Basic literacy education help mothers to understand the risks involved in not taking proper medical instructions to reduce maternal and infant mortality, Basic literacy helps mothers to make decisions with respect to health and wellbeing of their children and themselves in order to prevent child and maternal mortality, Female literacy education is among a number of core programs that yield sustainable reduction of child and maternal deaths, through literacy education, women are equipped with skills for economic, political and social development against child and maternal mortality rate, and Basic literacy education help mothers know that medical specialists are the right people to consult during pregnancy, delivery and after delivery. The mean response of beneficiaries of women education programmes was (Mean=3.17) and the mean of health officers (Mean=;3.16) showing that both community women who benefited in women literacy programme and health officers agree that basic literacy education reduces mortality rate among women and children.

Research question 2: *What are the roles of mother and child care education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis?*

Table 2: Descriptive statistics on the Roles of Mother and Child Care Education Programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

S/N	Items	Beneficiaries (n=405)		Health Officers(n=95)		Remark
		Mean	SD	Mean	SD	
1	Mother and child care education programme help women to learn child care practices that prevents maternal and child mortality	3.32	0.72	3.30	0.73	Agree
2	Nursing mothers' knowledge of breastfeeding (BF) and complementary feeding practices helps to prevent mortality.	3.10	0.81	3.08	0.82	Agree
3	Mothers' hygiene practices such as regular bathing, frequent washing of hands, wearing fresh and warm clothes, trimming of nails are mother and child care practices that helps to reduce mortality.	2.91	0.87	2.91	0.85	Agree
4	Mother and child care education programme helps to equip women to learn the use of insecticide-treated bed nets (ITNs) to prevent being infected by insects that can mortality.	2.88	0.72	3.17	0.64	Agree
5	Mother and child care education programme helps to teach nursing mothers to seek health care on time when they notice changes in their body and their child to prevent mortality.	3.03	0.78	3.04	0.76	Agree
Grand Mean		3.02		3.07		Agree

The data in table 2 showed the role of mother and child care education programmes on reduction of maternal and child mortality rate in Port Health Centers in Port Harcourt Metropolis. The mean responses of both beneficiaries of women education programmes (Mean=3.07) and health officers (Mean=3.02) agree that mother and child care education programme help women to learn child care practices that prevents maternal and child mortality, nursing mothers' knowledge of breastfeeding (BF) and complementary feeding practices helps to prevent mortality, mothers' hygiene practices such as regular bathing, frequent washing of hands, wearing fresh and warm clothes, trimming of nails are mother and child care practices that helps to reduce mortality, mother and child care education programme helps to equip women to learn the use of insecticide-treated bed nets (ITNs) to prevent being infected by insects that can mortality and mother and child care education programme helps to teach nursing mothers to seek health care on time when they notice changes in their body and their child to prevent mortality

Research question 3: *What are the roles of family planning education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis?*

Table 3: Descriptive statistics on the roles of family planning education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

S/N	Items	Beneficiaries (n=405)		Health Officers (n=95)		Remark
		Mean	SD	Mean	SD	
1	Educating women on birth control will help women know how to space child birth and have safer delivery to prevent mortality	3.55	0.60	3.56	0.59	Agree
2	Family Planning programme helps women to know the proper use of contraceptives to avoid complications that cause death.	3.51	0.66	3.52	0.65	Agree
3	Family planning education for women will help women know how to prevent and manage sexually transmitted infections before, during and after childbirth	3.46	0.62	3.49	0.61	Agree
4	Teaching women birth control helps encourages small family size in order to reduce the rate of conceptions and accompanying risks that can cause mortality	3.22	0.66	3.22	0.66	Agree
5	Family planning programmes help women to undergo pre-conception counseling in order to prepare her body for successful conception and prevention of mother and child mortality	3.26	0.68	3.26	0.69	Agree
Grand Mean		3.40		3.41		Agree

The data in table 3 showed the role of family planning education programmes on the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis. The table revealed that educating women on birth control will help women know how to space child birth and have safer delivery to prevent mortality, family Planning programme helps women to know the proper use of contraceptives to avoid complications that cause death, family planning education for women will help women know how to prevent and manage sexually transmitted infections before, during and after child birth, teaching women birth control helps encourages small family size in order to reduce the rate of conceptions and accompanying risks that can cause mortality and family planning programmes help women to undergo pre-conception counseling in order to prepare her body for successful conception and prevention of mother and child mortality. The mean of beneficiaries of women education programmes have agreed opinion about the role of family planning education programmes on reduction of maternal and child mortality rate in Port Harcourt Metropolis (Mean=3.41) with health officers (Mean=3.40).

Hypotheses

H1: There is no significant difference in the mean response of beneficiaries of women education programmes and health officers on the role of basic literacy education programmes in reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

Table 4: Summary of t-test on the difference in the mean response of beneficiaries of women education programmes and health officers on the role basic literacy education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

Gender	N	Mean	SD	Df	t-test	Sig.	Remark
Beneficiaries	405	3.17	0.73				
Health Officers	95	3.16	0.74	498	0.921	1.96	NS

NS = Not Significant

The data in table 4 showed the difference in the mean response of beneficiaries of women education programmes and health officers on the role of basic education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis. The table showed that the mean responses of beneficiaries is 3.17 while the mean responses of health officers is 3.16. The t-test calculated values is 1.739 while the corresponding probability (significant) level 0.083 and the degree of freedom is 498 since the prob-value (0.083) is greater than 0.05 level, it is therefore concluded that there is no significant difference in the mean response of beneficiaries of women education programmes and health officers on role of basic literacy education programmes in the reduction of maternal and child mortality rate in Port Harcourt Metropolis. Hence, the null hypothesis one is retained and the alternate rejected.

H2: There is no significant difference in the mean response of beneficiaries of women education programmes and health officers on the role of mother and child care education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

Table 5: Summary of t-test on the difference in the mean response of beneficiaries of women education programmes and health officers on the Role of Mother and Child Care Education Programme in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

Gender	N	Mean	SD	Df	t-test	Sig.	Remark
Beneficiaries	405	3.02	0.77				
Health Officers	95	3.07	0.76	498	0.583	1.96	NS

NS = Significant

The data in table 5 showed the difference in the mean response of beneficiaries of women education programmes and health officers on role of mother and childcare education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis. The table showed that the mean responses of beneficiaries is 3.02 while the mean responses of health officers is 3.07. The t-test calculated values 0.583 while the corresponding probability (significant) level 0.560 and the degree of freedom is 498. Since the prob-value (0.560) is greater than 0.05 level, it is therefore concluded that there is no significant difference in the mean response of beneficiaries of women education programmes and health officers on the role of mother and childcare education programmes in the reduction of maternal and child mortality rate in Port Harcourt Metropolis. Hence, the null hypothesis two is retained and the alternate rejected.

H3: There is no significant difference in the mean response of beneficiaries of women education programmes and health officers on the role of family planning education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

Table 6: Summary of t-test on the difference in the mean response of LWEP and Instructors on the role of family planning education programmes on reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

Gender	N	Mean	SD	Df	t-test	Sig.	Remark
Beneficiaries	405	3.40	0.64				
Health Officers	95	3.41	0.64	498	1.739	1.96	NS

NS = Not Significant

The data in table 6 showed the difference in the mean response of beneficiaries of women education programmes and health officers on the role of family planning education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis. The table showed that the mean responses of beneficiaries is 3.41 while the mean responses of health officers is 3.40. The t-test calculated values 1.739 while the corresponding probability (significant) level 0.083 and the degree of freedom is 506 since the prob-value (0.083) is greater than 0.05 level, it is therefore concluded that there is no significant difference in the mean response of beneficiaries of women education programmes and health officers on the role of family planning education programmes in the reduction of maternal and child mortality rate in Port Harcourt Metropolis. Hence, the null hypothesis three is retained and the alternate rejected.

DISCUSSION OF FINDINGS

The findings of the study for research one in table 1 revealed that basic literacy education programme helps mothers to know how to read and understand maternal and child mortality, understand and follow medical instructions and also help women to know the right people to consult before, during and after pregnancy for proper medical care to maternal and child mortality. The data showed the difference in the mean response of beneficiaries of women education programmes and health officers on the role of basic education programmes in the reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis.

The findings of the study in table 2 for research question 2 showed the role of mother and child care education on reduction of maternal and child mortality rate in Health Centers in Port Harcourt Metropolis. The table also revealed that mother and child care education programme help women to learn child care practices that prevents maternal and child mortality. Practices such as nursing mothers' knowledge of breastfeeding (BF) and complementary feeding, mothers' hygiene practices such as regular bathing, frequent washing of hands, wearing fresh and warm clothes, trimming of nails, helps women to learn the use of insecticide-treated bed nets (ITNs) to prevent being infected by insects that can cause mortality and mother and child care education programme helps to teach nursing mothers to seek health care on time when they notice changes in their body and in the body of their child to prevent mortality.

The findings of the study in table 3 for research question three revealed that family planning education programme plays such roles of educating women on birth control to help women know how to space child birth and have safer delivery, helps women to know the proper use of contraceptives to avoid complications that cause death, help women know how to prevent and manage sexually transmitted infections before, during and after child birth, helps encourages small family size in order to reduce the rate of conceptions and accompanying risks that can cause mortality and also help women to undergo pre-conception counseling in order to prepare their body for successful conception and prevention of mother and child mortality.

CONCLUSION

Based on the findings of the study, the following conclusions were reached:

Women basic literacy education programme is the key variable in determining the rate maternal and child mortality. Mother and child care education programme for parents and intending parents is very important because it increases the chances of having high understanding of family which reflects ability to access quality health care during and after pregnancy leading to reduction in maternal and infant mortality.

Promoting the health of women and families is part of a strategy to reduce the high maternal and child mortality rate, family planning should be made available in order to promote access to services to all individuals desiring them, family planning decrease maternal and child morbidity and mortality due to prevention of unwanted pregnancies, family planning encourages small family size in order to reduce the rate of conceptions and accompanying risks, family planning decreases fertility rate, population growth and economic challenges which helps to check the rate of maternal and child mortality

RECOMMENDATIONS

Based on the finding of the study, the researcher made the following recommendations:

1. The Federal Government in collaboration with State and Local Governments should establish a remedial literacy education programme men, women and youths that already parents or up to the age of marriage who cannot read, write or compute figure in order to prepare them to read, understand and apply health information.
2. The Federal Ministry of Education should incorporate mother and childcare education into secondary school curriculum so that secondary age children would learn the acts of mother and childcare and be better prepared before engaging in marriage and child bearing.
3. Promoting the health of women and families is part of a strategy to reduce the high maternal and child mortality rate, couples should therefore make conscious effort to acquire knowledge of family planning from approved medical centers with proper access to services for all individuals desiring them in order to reduce maternal and child mortality through prevention of unwanted pregnancies

REFERENCES

- Aderinonye, C. (2014). 'The role of primary education in the promotion of national integration and cohesion'. *Knowledge Review*, 1(2), 15-23.
- Aaron, A.A. (2021). Ghana: MDGs Coalition Strive to Improve Maternal Health. This Day. allafrica.com. Retrieved on 07/04/2010.
- Claudia, H. Eberhard, A. and Muhlan (2018). Effects of birth spacing on maternal, perinatal, infant, and child health: A systematic review of causal mechanisms. *Studies in Family Planning* 43(2):93-114.
- Cosy, K.S. (2011). The Health Belief Model Can Guide Modern Contraceptive Behavior Research and Practice. *Journal of Midwifery and Women's Health* 57(1):74-81.
- Gender statistics (2010). 'Improving the lives of women and girls in Nigeria: Issues, policies and actions'. British Council, Nigeria, 2012.
- Ijere S. (2011). MDG 5: How close are we to success? *BJOG: An International Journal of Obstetrics and Gynaecology* 116(1):2-5.
- King, E. (2013). Intersecting sources of education inequality. World Bank Data Blog. Accessed online at [http://blogs.worldbank.org/opendata /intersecting-sources-of-education-inequality](http://blogs.worldbank.org/opendata/intersecting-sources-of-education-inequality) on September 19, 2013.

Mackinnan (2015). Abused women disclose partner interference with health care: An unrecognized form of battering. *Journal of General Internal Medicine*, 22, 1067-1072

- Olusanya, E. B. I. (2010). *'The dimensions of poverty in Nigeria: spatial, sectorial, gender dimensions'*. *Bullion*: Publication of the Central Bank of Nigeria 23(4), 17-30
- Onyishi, A. O. (2017). 'Cross-ethnic study of stress levels, support systems and adjustment strategies among Nigeria widows'. Unpublished Ph.D. thesis. Department of Educational Guidance and Counseling, University of Ilorin, Ilorin.
- Okeke, P., Oluwo, G. & Azil, A. (2016). Paying attention to gender and poverty in health research: content and process issues. *Bulletin of the World Health Organization*, 82, 740- 745.
- Slien, I. and Willimson, P. (2019). Family planning and maternal mortality rate in nigeria: evidence from time series econometrics (1980-201). *Dutse Journal of Humanities and Social Sciences, Faculty of Arts and Social Sciences, Federal University Dutse*2(1). 119 – 149.
- Sariki, H. (2018). Maternal mortality rate and economic growth in Nigeria. An estimation of Grossman Death Model. *Asian-African journal of Economics and Econometrics*, 14(1), 135-147
- Sarumi, K. (2015). Nigeria: Motherhood Kills. ThisDay. allafrica.com. Retrieved on 07/04/2010.
- UNESCO, (2003). Human Development Report 2016: The Rise of the South: Human Progress in a Diverse World, New York: United Nations Development Programme
- UNICEF, (2019). Levels and Trends in Child Mortality, Report 2010, New York: UNICEF
- Worldbank (2018). Improving Maternal, newborn and child health in the Southeast Asia Region: Focus on Bangladesh
- World Health Organization (WHO) (2019). High rates of unintended pregnancies linked to gaps in family planning services: New WHO study. Available at <https://www.who.int/news/item/25-10-2019-highrates-of-unintended-pregnancies-linked-to-gaps-in-family-planningservices-new-who-stud>
- World Health Organization. (2014). Preterm birth – Key facts. Retrieved from <http://www.who.int/news-room/fact-sheets/detail/preterm-birth>.