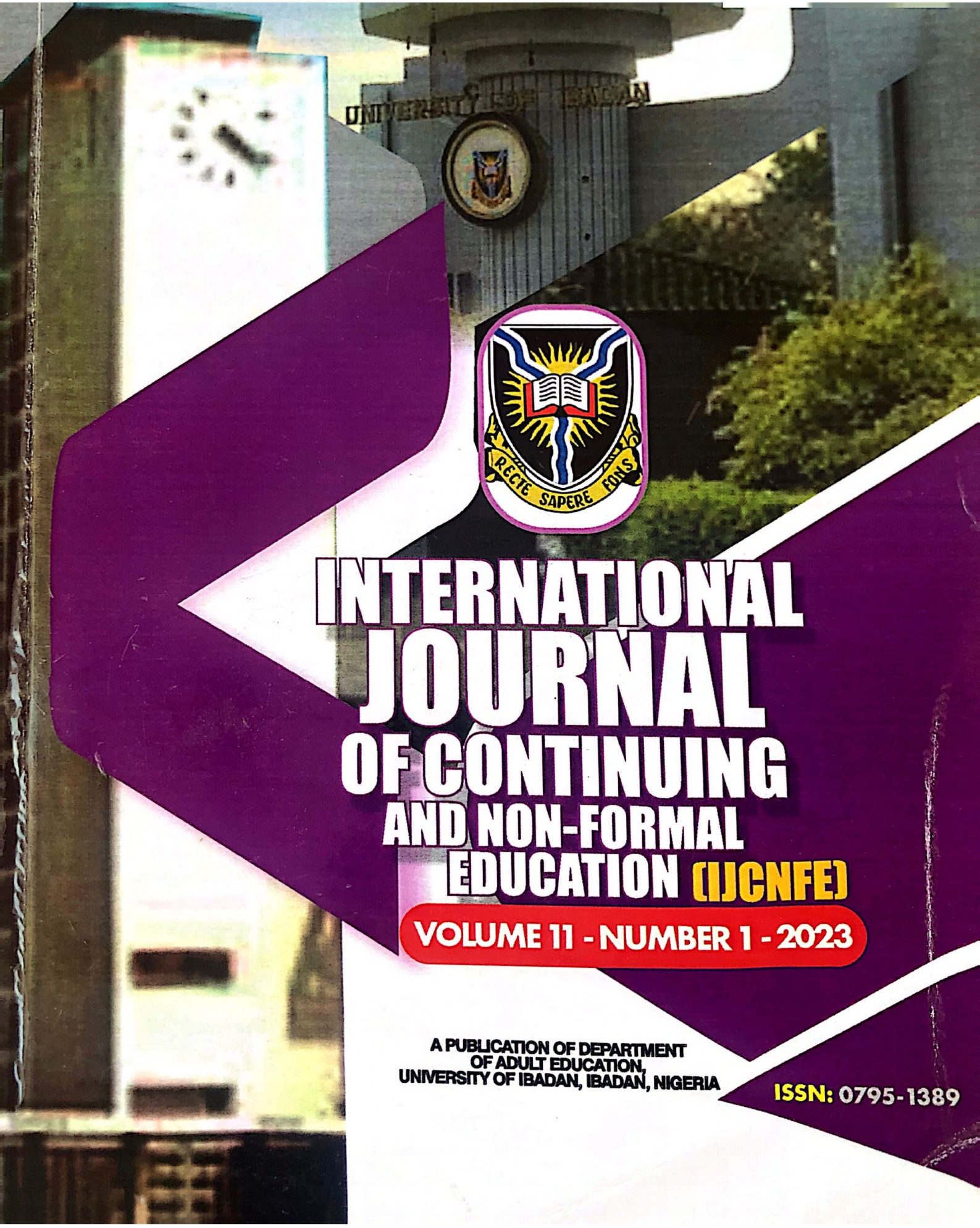


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Editorial Comment

The International Journal of Continuing and Non-Formal Education is an annual, peer-reviewed academic journal published by the Department of Adult Education, University of Ibadan. Its interdisciplinary approach and comparative perspectives promote examination and dissection of the most pressing and contemporary issues on Adult Education or Adult Learning and Education (ALE) - as it is called by UNESCO and other International Development Partners. The current edition (Volume 11) comprises articles published in June and December, 2023 and January and June, 2024. There are altogether () articles made-up of both empirical and position papers. The contributors are seasoned academics from within and outside Nigeria.

Articles in this current edition address wide-ranging issues and problems related to adult learning and education form the global context to Nigerian context. The articles are well-researched and discussed academic papers that make positive contributions to knowledge, scholarship and practice of adult education or adult learning and education. Papers have been carefully and thoroughly peer-reviewed and those recommended for publication are the ones in this edition of the journal (Vol. 11). Therefore, there is no doubt that individuals, researchers, scholars, practitioners, and other stakeholders in adult education as well as Ministries, Departments and Agencies and International Development Partners saddled with the responsibility of promoting the development and growth of adult education globally and in Nigeria would find the articles in this current edition very useful as reference materials. In addition, postgraduate students pursing masters and doctoral degree programmes in various components of adult education or ALE would find the journal a rewarding companion.



Prof. K. O. Ojokheta
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GUIDELINES FOR SUBMISSION OF ARTICLES FOR INTERNATIONAL JOURNAL OF CONTINUING AND NON-FORMAL EDUCATION (IJCNFE)

The editorial board of International Journal of Continuing and Non-Formal education (IJCNFE) is seeking articles for the next edition of the journal. The guidelines for submission of empirical and position-based articles in all areas of adult education or ALE are:

1. Papers to be submitted can be on: empirical studies, policies and practices, conceptual analyses of trends and issues, comparative studies, case-studies, evaluative studies or contributions in theory, practice and methodology.
2. Papers must be written in correct and concise British, not American, English.
3. Papers must be written in Times New Roman, font 12, 1.5-line spacing, and in Word document (save as type).
4. Title of paper should be within 10-18 words.
5. First page of paper should contain title of paper, author(s) name(s), institutional affiliation, email address, telephone number, and possibly ORCID ID.
6. Abstract should be maximum of 200 words with 5 key words underneath it.
7. Main content should not be more than maximum 7,000 words excluding the abstract, graphs, maps, tables/figures and references. All headings and sub-headings should be bold.
8. All illustrations, figures and tables should be placed appropriately within the paper.
9. Tables, figures, graphs, in-text citation, and references must be done in APA Guide: 7th Edition (Download the Edition from the Internet).
10. Male authors should indicate in their papers, the surname and the initials only while female authors should indicate the surname, one full name and one initial.

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Pregnant Women Awareness Level of Preventive Maternal Mortality in Ilorin South Local Government Area, Kwara State, Nigeria

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Abstract

The study investigated the level of awareness among pregnant women on preventive measure of maternal mortality in Ilorin South Local Government Area, Kwara State, Nigeria. A total of 143 pregnant women were purposively selected as the sample for the study. Two research questions were raised to guide the study. A researcher designed questionnaire titled: "Awareness of preventive strategies of maternal mortality questionnaire" was designed for the study. Demographic information of the sample revealed that more than 65% of the pregnant women registered with government hospitals while the rest registered at private hospitals in the study area. Pie chart two shows that majority of the pregnant women (over 30%) were NCE holders followed by ND and SSCE holders slightly above 20% of the sample respectively. Pie chart three shows that the highest ratio of pregnant women ages fall between 28 to 32 years of age at over 40% while ages 23-27 of the same were over 33% of the sample implying that the sample largely constituted between ages 23 to 32 years at over 73%. The findings revealed that the level of education and poor health information was rated high as factor responsible for increasing rate of maternal mortality. The researcher concluded and made three recommendations that Local, State and Federal government should provide adequate door to door antenatal sensitisation for pregnant women, provide mass literacy programme for women to gain mass literacy on antenatal care in Ilorin South Local Government and Nigeria at large.

Keywords: Pregnant women, awareness level, preventive measure, maternal mortality, Ilorin South Local Government Area and Kwara State.

Introduction

The joy of parenting is the goal of most marriages in the West African Sub-region and Nigerians in particular attribute a lot of significance to childbearing in our society. In our cultural society, the joy of marriage fulfillment is associated to the ability of a woman to conceive pregnancy and deliver of a baby for procreation purpose. Some marriages often time breakup and eventually

divorce when a woman is accused of bareness. On another hand, some women are accused of not bearing male child as the husbands are seen to be desperate for male children. The above scenario is responsible for pressure on women to get pregnant and bear more children. Beyond mere verbal pressure, some women are subjected to domestic violence and all forms of gender based violence by their husbands to compel them to conceive pregnant. These menaces have heightened the escalating incidence of maternal mortality in Nigeria. Some women who suffered domestic violence and gender based violence sometimes experience stillbirth due to physical battering and injuries on the fetus which degenerate to stillbirth complications and incidentally, maternal mortality continue to increase as either the unborn child or the mother and in extreme cases both die in the operations (Beatrice, 2020).

It is common knowledge that medical installations in Nigeria is grossly below standard, the personnel are mostly understaffed, the workplace hazard is high and the incentives are poor Yaya and Okonofua, Ntoimo (2018). These identified issues play a big role in maternal mortality rate in Nigeria. The statistical Maternal Mortality rate in Nigeria is very pathetic and one will wonder why the government hasn't declared a state of emergency on health sector across the country. Specifically, the distribution of workload per medical doctor is overwhelming and one begins to wonder if these doctors are human to face the ratio of 10,000 patients to 4 doctors according to the (The Associated Press (2024). Lately, the lack of government interest in the health sector has led to mass exodus of medical doctors and nurses from Nigeria to seeking greener pastures abroad in what is fondly called "Japa".

Nigeria doctors and Nurses are heavily sought after in the United Kingdom and the United State of America including Canada, Saudi Arabia, and the United Arab Emirate among others. The Associated Press (2024) Reported that an average of 200 resident doctors in Nigeria have relocated abroad every month over the last two years, in search of better pay. These positions are left vacant leading to huge deficits of experienced medical doctors in Nigeria and these have drastically affected the public health facilities in Nigeria.

The above situations have led to increasing Maternal Mortality rate in Nigeria. The World Health Organization (WHO) (2022) reported that despite the declining ratio in global maternal mortality rate to 34.2% between the year 2000 to 2020; maternal mortality remains a crunch matter in Africa having over 2/3 69% of the maternal mortality taking place in the African continent. This remain a damning challenge to World Health Organization and sister agencies across Africa and the Federal Ministry of Health to deal with and brainstorm on

alternative solution towards reducing maternal mortality in Nigeria and African Continent at large by aiming to reduce maternal mortality rate to 70 per 100,000 live births by the year 2030 (WHO, 2022).

Kwara State Government has tried in the establishment and maintenance of hospitals across the state in attempt to provide medical care for the people of the state. One of such intervention is the establishment of 120 beds Aisha Buhari Mother and Child Hospital in Ilorin in the year 2021 by the Kwara State Government assisted by the Office of the Sustainable Development Goals of the Federal Government (Punch, 2021). Kwara State Government has also supported the routine ante-natal care across the state. However, there is so much to do to adequately sustain the reported decline in the maternal mortality rate in Kwara State.

Statement of the Problem

In the World over, records show that women die as a result of complications arising from child birth (WHO, 2022). It is heartbreaking that these maternal mortality causes of their death are actually preventable given the right medical facilities and personnel in place at the right time. Regrettably, 69% of these deaths occur in African region. In the year 2020, Maternal Mortality Rate in Africa was 531 deaths per 100,000 live births. Prominent among the causes of these deaths are chronic hemorrhage, infections, and high blood pressure during pregnancy, unsafe abortions and other forms of complications during childbirths were reported as causes of deaths. Given this staggering report, it's worrisome that meeting the SDGs target of Maternal Mortality rate by year 2030 to at least 12 per 1,000 is far from reality of medical facilities and available medical doctors' ratio available to patients on ground. The researchers are worried about the information available to expectant mothers on the modalities to adopt in reducing the maternal mortality rate in Nigeria. This has motivated the researcher to investigate the Awareness Level of Pregnant Women on Maternal Mortality Reduction Strategies in Ilorin South Local Government Area, Kwara State, Nigeria. This will help to shed more light on the challenges faced by these expectant mothers and how best to help in reducing maternal mortality in Ilorin South, Kwara State.

Purpose of the Research

The research is guided by the under-listed purposes of the research:

I. To investigate the level of awareness among pregnant women on preventive measure of maternal mortality in Ilorin South Local Government Area, Kwara State, Nigeria.

II. To find out the factors affecting level of awareness among pregnant women on preventive measure of maternal mortality in Ilorin South Local Government Area, Kwara State, Nigeria.

Research Questions

- I. What is the awareness level of pregnant women on maternal mortality reduction strategies in Ilorin South Local Government Area, Kwara State, Nigeria?
- II. What are the factors affecting awareness level of pregnant women on maternal mortality reduction strategies in Ilorin South Local Government Area, Kwara State, Nigeria?

Literature Review

The increasing rate of maternal mortality is matter of public health concern across the world, particularly in sub-Saharan Africa. Limited access to medical facilities in underdeveloped and developing economics in Sub-Saharan African remains a matter of concern to regional governments and international aid organizations. The World Health Organization (WHO) has remained steadfast in supporting local health authorities to confront the raging health issues across the Sub-Saharan Africa. WHO reported the ratio of Maternal Mortality rate where a staggering figures of 531 deaths were recorded per 100,000 live birth between year 2020 to 2022 (WHO, 2022). In Somalia, Yemen, Syria, Southern Sudan, Democratic Republic of Congo, Chad, Central Africa Republic, Sudan and Afghanistan reported maternal mortality rate increased from 30-551 in South Sudan in the year 2020 which doubled the global incidences of maternal mortality rate and the rest low-income countries above recorded 430 maternal mortality rate per 100,000 live birth (WHO, 2022). Women in low-income countries are faced with the high risk of maternal mortality due to poor medical facilities, brain drain, inability to afford proper medical care and unsafe abortion. This implies that a girl at the age of puberty is already threatened with this reality.

Causes of Maternal Mortality

Women are faced with a number of medical complications during childbirth. Some of these complications are noticeable during proper antenatal care with constant pregnancy scan and medical examination by the medical doctor. Most of these complications are actually preventable with the right enlightenment and strict medical guidance. Majority of the causes of these high mortality rates

are actually treatable given the procurement of adequate medical equipment and skilled medical professionals. While there are few hospitals with all the necessary medical facilities, the patients on the other hand may not have the financial muscle to tackle some of the complications during pregnancy. Thus, the researchers outlined some of the pregnancy related complications that can lead to maternal mortality by at least 75%:

i. Severe bleeding mostly after childbirth
ii. Unsafe abortion
iii. Infections (usually after childbirth)
iv. Complications from delivery; and
v. High blood pressure during pregnancy (pre-eclampsia and eclampsia)

Medical Remediation to Maternal Mortality

One of the safest approaches to cut down maternal mortality is to prevent unwanted pregnancy which will drastically reduce unsafe abortion. There should be public awareness on appropriate use of contraceptives, mass education on safe abortion practices, its corresponding legal implications and adequate post-abortion care which is very important. Most maternal mortality is actually preventable or handled women present themselves for medical examination at the earliest stage (Emelumadu, Onyeonoro, Ukegbu, Ezeama, Ifeadike and Okezie (2014). The maternal health is proportionate to the well-being of the unborn child; thus, all antenatal care is to be provided and closely supervised by a medical practitioner. Any error or ill-informed decision at this point of pregnancy can affect the survival or health of the unborn child, the mother or both. This underscores the need for regular antenatal care at authorized medical centre prevents any foreseeable complications.

i. Severe bleeding: women are faced with bleeding after childbirth and it can lead to death if left uncontrolled. The use of oxytocics immediately after childbirth puts bleeding in check. Most women who bleed for hours after birth often die.In Nigeria, some women risk giving birth at home maybe due to lack of ambulance services or economic reasons. In the event of any complications, such pregnant women often die before being rushed to the hospital.

ii. Infection: some women suffer chronic infection after childbirth. Infections are prevented with good hygiene practices. In the event of any symptoms of infections that is reported to medical doctor at its earliest stage, it can be treated.

iii. Pre-eclampsia: early detection of pre-eclampsia can be adequately managed before it escalates to convulsions (eclampsia) state where it puts the life of the victim in danger. Drugs like magnesium sulfate have been found to be very effective in lowering the chances of pre-eclampsia among women.

Importance of Antenatal Care and Quality Healthcare

Women in the rural areas are disadvantaged in accessing proper healthcare due to lack of quality healthcare providers in rural communities. Hanefeld, Powell-Jackson and Balabanova (2017) in most low-income countries, most communities lack primary healthcare centre in their localities. WHO (2022) reported that 99% of all births took place under the supervision of a trained doctor, a trained midwife or a nurse. Samuel, Zewotir and North (2021) reported that in low-income countries, there is slightly above 68% of all childbirth that took place under a doctor, a trained midwife or a nurse and only 78% of such women are assisted by such trained healthcare. The researcher detailed some of these factors that deny women from receiving such medical care in low-income countries include:

i. Poor healthcare facilities, mistreatment and abuse of pregnant women, inadequate manpower for medical centre, inadequate medical supplies for routine treatment and lack of proper accountability by the healthcare management board.
ii. Healthcare system in Nigeria experience some failure which affect the quality of medical care like the ones mentioned in (i) above.
iii. Socioeconomic metrics like family income, available educational institutions, other demographic factors like race, ethnicity, religion, that put certain segment of the sub-population at a disadvantaged position in accessing healthcare institutions.
iv. Dysfunctional gender orientation or gender inequality/discrimination that deny some women right to access quality, safe and available sexual and reproductive health orientations and services. Female condoms are seen like a taboo in African culture where a woman is not expected to take the leading role in sexual matters; leaving her health and safety in the hands of the males to decide on whether to use male condoms or not, thereby endangering the life of the female partner in unwanted pregnancy and other sexually transmitted infections like HIV/AIDS, Gonorrhea, and others.
v. Global warming and other disasters that affects the healthcare system from performing optimally.

Effect of Covid-19 Pandemic on Maternal Maternity

The world was hit by its worst pandemic in history as the COVID-19 Pandemic brought the world on it's a complete shutdown. Many pharmaceutical companies, research institutions, health centres were overwhelmed with the scourge of the COVID-19 pandemic. This led to limited resources available to

funding other healthcare needs of the society like the maternal mortality reduction campaign was hard hit as the above data showed a disturbing increase in maternal mortality especially in low income countries. These maternal mortality deaths during the COVID-19 period was either as a result of the negative interaction between pregnant mother otherwise known as indirect obstetric death and COVID-19 or as a shortfall in manpower of healthcare professional and limited resources available to general healthcare services which resulted in high maternal mortality rate during this time.

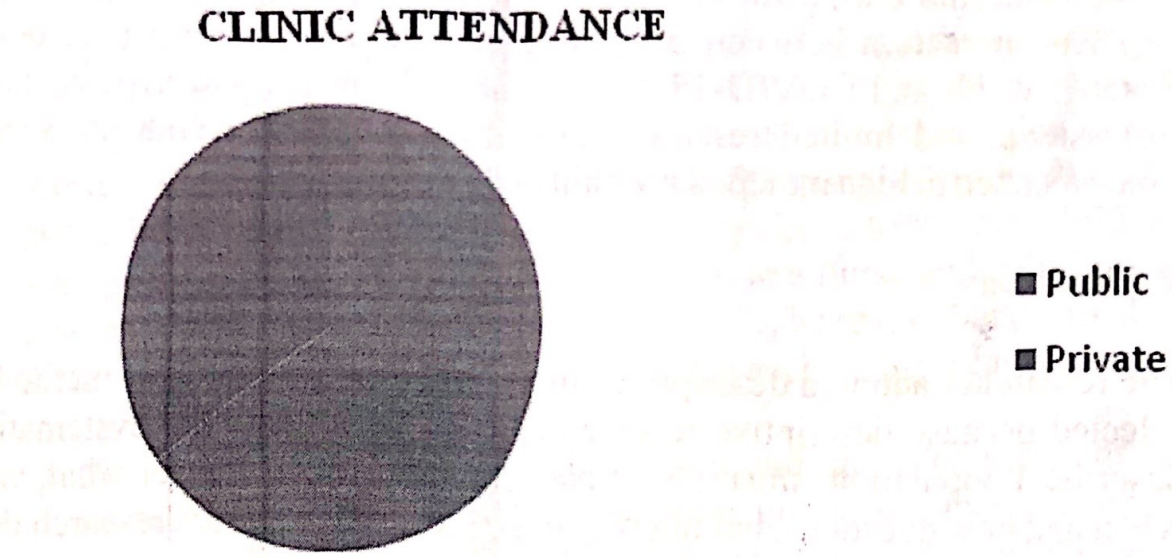
Methodology

The researcher adopted descriptive survey research design. This method was selected because descriptive research aims to accurately and systematically describe a population, situation, or phenomenon. It can answer what, where, when and how questions, but not why questions. A descriptive research design can use a wide variety of research methods to investigate one or more variables. Unlike in experimental research, the researcher does not control or manipulate any of the variables, but only observes and measures them (Shona (2023). Thus; the researcher investigated the awareness level of pregnant women on maternal mortality reduction strategies in Ilorin South Local Government Area, Kwara State, Nigeria. The researcher established that there were two hundred and seventy-seven (277) pregnant women who registered for routine antenatal care at three (3) private hospitals and six (6) government health centres in Ilorin South Local Government Area of Kwara State as population for the study. The sample comprised of one hundred and forty-three (143) pregnant women selected through purposive sampling technique.

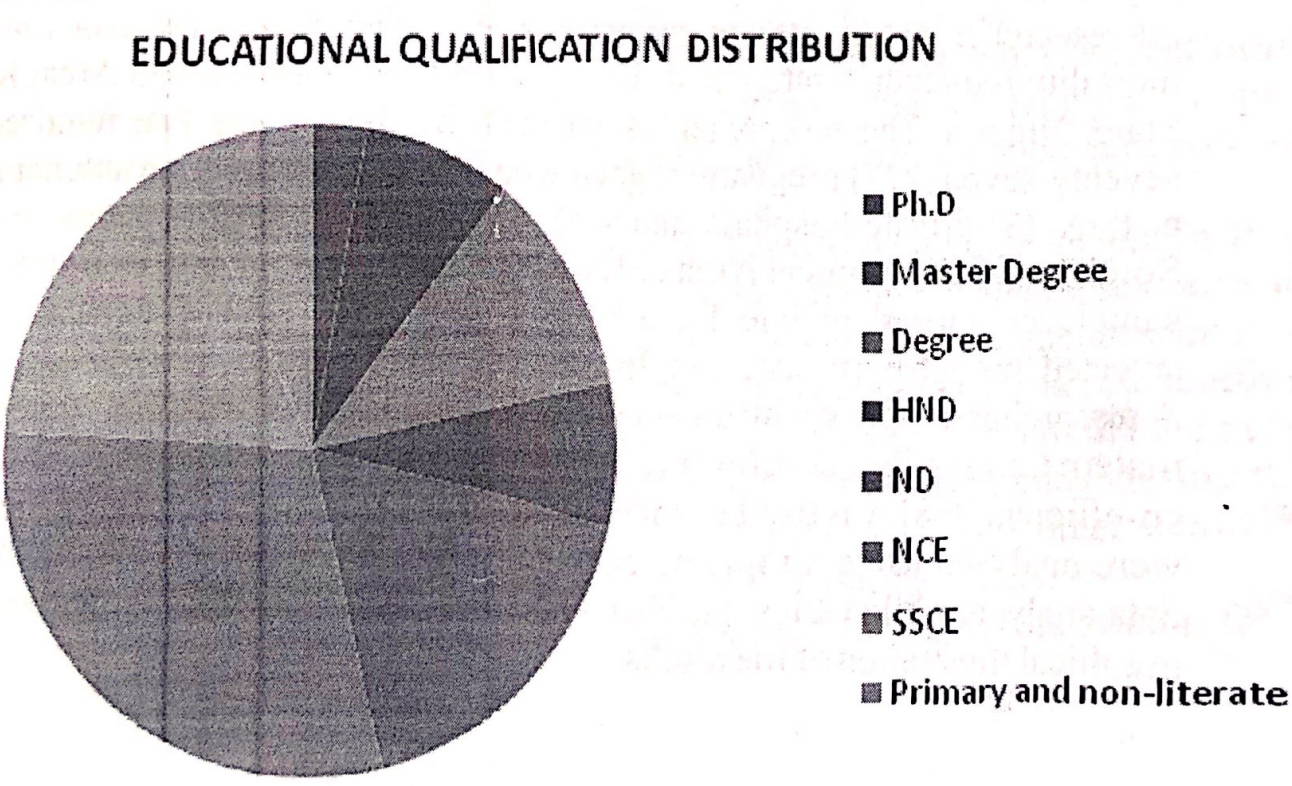
A researcher designed instrument titled: "Awareness of preventive strategies of maternal mortality questionnaire" comprise of three segments with reliability co-efficient [0.8] was used to solicit data for the study. The results of the study were analysed using simple percentage, mean, Standard Deviation (SD) for data analysis while tables, pie charts and bar charts were used for showing the graphical illustration of the results.

Results and Discussion of Findings

Demographic data of the pregnant mothers sampled for the study.

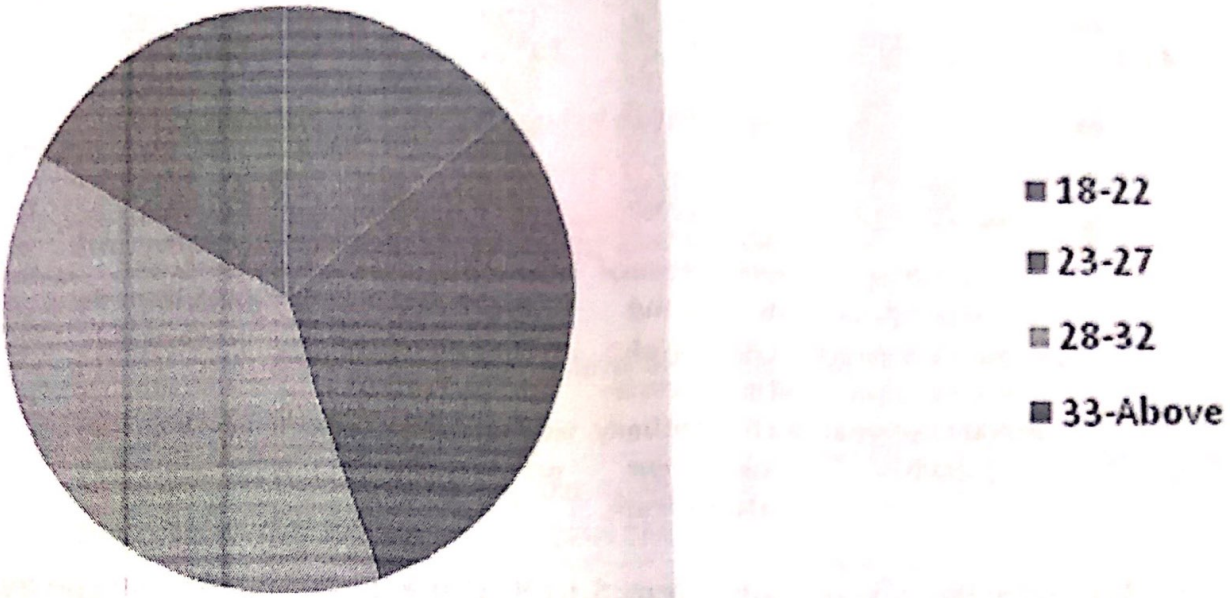


Pie chart one shows clinic attendance of pregnant mothers in Ilorin South, Kwara State.



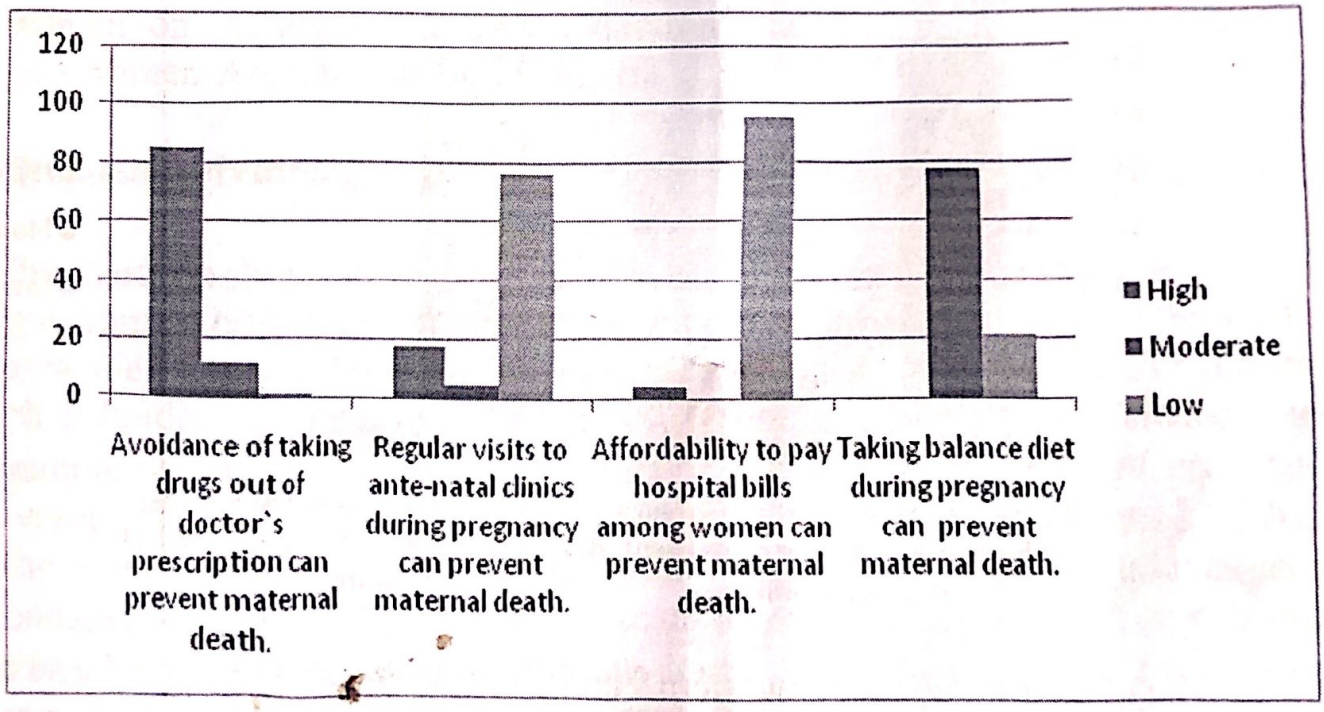
Pie chart two shows the Educational Qualification of pregnant women sampled for the study.

AGE DISTRIBUTION

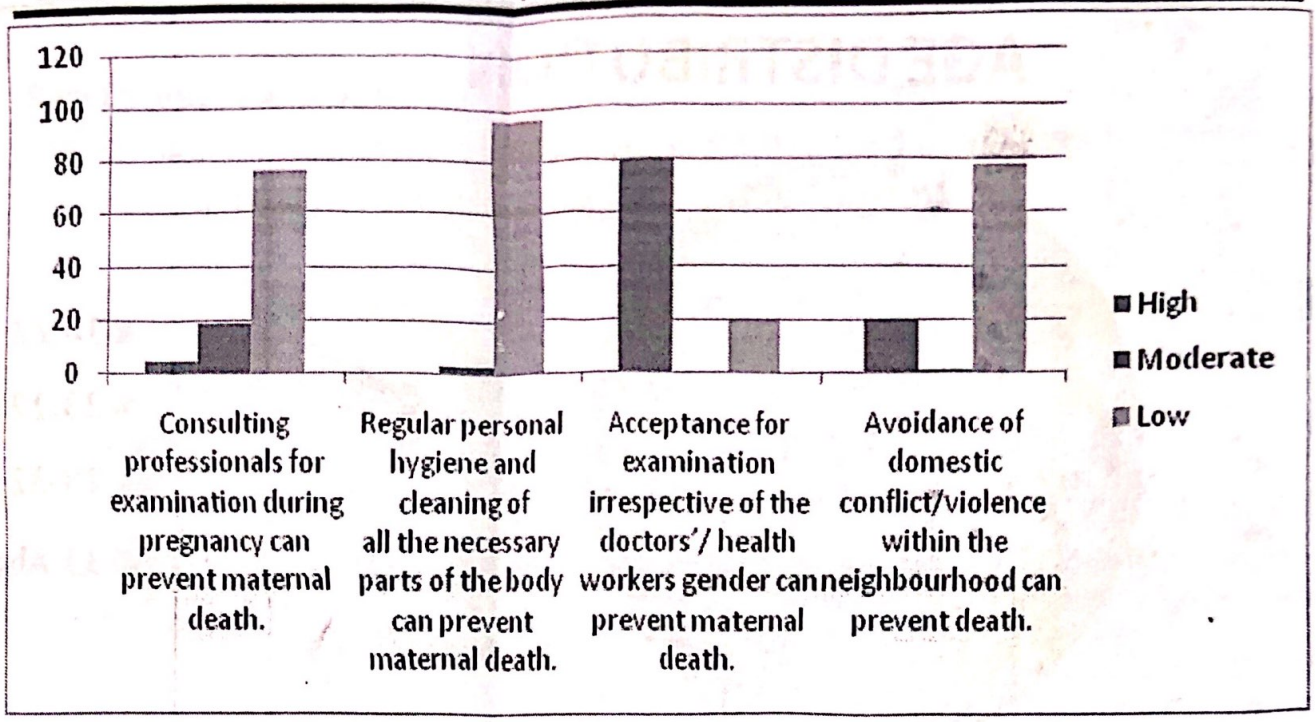


Pie chart three shows age distribution of pregnant mothers in Ilorin South, Kwara State.

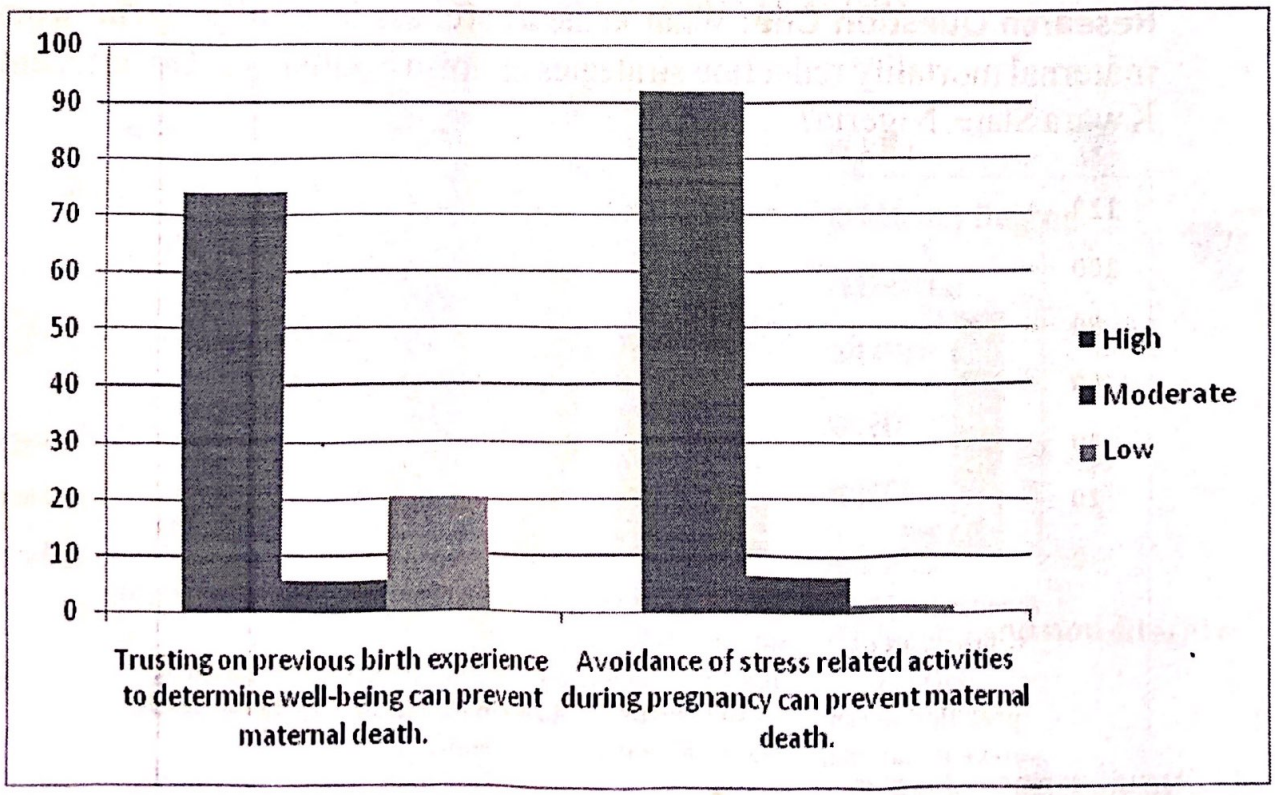
Research Question One: What is the awareness level of pregnant women on maternal mortality reduction strategies in Ilorin South Local Government Area, Kwara State, Nigeria?



Bar chart one above shows item 1 to 4 of the questionnaire on the awareness level of pregnant women on maternal mortality reduction strategies in Ilorin South Local Government Area, Kwara State, Nigeria.



Bar chart two above shows item 5 to 8 of the questionnaire on the awareness level of pregnant women on maternal mortality reduction strategies in Ilorin South Local Government Area, Kwara State, Nigeria



Bar chart three above shows item 9 and 10 of the questionnaire on the awareness level of pregnant women on maternal mortality reduction strategies in Ilorin South Local Government Area, Kwara State, Nigeria.

Research Question Two: what are the factors affecting awareness level of pregnant women on maternal mortality reduction strategies in Ilorin South Local Government Area, Kwara State, Nigeria?

SN	FACTORS	MEAN	SD	RANK
1	My level of education affects my level of awareness on maternal mortality.	3.3	0.9	1
2	Inadequate health information affects my level of awareness on maternal mortality.	2.7	1.0	2
3	My financial/income status affects my level of awareness on maternal mortality.	2.4	0.7	3
4	My inability to understand the language of communication affects my level of awareness on maternal mortality.	2.3	0.8	4
5	My religious belief affects my level of awareness on maternal mortality.	2.3	0.7	5
6.	My cultural belief affects my level of awareness on maternal mortality.	2.2	0.8	6
	GRAND MEAN	15.2		

Table one shows the mean of factors that affected awareness level of pregnant women on maternal mortality reduction strategies in Ilorin South Local Government Area, Kwara State, Nigeria.

Discussion of Findings

Pie chart one shows that more than 65% of the pregnant women registered with government hospitals while the rest registered at private hospitals in the study area. Pie chart two shows that majority of the pregnant women (over 30%) were NCE holders followed By ND and SSCE holders slightly above 20% of the sample respectively. Pie chart three shows that the highest ratio of pregnant women ages fall between 28 to 32 years of age at over 40% while ages 23-27 of the same were over 33% of the sample implying that the sample largely constituted between ages 23 to 32 years at over 73%. Bar chart one shows response of the respondents on the level of awareness about preventive measures in reducing maternal death among pregnant and age rearing women in Ilorin South Local Government Area.

Item 1 revealed that "Avoidance of taking drugs out of doctor`s prescription can prevent maternal death" 86.0% of respondents rated it high, 11.9% moderate and 2.1% low. Item 2 "Regular visits to ante-natal clinics during pregnancy can prevent maternal death" 18.2% of the respondents rated it high, 4.9% rated it moderate while 76.9% of respondents rated it low. Item 3 shows "Affordability to pay hospital bills among women can prevent maternal death" had 4.9% of respondents rated it high, none rated it moderate while 95.1% rated it low. Furthermore, item 4 "Taking balance diet during pregnancy can prevent maternal death".

The analysis revealed that none of the respondents rated it high, 78.3% and 21.7% respectively rated it moderate and low. Item 5 "Consulting professionals for examination during pregnancy can prevent maternal death" had 4.9% rated it high, 18.2% moderate and 76.9% low. Item 6 "regular personal hygiene and cleaning of all the necessary parts of the body can reduce maternal death" had 3.5% and 96.5% that rated it moderate and low respectively. Item 7 "Acceptance for examination irrespective of the doctors'/ health workers gender can prevent maternal death" had 80.4% rated it high, and 19.6% low. Item 8 "Avoidance of domestic conflict/violence within the neighbourhood can prevent maternal death" had 20.3% that rated it high, 1.4% moderate and 78.3% rated it low. Item 9 "Trusting on previous birth experience to determine well-being can prevent maternal death" had 74.1% that rated it high5.6% moderate and 20.3% low. Item 10 "Avoidance of stress related activities during pregnancy can prevent maternal death" had 92.3% that rated it high, 6.3% moderate and 1.4% low.

However, in order to determine the level of awareness, the grand mean for the group was calculated to be 15.2. In an interval of score of 21-30 as high level of awareness, 11-20 as moderate and 1-10 as low level of awareness, it is shown that the level of awareness about preventive measures in reducing maternal mortality among pregnant and age rearing women in Ilorin South Local Government Area is moderate.

Table one shows factors that affected the level of awareness of pregnant women on maternal mortality in Ilorin South Local Government Area. In this result, only factors that the mean value equal or greater than the average grand mean value of 2.5 was considered as an important factor. It was shown in the result that level of education (=3.3, SD=0.9) and inadequate health information (=2.7, SD=1.0) were the two major factors affecting level of awareness of pregnant women on maternal mortality in Ilorin South Local Government Area. By implication, if the government invests heavily on conventional and adult

literacy programme and create more public awareness symposium on maternal health and antenatal promotion drive across rural community, state and nationwide, there will be drastic fall in the number of maternal mortality rate among pregnant women in the study area and the country at large.

The finding of this study revealed that pregnant and age rearing women in Ilorin South Local Government Area of Kwara State had moderate level of awareness of preventive measures in reducing maternal mortality. In other words, the level of awareness of pregnant and age rearing women in Ilorin South Local Government Area of Kwara State on preventive measures in reducing maternal mortality is neither low nor high or adequate. This occurrence can still make them susceptible to certain practices or behaviour capable of worsening or endangering the situation as a result of lack of adequate awareness of various measure through which the incident of maternal mortality can be prevented.

This finding suggests that there is a need for the concerned stakeholders to expedite action towards raising awareness level of women on maternal mortality. Finding of this study on women awareness on maternal mortality does not significantly different from what has been reported by previous researchers. Mahmoud and Omar (2018) study revealed that more than half of rural women in Assiut and Fayoum Governorates, Egypt had unsatisfactory awareness about maternal mortality issues. Education enhances individual's knowledge of a phenomenon and tendency is high for women who are educated to be more informed on what needed to be done or where the needed information can be obtained in maternal health and other health related issues.

It is imperative to note that previous author consulted for the study heavily centred their discussion on statistics of maternal mortality rate as they showed how low income countries are more hit by the ratio of maternal mortality especially among sub-Saharan Africa and how more funds are needed to be invested in meeting the Sustainable Development Goals (SDGs) target set for 2030 as seen in WHO (2022) and others. They didn't dwell on the awareness level of the pregnant women on maternal mortality and strategies to prevent maternal mortality among these pregnant women. Therefore, the focus of research which investigated the awareness level of pregnant women on maternal mortality and preventive strategies makes this work standout among others.

Conclusion

The study established that educational qualification and inadequate health information at the public domain is directly correlated with maternal mortality among the pregnant women of Ilorin South Local Government Area of Kwara State. That is to say, to record a significant fall in the ratio of maternal mortality in the area, the government must invest in mass education and continuous public health campaign that promote antenatal registration for all pregnant women and provide public health awareness campaign on strategies that can reduce the scourge of maternal mortality in the study area and the country at large.

Recommendations

The following recommendations are hereby given to relevant stakeholders for policy framework:

I. The local government administration should engage in door to door sensitization campaign to sensitise pregnant women on the need to adhere to antenatal care at government approved medical centre.
II. The State and the Federal government should adequately fund mass literacy programmes to provide the pregnant women needed enlightenment to read medical instructions and sufficiently communicate their experiences to the antenatal healthcare providers and succinctly follow the instruction to maintaining a healthy living throughout their pregnancy.
III. Given the growing hunger in the country due to inflation, the government should provide financial support to low-income families to be able to carry-on with the pregnancy maintaining the needed balance diet for healthy baby.

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