

CENTRAL UNIVERSITY
SCHOOL OF MEDICINE AND HEALTH SCIENCES
DEPARTMENT OF NURSING

KNOWLEDGE AND ATTITUDE OF MIDWIVES ON MATERNAL DEATHS AT
TEMA GENERAL HOSPITAL

BY

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DECLARATION

We hereby declare that this submission is our own work towards the BSc. and that, to the best of our knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the university or elsewhere, except where due acknowledgement has been made in the text.

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DEDICATION

To our parents, CAMFED-Ghana and siblings

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We wish to thank the Almighty God for His inspiration and protection throughout our studies. Amen.

We wish to express our sincere gratitude to our supervisor Mrs May Osae-Addae for her direction and corrections throughout this work.

To Tema General Hospital and the entire staffs of obstetric and gynecological ward, we say God bless you all for your support during our data collection.

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ABSTRACT

In Ghana one in 45 women has a risk of dying from pregnancy-related causes in her lifetime. The recent WHO/UNICEF/UNFPA/World Bank (2014) estimate of maternal mortality ratio for Ghana in 2010 was 350 deaths per 100,000 live births, with an uncertainty range between 210 and 630, taking into account the impact of sampling errors on the estimates constructed by the international organizations.

The purpose was to study the knowledge and attitude of midwives on maternal deaths at Tema General Hospital. The research objectives for this study were to investigate the general knowledge of midwives on maternal deaths, explore the attitude of midwives towards maternal deaths and to ascertain preventive practices of midwives towards maternal deaths at Tema Genral Hospital. Descriptive quantitative research design was adopted for the study. Convenience sampling technique was used to select 100 midwives. Structured questionnaire was used to gather data for the study. Data was analyzed with both Microsoft Excel and SPSS (Statistical Package for Social Sciences version 21) applications. Findings indicated that the midwives have positive attitude towards maternal death. A great majority (92%) of the midwives responded in the affirmative that, death occurring from pregnancy related causes is called maternal death. Maternal death is preventable and some of the measures indicated by the midwives include, counselling and education, community outreach programmes and availability of ambulances. The study recommended that, midwives should be fully educated about their work to avoid negligence and death of pregnant women and their unborn child, Outreach programmes should be frequently organized by midwives in all communities' especially remote areas for all pregnant women to benefit. Again, midwives should be encouraged to build positive attitude towards their work and prevent maternal deaths.

CHAPTER ONE

BACKGROUND AND LITERATURE REVIEW

1.0 Introduction

This chapter presents the background of the study, problem statement, purpose of the study, research objectives, research questions, significance of the study, operational definition of terms and literature review.

1.1 Background of Study

About 287,000 women die annually while about 830 die daily from pregnancy-related complications. A woman's lifetime risk of maternal death -the probability that a 15 year old woman will eventually die from a maternal cause - is 1 in 3800 in developed countries, versus 1 in 150 in developing countries (World Health Organization, 2015).

In Ghana one in 45 women has a risk of dying from pregnancy-related causes in her lifetime. The recent WHO/UNICEF/UNFPA/World Bank (2014) estimate of maternal mortality ratio for Ghana in 2010 was 350 deaths per 100,000 live births, with an uncertainty range between 210 and 630, taking into account the impact of sampling errors on the estimates constructed by the international organizations.

As at 2015, the rate of maternal mortality was reduced worldwide from an estimated value of 532,000 in 1990 to 303,000 in the year 2015. However, this reduction was not enough to meet the target of a three-quarters reduction in maternal mortality from 1990 to 2015. In 2015, the "women who died around the world every day due to pregnancy and childbirth was 830. Out of 830, 550 occurred in sub-Saharan Africa and 180 occurred in Southern Africa and 5 occurred 3in developed countries" (World Health Organization, 2015). Between 2016-2030, as part of the Sustainable Development Goal 3, the target is to reduce

the global maternal mortality ratio to less than 70 per 100,000 live births with no country having a maternal mortality rate of more than twice the global average

The World Health Organization (2015) defined maternal death as deaths aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy.

The problem of maternal mortality has become an everyday phenomenon of the contemporary world. Women of childbearing age all over the world irrespective of race, education, occupation or marital status are faced with the agony of pregnancy's possibility of leading to the death of the mother. Not until two decades ago, women died from pregnancies in silence and pain. Families mourned their dead while husbands hoped for another wife to bear them children. (Ameyaw, 2012).

Tuo (2017) studied "trend, causes and the characteristics that contribute to the death of mothers in health facilities in the upper West region. The study was a retrospective and descriptive in nature. The findings were processed into frequency tables, charts, and graph. The results indicated an unstable maternal mortality trend in the region with a mortality ratio of 193 deaths/100,000 live births. The major causes of the maternal deaths recorded included haemorrhage/bleeding, Sepsis, and anaemia.

A similar study by Salifu (2014) on "occurrence and incidence of maternal deaths in Wa District from 1998 to 2010". The incidence of maternal mortality was high in 2001 but low in 2002, 2004 and 2008 as compared to 2010 (reference year).

The above studies indicate that, there is a research gap in relation to maternal deaths in Ghana. There is therefore an urgent need to research and document the knowledge and attitude of midwives towards maternal deaths in order to curb its occurrence. The researchers however, decided to undertake this study, after identifying the major roles midwives play in

maternal death issues. If midwives have adequate knowledge and form the right attitude towards their work delivery, maternal death will be reduced to the barest minimum. Moreover, financial stress and burden on families as a result of maternal death will reduce. These however, necessitated a study on the knowledge and attitude of midwives on maternal deaths at Tema General Hospital.

1.2 Problem Statement

The Fifth Millennium Development Goal sought to improve maternal health, with a target to reduce the maternal mortality ratio by three quarters, between 1990 and 2015. Yet maternal mortality in developing countries has barely decreased over the past decade, and in parts of Africa it has increased. The national target for Ghana was to reduce the 1990 maternal mortality rate of 740 per 100,000 live births by 3/4 to 185 per 100,000 live births by 2015 (World Health Organization, 2015).

Research indicates that the developed world has been able to reduce maternal mortality through effective and efficient health care services and by forming the right attitude toward work delivery. Most research focused on the direct causes of maternal deaths as hemorrhage, infection, hypertensive disorders, unsafe abortion and obstructed labor and indirect causes associated with pre-existing diseases that are not complications from pregnancy but are intensified by pregnancy such as malaria, HIV/AIDS and anemia. (Gil, Hernandez, Gil & Alvarez, 2009).

Little studies, have concentrated on the knowledge and attitude of midwives. Most midwives do not form the right attitude to work and to their patient which has contributed to most maternal deaths cases in Ghana. An instance occurred when we were doing our clinical at a certain hospital and that is why we are researching into this topic in order to throw more light on the knowledge and attitude of midwives on maternal death. “A patient was brought to

the maternal unit around 2:30 midnight. A patient with an obstetrics history of G*0+3, P*4. A pathograph was created for her by the night staff. One midwife was asked to check the contraction every 30minute not knowing the outcome of the contraction was poor. Because this midwife was not competent in her work, she did not know that, the outcome of the contraction was poor and she chose to shade four boxes because she said the night staff shaded three boxes on the contraction portion. Due to this, both the mother and the fetus died”.

“Another instance occurred when a patient came to deliver and was bleeding heavily after birth but because the patient did not bring any relative to donated blood during antenatal session, this patient was not transfused and the next day the patient died”. Some midwives delay in attending to the pregnant mothers, others do not take their work serious, verbal and physical abuse is also very common among some midwives.

Knowledge and attitude of midwives ultimately influence maternal health outcome of the mothers before and after delivery therefore, this study seeks to provide empirical analysis of knowledge and attitude of midwives on maternal deaths by providing answers to the research questions.

1.3 Purpose of the Study

The purpose was to study the knowledge and attitude of midwives on maternal deaths at Tema General Hospital.

1.4 Research Objectives

Specifically, the research seeks to achieve the following objectives:

1. To investigate the general knowledge of midwives on maternal deaths at Tema General Hospital.

2. To explore the attitude of midwives towards maternal deaths at Tema General Hospital.
3. To ascertain the preventive practices of midwives towards maternal deaths at Tema General Hospital.

1.5 Research Questions

1. What is the general knowledge of midwives on maternal deaths at Tema General Hospital?
2. What is the attitude of midwives towards maternal deaths at Tema General Hospital?
3. Which are the preventive practices of midwives towards maternal deaths at Tema General Hospital?

1.6 Significance of the Study

This study is significant in a number of ways.

- The Ministry of Health (MOH) may find the study useful and beneficial in its health education programmes. It will help the ministry to strategize its educational programmes towards nurses in an effective way.
- Non-Governmental Organizations may find this study useful in highlighting important health issues that need their attention. The study will attract attention and support towards reducing maternal deaths.
- The study will influence policy makers to make policies in favour of reducing maternal deaths.
- Findings of the research will broaden knowledge on awareness of nurses on maternal deaths and provoke further research by scholars into the subject.
- Future students of Central University will use the study document as reference material.

1.7 Operational Definition of Terms

Concepts relevant to this research include the following:

- **Maternal mortality:** It refers to the death of a woman from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy (WHO, 2015).
- **Awareness:** It means knowledge or perception of a situation or fact.
- **Policy-maker:** It is a person who determines or influence policies and practices.
- **Knowledge:** It is an information, understanding and skills that you gain through education or experience.
- **Midwife:** Is a professional in midwifery specializing in pregnancy, childbirth, postpartum and new born.
- **Attitude:** A settled way of thinking or feeling about something.

1.8 Literature Review

1.8.0 Introduction

This section of the study reviews literatures related to the knowledge and attitude of midwives on maternal deaths. Articles concerning general knowledge of midwives on maternal deaths, attitude of midwives towards maternal deaths and preventive practices of midwives towards maternal deaths shall be reviewed.

1.8.1 General Knowledge of Midwives towards Maternal Deaths

A study in Ghana by Tuo (2017) assessed the trend, causes and the characteristics that contribute to the death of mothers in health facilities in the upper west region. The study was a retrospective and descriptive in nature. All maternal death cases that occurred in Upper West Region from 2009 to 2014 were involved. A review of secondary data of 179 institutional maternal death records from all the 11 districts in the Upper West Region was performed. The data was sorted and coded into Microsoft Excel 2010 and exported into SPSS version 20.0 for statistical analysis. The findings were processed into frequency tables, charts, and graph. The results indicate an unstable maternal mortality trend in the region with a mortality ratio of 193 deaths/100,000 live births. The Wa Municipality and the Wa Regional Hospital contributed majority of the cases of 24.0% and 54.2% respectively. Majority of the deaths were within the age range of 20-29 with a median age of 28 years and among the uneducated. The major causes of the maternal deaths recorded included haemorrhage/bleeding, Sepsis, and anaemia. The Primidgravida and nulliparous women were the majority of the deaths with 56.4% of them dying within or after the 36th week of pregnancy.

Another study in Ghana by Klutse (2012) assessed maternal health services in the Fanteakwa district. The main design for the study is the descriptive method, which employed the quantitative method of data collection and analysis. The two main sources of data were

used for the study. The questionnaire was used to collect the primary data, while secondary data was collected for the trend studies. A total of 540 expectant mothers were used for the study and were drawn proportionally from 2 randomly selected communities in the Fanteakwa district using the cluster sampling method where each selected community was classified as a group from which the sample was drawn. Data collected was represented using tables and chart and analyzed using percentages. A major finding of the study is that the main cause of late access to maternal health care is financial constraints of expectant mothers and the use of TBAs (Traditional Birth Attendants) and herbalists for maternal health services.

Another study in Ethiopia by Debeb (2016) aimed to quantify overall levels, identify specific causes, and evaluate local interventions in relation to efforts to reduce maternal mortality in Tigray Region, Northern Ethiopia, thereby providing a strong empirical basis for decision making by the Tigray Regional Health Bureau using methods that can be scaled at national level. The study employed a combination of community-based study designs to investigate the level and determinants of maternal mortality in six randomly selected rural districts of Tigray Region. A census of all households in the six districts was conducted to identify all live births and all deaths to women of reproductive age occurring between May 2012 and September 2013. A total of 181 deaths to women of reproductive age and 19,179 live births were documented from May 2012 to April 2013. Of the deaths, 51 were pregnancy-related. District-level MMRs showed strong inverse correlation with population density ($r^2 = 0.86$). Direct obstetric causes accounted for 61% of all pregnancy-related deaths, with hemorrhage accounting for 34%. Non-membership in the voluntary Women's Development Army (AOR 2.07, 95% CI 1.04-4.11), low husband or partner involvement during pregnancy (AOR 2.19, 95% CI 1.14-4.18), pre-existing history of other illness (AOR 5.58, 95% CI 2.17-14.30), and never having used contraceptives (AOR 2.58, 95% CI 1.37-4.85) were associated with increased risk of maternal death in a multivariable regression

model. In addition, utilization of free ambulance transportation service was strongly associated with reduced MMR at district level. Districts with above-average ambulance utilization had an MMR of 149 per 100,000 LB (95% CI: 77-260) compared with 350 per 100,000 (95% CI: 249-479) in districts with below average utilization.

Another study in Asia by Sohail (2017) studied prevalence and risk factors associated with under-mortality: a multi-country comparative study in South Asia. The study was based on Demographic and Health Survey (DHS), data collected from five South Asian countries (Bangladesh, India, Maldives, Nepal and Pakistan). Data was obtained from the most recent live under-5 births from mothers within five years prior to the survey (n=570676). Association of under-5 mortality with risk factors including socio-demographic variables was studied using Cox Proportional hazard method. The estimates were presented as hazard ratio (HR) and their 95% confidence interval (CI). Survival Curves were used to explain the difference in survival of under-5 children in each country. Overall prevalence of under-5 mortality in South Asian countries according to pooled data was 10%. Country-specific results showed that Nepal having the highest prevalence (11.1%) of under-5 mortality followed by India (10.3%) and Pakistan (10.2%) in South Asia. In a multivariable model in pooled data, older age of the women (HR 0.70, 95% CI 0.68-0.72), being employed (HR 1.09, 95% CI 1.07-1.12), having husband with higher education (HR 0.74, 95% CI 0.70-0.78) and having higher education (HR 0.36, 95% CI 0.32- 0.40) were significantly associated with under-5 mortality. Among other maternal and child factors, being female child (HR 0.95, 95% CI 0.93-0.97), wanted no children (HR 0.92, 95% CI 0.87-0.97), no contraceptive use (HR 0.95, 95% CI 1.30-1.37), currently pregnant (HR 1.17, 95% CI 1.17-1.23), no smoking (HR 0.85, 95% CI 0.83-0.87), male sex of children was associated with under-5 mortality. Most of the studied risk factors were common across the countries, but some difference in the

factors associated with under-5 were country specific. The prevalence of under-5 mortality is still high in South Asia.

1.8.2 Attitude of Midwives towards Maternal Deaths.

A study in Somalia by Duelle (2014) investigated birth attendants' perceptions of maternal mortality rate and the associated determinants in Abudwak District. A mixed method approach was employed. Purposive sampling was utilized to recruit participants. Observation, closed-ended questionnaires and in-depth semi-structured interview data collection tools were used. Data were analyzed with SPSS data analysis software and manual content analysis. The results indicated that, majority of the birth attendants in the study were older females, illiterate (76.2%), lived in the community over 10 years (81%), have > 10 years of experience (81%), assisted > 10 births in 2013 (90.5%), have > 5 children (95.2%) and referred (71.4%) complicated pregnancies to a higher level of care. Skilled birth attendants (SBAs) and trained traditional birth attendants (TTBAs) have better pregnancy risk recognition and higher referrals than traditional birth attendants (TBAs). All participants thought maternal mortality is high in Abudwak district and lack of competent health professionals and nutrition has been identified as the top determinants for maternal mortality in Abudwak. The findings of the study highlighted low awareness of maternal and infant mortality among the pregnant participants.

Another study in Sudan by Sidahmed (2013) explored factors contributing to high maternal mortality in Sudan. Analysis of literature was done by using a modified version of the Three Phases of Delay Model developed by Thaddeus and Maine's in 1994. The study found that, multiparous, poor, and rural women with low education level are at high risk of maternal death in Sudan. Direct obstetric causes are responsible for the majority of deaths. Factors related to late recognition of the obstetric problems, delay in seeking and accessing

emergency obstetric care were found to play a paramount role in maternal mortality. Health services related barriers were significantly contributing to each phase of delay.

Another study in Ghana by Salifu (2014) examined the occurrence and incidence of maternal deaths in Wa district from 1998 to 2010 as well as assessed the factors that contribute to maternal deaths at the Upper West Regional Hospital (UWRH) from 2008 - 2012. Poisson and logistic regression models were employed. Poisson regression model was used to examine the occurrence and incidence of maternal deaths while logistic regression was used to assess the factors that contribute to maternal death at UWRH. SAS and STATA statistical software were used to analyze the data. The study found that, the mean number of occurrence of maternal mortality was high in 2001 and 2009 as compared to 2010 and also established that the mean number of occurrence of maternal mortality did not significantly reduce over the study period 1998-2010. The incidence of maternal mortality was high in 2001 but low in 2002, 2004 and 2008 as compared to 2010 (reference year). The study also found that, the mean incidence of maternal death cases did not change.

A similar study in Ghana by Kwarteng (2015) on “Maternal mortality in Ghana: Prospects of meeting the UN Millennium Development Goals”, employed qualitative research approach with a case study design, conducted in Asante Akim Central Municipality (AACM). Purposive sample technique was used which involved pregnant women, midwives, Physician assistant (PA), health personnel, Municipal Health Directorate (MHD), Municipal Development Planning Coordinator (MDPC) and representatives of NGOs. These entities were as key informants. However, pregnant women were used in the focus group discussions. Secondary data included research conducted, policy documents and articles related to the research interest area. It was found that most pregnant women residing in the rural areas have difficulty in accessing skilled health care. They were unable to enroll on the National Health Insurance Scheme (NHIS) and those who are already enrolled find it difficult to renew their

insurance cards when they expire due to financial constraints. This group of women fails to attend antenatal care (ANC) regularly which makes it difficult for them to receive education on their health. Moreover, they were not able to detect pregnancy related complications due to the inadequate education and most of them depend on TBAs who sometimes do not handle complications efficiently.

1.8.3 Preventive Practices of Midwives towards Maternal Deaths.

A study in Turkey by Nutiye (2009) examined determinants of maternal mortality in Turkey. Regional, household and individual level characteristics that are associated with infant mortality were examined. For this purpose survival analysis was used in this analysis. The data come from 2003-2004 Turkey Demographic and Health Survey that includes detailed information of 8,075 ever married women between the ages 15-49. 7,360 mothers of these women gave birth to 22,443 children. The results of the logistic regression show that intervals between the births of the infants were associated with infant mortality at lower levels of wealth index. Children from poorer families with preceding birth interval shorter than 14 months or children whose mothers experience a subsequent birth fare badly. Breastfeeding is important for the survival chance of the infants under the age 3 months. Place of delivery and source of water the family uses are also found to be correlated with infant mortality risk. Curvilinear relation between maternal age at birth and infant mortality risk was observed, indicating higher risk for teenage mothers and mothers having children at older ages.

A similar study in United Kingdom by Mwangakala (2014) on pregnant women's access to maternal health information and its impact on healthcare utilization behavior in rural Tanzania A qualitative study involving twenty five (25) pregnant women, five (5) Skilled healthcare providers and five (5) Traditional Birth Attendants (TBAs) was conducted in Chamwino District in Dodoma Region, Tanzania for a period of six months. Two selected

wards, Msanga and Buigiri were used. The researcher used The Health Belief Model and Theory of Planned Behaviour to develop interview questions and focus group guides as well as the interpretation of the findings. The Data was analyzed thematically using the 6-stage guide to thematic data analysis with the help of NVivo Software. The inadequate conditions of the health facilities and the poor working conditions of the care providers affected the provision of quality of maternal services and health information to pregnant women in the study area. The limited access to skilled maternal health information from skilled healthcare providers and lack of alternative sources of reliable health information led pregnant women to seek health information from their Mothers-in-laws, TBAs and other women in the society.

A similar study in Indonesia by Susanti (2013) sought to gain an understanding of pregnancy and childbirth experiences from multiple perspectives, in relation to the use of maternal health services in Aceh, Indonesia. The sample size was determined by data saturation (19 women, 15 family members, 7 health professionals, 3 kaders, 4 student midwives and 1 village leader participated). Ethical approval was gained and the research setting was in the two villages of Aceh Besar District, Aceh Province, Indonesia. Data were coded and analyzed by following a constant comparison process. The research findings revealed that maternal mortality was a hidden problem within the community, and was related to inadequate maternity practices in the village. The core category “maternal death: the elephant in the room” was found to consist of four interrelated categories. The categories of the value of midwifery in the community, decision-making of maternity care, social control of the childbearing and distancing of maternal deaths; explain maternity practices in the community.

CHAPTER TWO

RESEARCH METHOD

2.0 Introduction to the Chapter

The research method explains the manner in which the study was done. It covers the study design, research setting, target population, sampling method and sample size, data collection tool, data collection procedure, validity and reliability of the study, pretest, ethical considerations and limitation of the study.

2.1 Research Design

Descriptive quantitative research design was adopted for the study. Quantitative data was collected through the administration of questionnaires. The quantitative approach was used to help study the knowledge and attitude of midwives on maternal deaths at Tema General Hospital.

2.2 Research Setting

The Tema General Hospital is located at the Tema Municipality of the Greater Accra Region. The hospital was established in 1948 by William Hackson and Sons Limited while constructing the Tema Harbor. The hospital is recognized by different medical professional regulatory bodies that run the activities of the hospital including the Nursing and Midwifery Council, paramedical and nursing students. The hospital has total compliment of 280 and 10 wards. It runs both generalized and specialist care services in the major clinical disciplines including general surgery, internal medicine, paediatrics, obstetrics and gynaecology, dental and eye clinic. The hospital has a total staff strength of about 354 consisting of 15 medical specialist, 35 medical doctors and 304 (permanent and temporal) nurses. The Tema General Hospital is often very busy as it offers quality services to people within and out of the Tema

Metropolis. The hospital has a daily out-patient department attendance of about 650 and an average bed occupancy rate of 80%. (Source: Field Data, 2018).

2.3 Target Population

The target population of the study included all midwives at Tema General Hospital.

Inclusion Criteria

- Midwives who were available at the time of data collection.
- Midwives who consent to participate in the study.

Exclusion Criteria

- Midwives who were not available at the time of data collection.
- Midwives who showed no consent to participate in the study.

2.4 Sampling method and Sample size

A sample of the population rather than studying the entire target population was used because:

- The study area is a busy area and it was impossible to study the entire population.
- The large population would take long time and a lot of money to study.

A minimum sample size would be obtained using the sample size calculation formula:

$$n = Z^2 (p*q) / e^2$$

n = sample size.

Z=percentile for 95% significance level of normal distribution (1.96)

P=estimated knowledge of maternal deaths among midwives (50% = 0.50)

Q = 1-p

Giving:

$$n = 1.96^2 (0.50 * 1-0.50) / 0.10^2 = 96 \text{ midwives}$$

The sample size would be adjusted to 100 midwives in order to make provision for non-response. After the determination of the sample size, convenience sampling technique was used to select the respondents. This technique was preferable because it entails the use of most conveniently available people as respondent in a study.

2.5 Data Collection Tool

Structured questionnaire was the main data gathering tool for collecting information from the respondents. All the questionnaires were written in English without jargons. The designed questions were closed ended to provide responses for respondents to choose from and this limited unnecessary answers that had no bearing on the study objectives. Steps were taken to avoid ambiguity and the use of jargons in the construction of the questionnaires.

2.6 Data Collection Procedure

Permission was sought from the Administrator of the Tema General Hospital. After permission was granted for data to be collected, a date was scheduled. On the day of data collection, the purpose of the study was explained to the respondents and their oral consent taken for participation. The primary caregivers who showed consent were given the questionnaires distributed for filling.

2.7 Validity and Reliability of the study

A research instrument is reliable when it can measure a variable accurately and constantly and obtain the same results under the same conditions of a period of time (Creswel & Clark, 2011). Validity of the study ensures that data collected is of value (Creswel &

Clark, 2011). All questionnaires to be used in the research was developed using standard procedures to ensure validity and reliability.

Pre-testing

A pretest was conducted by the researchers at a similar Hospital (Mercy Women's Hospital, Mankessim) that afforded the researchers opportunity to assess the ability of the questionnaires to elicit the information required from the respondents. Appropriateness of the sequence in which the questions were arranged in the questionnaires and the time taken to complete one questionnaire was noted (30minutes).

2.8 Ethical Consideration

Ethical clearance was obtained from the Administration of Central University. Approval was sought from the school (Central University) and the hospital (Tema General Hospital) where the study was conducted. Oral consent was taken from all the respondents before administering the questionnaires. The purpose and the objectives of the study, and any potential risk or benefits inherent in the study were explained to the respondents. The respondents were given an opportunity to ask questions about the study. Privacy and confidentiality was ensured by dealing with the respondents individually.

2.9 Limitations of the study

The study had the following limitations

- Financial challenges due to high expenses incurred.
- Shorter time frame for the study.
- Busy schedules of the respondents to make time to fill the questionnaires.

2.10 Statistical Analysis of Data

Questionnaires were used to collect data and coded for easy identification. Data was analyzed with both Microsoft Excel and SPSS (Statistical Packages for the Social Science).

Data was analyzed using descriptive statistical approach and presented as frequency counts and percentages. The output was presented in charts.

CHAPTER THREE
STUDY FINDINGS AND DISCUSSIONS

3.1 Introduction

This chapter is devoted to the presentation of the study findings and discussions. The data are presented in response to the research questions as presented in chapter one. However, the findings are presented and analyzed in the light of the research objectives.

3.2 Approach to Data Analysis

Questionnaires were collected and coded for easy identification. Data was analyzed with both Microsoft Excel and SPSS (Statistical Package for Social Sciences version 21) applications. Data were presented in frequency counts, percentages, and charts.

3.3 Findings

3.3.1 Background Information

Table 1: Age of Respondent

Response	Frequency	Percent
18 - 25 years	20	20.0
26 – 39 years	51	51.0
40 - 49 years	22	22.0
50 years and above	7	7.0
Total	100	100.0

Source: Field Data (2019)

Table 1 shows that, majority fifty-one percent (51%) of the midwives were between 26 and 39 years of age. Twenty-two percent (22%) were between the ages of 40 to 49 years whiles

twenty percent (20%) were between the ages of 18 to 25 years. Only seven percent (7%) of the midwives were above 50 years.

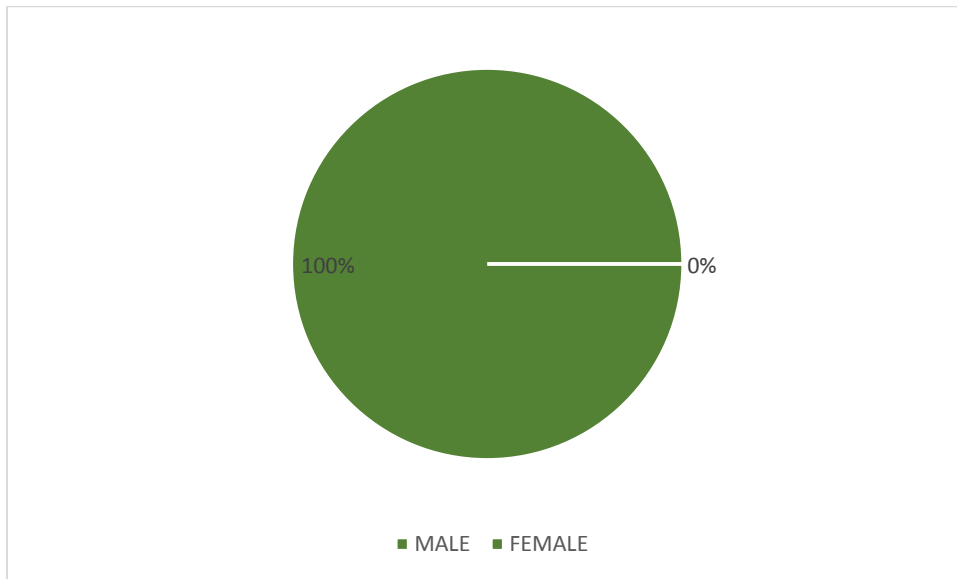
Table 2: What is your marital status?

Response	Frequency	Percent
Married	66	66.0
Single	21	21.0
Divorced	2	2.0
Widowed	4	4.0
Cohabitation	7	7.0
Total	100	100.0

Source: Field Data (2019)

From table 2 above, sixty-six percent (66%) of the midwives were married. Twenty-one (21%) were single. Four percent (4%) were widowed while seven percent (7%) were cohabiting. Only two percent (2%) had divorced.

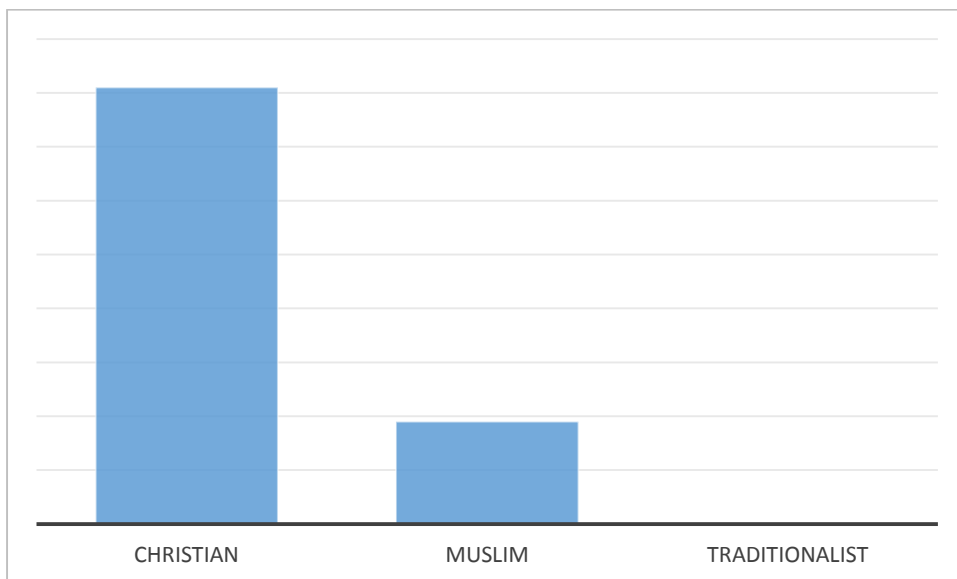
Figure 1: What is your gender?



Source: Field Data (2019)

Figure 1 indicates that, all the midwives who took part in the study were Females.

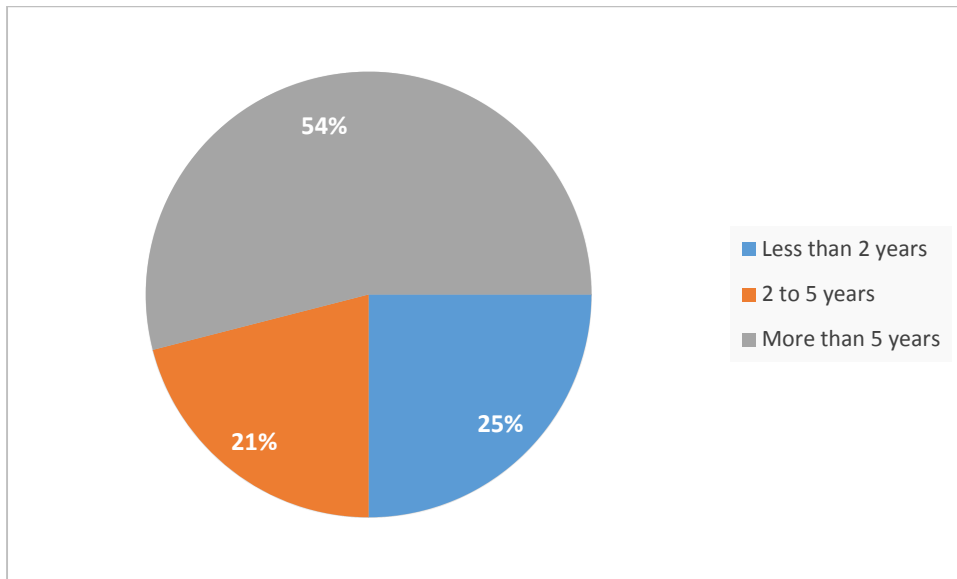
Figure 2: What is your religion?



Source: Field Data (2019)

From figure 2 above, eight-one percent (81%) of the midwives who answered the questionnaires were Christians whiles nineteen percent (19%) were Muslims. None of them was traditionalist.

Figure 3: How long have you been working as midwives?



Source: Field Data (2019)

Table 3 indicates that, fifty-four percent (54%) of the midwives have been working for more than 5 years. Twenty-one percent (21%) have been working between 2 to 5 years. Twenty-five percent (25%) have been working for less than 2 years.

3.3.2 General Knowledge of Midwives on Maternal Deaths

In determining the general knowledge of the midwives towards maternal death, series of statements were made upon which they responded ‘Yes’ or ‘No’.

Table 3: General knowledge of midwives on maternal deaths

Statement	YES	NO	NOT SURE
Death occurring from pregnancy related causes is called maternal death	92(92%)	3(3%)	5(5%)
The use of Traditional Birth Attendants (TBA) can cause maternal death.	80(80%)	16(16%)	4(4%)
Direct obstetric cause accounts for maternal death.	76(76%)	12(12%)	12(12%)
Haemorrhage is also a cause of maternal death	60(60%)	10(10%)	30(30%)
Availability of ambulance services in hospital can reduce maternal death.	100(100%)	0(0%)	0(0%)
Knowledge and experience of midwives have effects on maternal death.	85(85%).0	8(8%)	7(7%)
Negligence of midwives can cause maternal death.	72(72%)	25(25%)	3(3%)
Shortage of midwives at health facilities accounts for maternal mortality.	56(56%)	32(32%)	12(12%)

Source: Field Data (2019)

From table 3 above, a great majority ninety-two (92%) of the midwives responded in the affirmative that, death occurring from pregnancy related causes is called maternal death. Three percent (3%) responded otherwise while five percent (5%) were not sure about the response to the statement.

Eighty percent (80%) of the midwives affirmed that, the use of Traditional Birth Attendants (TBA) can cause maternal death. Sixteen percent (16%) of them responded 'No' whiles four (4%) were not sure about the response to give.

Moreover, seventy-six percent (76%) of the midwives confirmed that, direct obstetric cause accounts for maternal death. Twelve percent (12%) responded otherwise whiles another twelve percent (12%) were not sure about the response to give.

In determining if haemorrhage is also a cause of maternal death, sixty percent (60%) of the midwives responded in the affirmative. Ten percent (10%) responded 'No' whiles thirty percent (30%) were not sure about the response to give.

All the midwives affirmed that, availability of ambulance services in hospital can reduce maternal death.

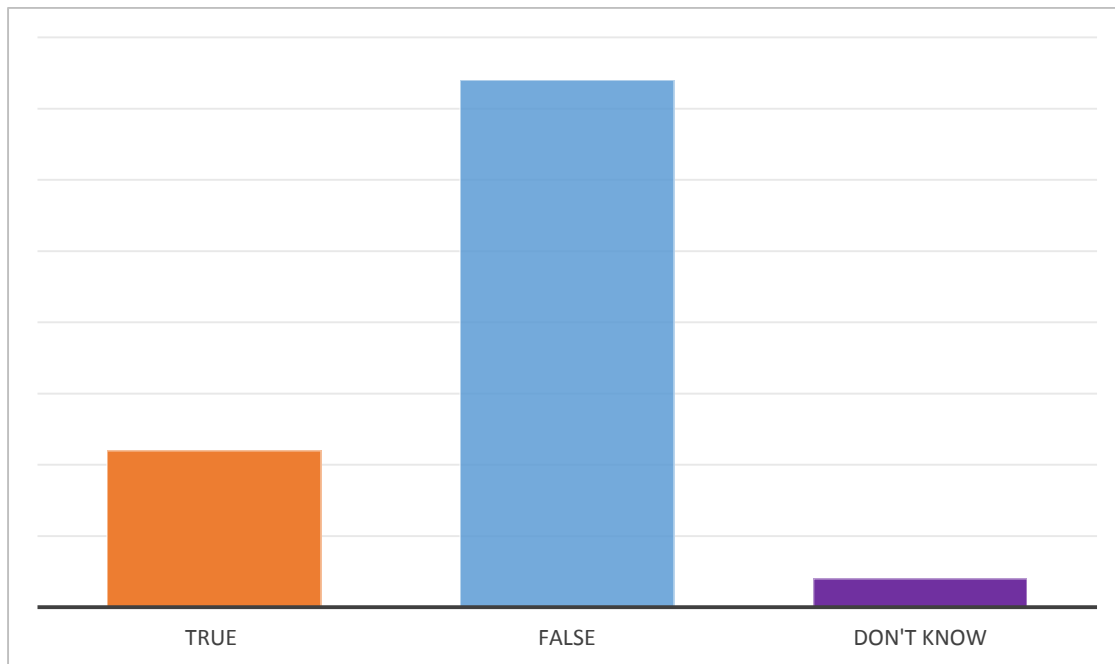
The midwives eighty-five percent (85%) indicated that, knowledge and experience of midwives have effects on maternal death. Eight percent (8%) thought otherwise whiles seven percent (7%) were not sure about the statement.

Seventy-two percent (72%) of the midwives affirmed that, negligence of midwives can cause maternal death. Twenty-five percent (25%) responded otherwise whiles three percent (3%) were not sure about the response.

Fifty-six percent (56%) of the midwives affirmed that, shortage of midwives at health facilities accounts for maternal mortality. Thirty-two percent (32%) responded otherwise whiles twelve percent (12%) were not sure about the response to give.

3.3.3 Attitude of midwives towards maternal deaths at Tema General Hospital

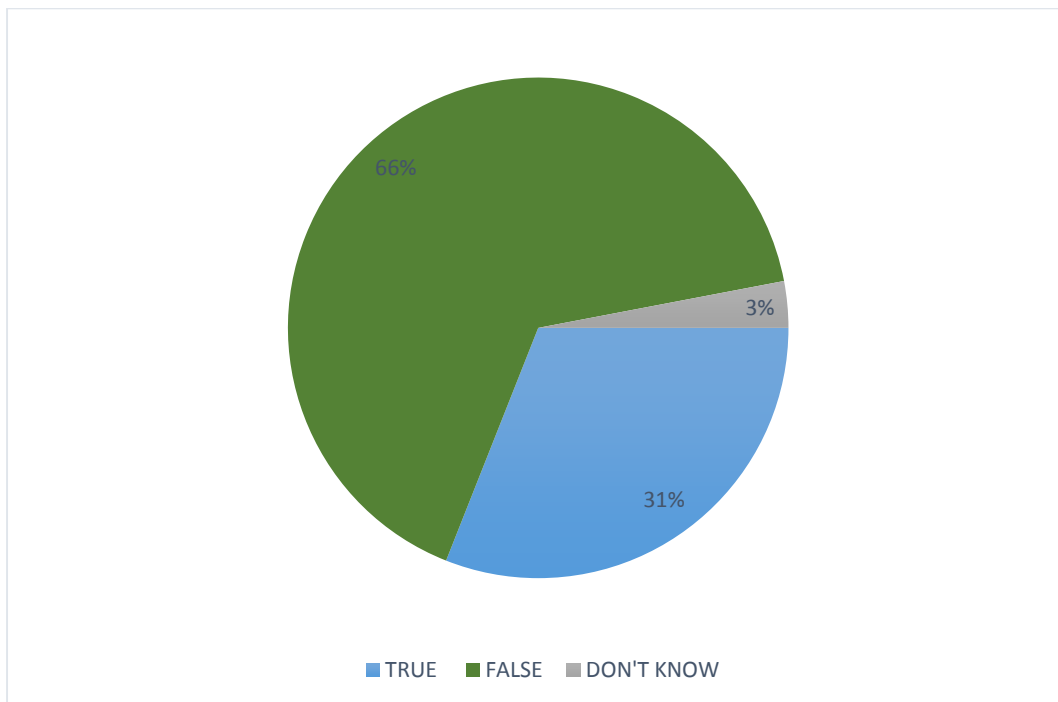
Figure 4: Maternal death is normal because it happens every time at the hospital.



Source: Field Data (2019)

Figure 4 shows that, seventy-four percent (74%) of the midwives do not consent that, maternal death is normal because it happens every time at the hospital. Twenty-two percent (22%) of them affirmed the statement whiles four percent (4%) did not know the response to the statement.

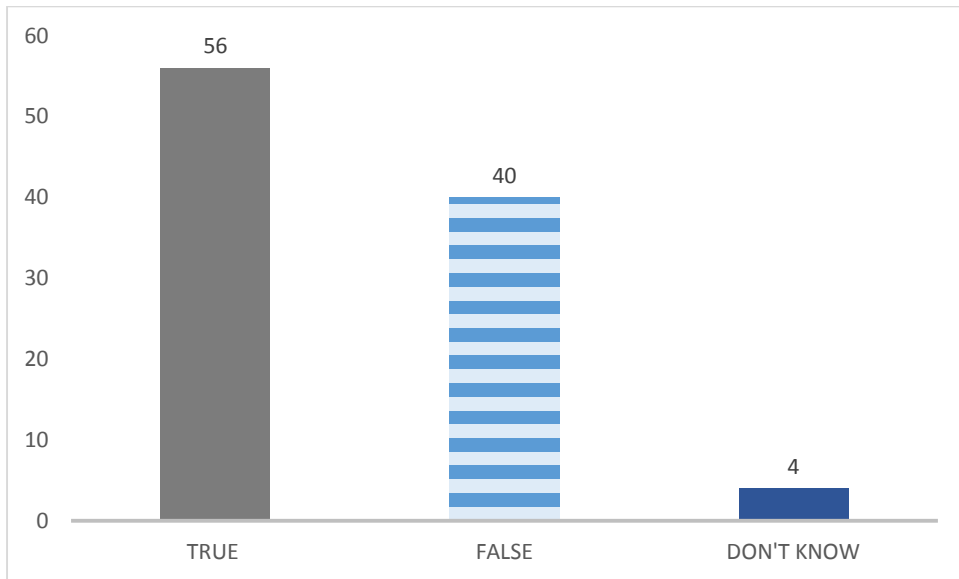
Figure 5: Pregnant women cause their own death due to non-attendant for antenatal services.



Source: Field Data (2019)

Figure 5 shows that, sixty-six (66%) of the midwives do not believe that, pregnant women cause their own death due to non-attendant for antenatal services. Thirty-one percent (31%) of them responded 'True' while three percent (3%) did not know the response to the statement.

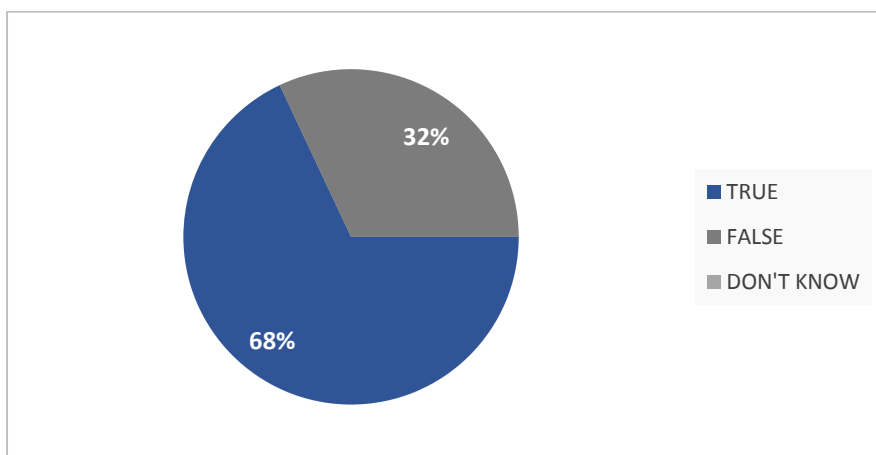
Figure 6: Midwives have no control over the occurrence of maternal death.



Source: Field Data (2019)

Responses from fifty-six percent (56%) of the midwives indicate that, they believe midwives have no control over the occurrence of maternal death. Forty percent (40%) of them do not believe so whiles four percent (4%) did not know the response to the statement.

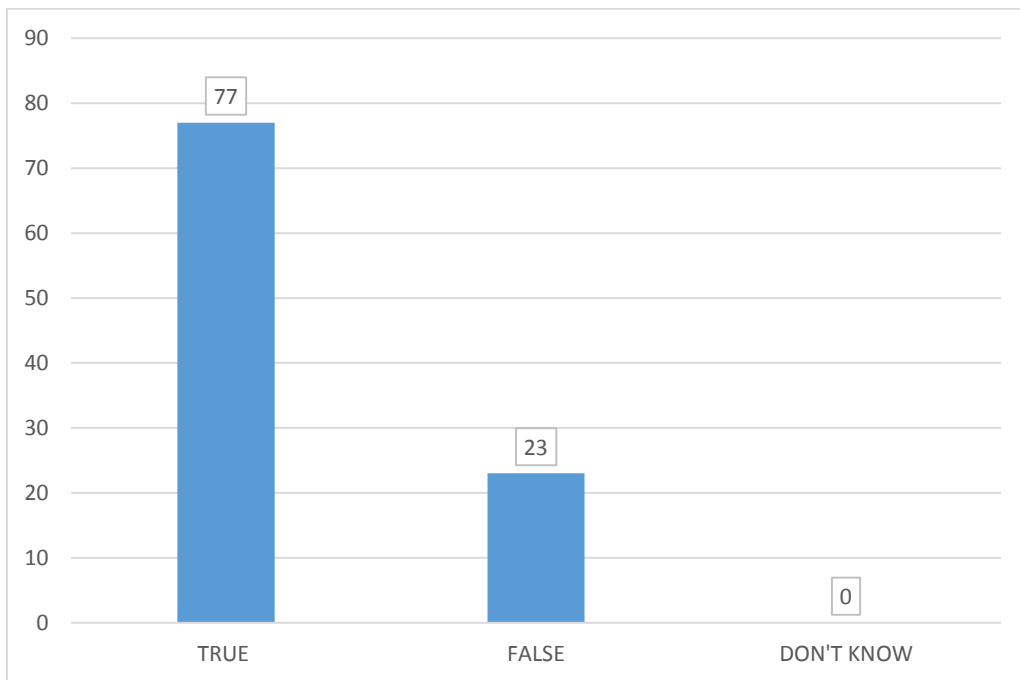
Figure 7: Pregnant women uses concoction instead of attending hospitals which causes their death.



Source: Field Data (2019)

Figure 7 reveals that, sixty-eight percent (68%) of the midwives believe that, pregnant women use concoction which causes their death. Thirty-two (32%) percent of them think otherwise.

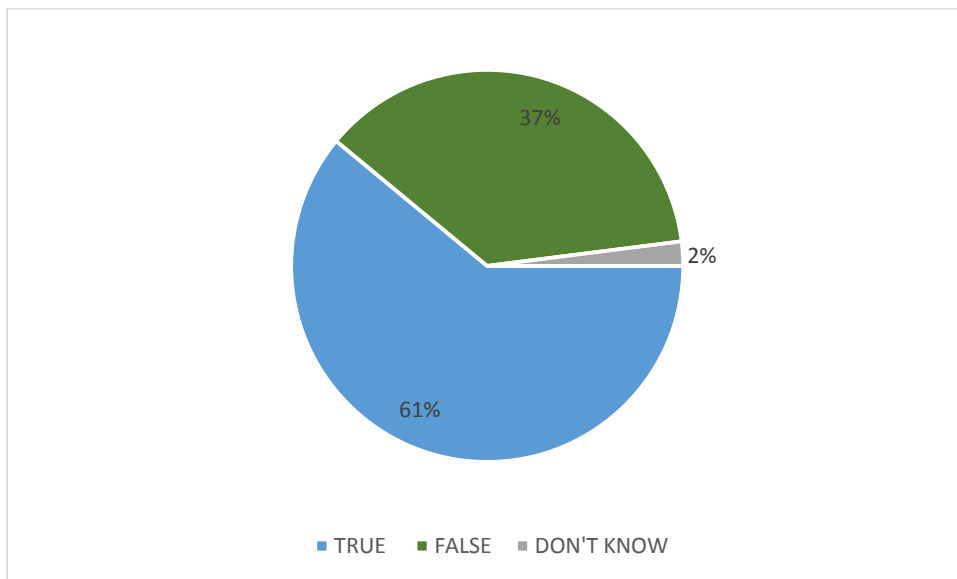
Figure 8: Midwives are not provided with the needed equipment to work which causes maternal death.



Source: Field Data (2019)

Responses obtained from seventy-seven percent (77%) of the midwives indicate that, they believe midwives are not provided with needed equipment to work which causes maternal death. Twenty-three percent (23%) of them do not think so.

Figure 9: Midwives are not properly motivated to give their best which increases maternal mortality.



Source: Field Data (2019)

Figure 9 indicates that, sixty-one percent (61%) of the midwives believe that, midwives are not properly motivated to give their best which increases maternal mortality. Thirty-seven percent (37%) did not believe so. Two percent (2%) did not know the response to the statement.

3.3.3 Preventive Practices of Midwives towards Maternal Deaths.

Table 4: Preventive practices of midwives towards maternal deaths.

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
I counsel pregnant women with health information in order to reduce maternal death.	80(80%)	20(20%)	0(0%)	0(0%)
I recommend good nutrition and drugs for pregnant women to prevent illnesses.	55(55%)	40(40%)	5(5%)	0(0%)
I sometimes visit pregnant women at homes to check on their condition.	14(14%)	22(22%)	54(54%)	10(10%)
I organize educational programmes to educate pregnant women through the media.	4(4%)	6(6%)	57(57%)	33(33%)
I join other midwives to go on community outreach to educate pregnant women on maternal deaths.	30(30%)	51(51%)	15(15%)	4(4%)

Source: Field Data (2019)

Table 4 shows that, a great majority eighty percent (80%) of the midwives strongly agreed that, they counsel pregnant women with health information in order to reduce maternal death. Twenty percent (20%) of them agreed to the same statement. None of them disagreed or strongly disagreed.

Further responses from fifty-five percent (55%) of the midwives indicates that, they strongly agree that they recommend good nutrition and drugs for pregnant women to prevent illnesses. Forty percent (40%) of them agreed while five (5%) disagreed to the statement.

Fifty-four percent (54%) of the respondents disagreed that, they sometimes visit pregnant women at homes to check on their condition. Twenty-two percent (22%) agreed while fourteen percent (14%) strongly agreed. Ten percent (10%) of them strongly disagreed.

Fifty-seven percent (57%) of the midwives disagreed that, they organize educational programmes to educate pregnant women through the media. Thirty-three percent (33%) strongly disagreed. Six percent (6%) agreed while four percent (4%) strongly disagreed. Responses from fifty-one percent (51%) of the respondents indicate that, they join other midwives to go on community outreach to educate pregnant women on maternal deaths. Thirty percent (30%) strongly agreed while fifteen percent (15%) disagreed. Four percent (4%) strongly disagreed.

3.4 Discussions

3.4.1 Background Information

Findings from the study indicate that, majority fifty-one percent (51%) of the midwives were between 26 and 39 years of age. This shows that, most of the midwives were in their middle ages. Most sixty-six percent (66%) of these midwives were married. Christians dominated the midwives, followed by Muslims. Most of the midwives have been working for more than 5 years.

3.4.2 General Knowledge of Midwives on Maternal Deaths

Findings further showed that, great majority ninety-two percent (92%) of the midwives responded in the affirmative that, death occurring from pregnancy related causes is called maternal death. Moreover, eighty percent (80%) of the midwives affirmed that, the use of Traditional Birth Attendants (TBA) can cause maternal death. Seventy-six percent (76%) of the midwives confirmed that, direct obstetric cause accounts for maternal death. Sixty percent (60%) of the midwives responded in the affirmative. All the midwives affirmed that, availability of ambulance services in hospital can reduce maternal death. The midwives eighty-five percent (85%) indicated that, knowledge and experience of midwives have effects on maternal death. Seventy-two percent (72%) of the midwives affirmed that, negligence of midwives can cause maternal death. Fifty-six percent (56%) of the midwives affirmed that, shortage of midwives at health facilities accounts for maternal mortality. The general responses indicate good knowledge level of the midwives.

3.4.3 Attitude of midwives towards maternal deaths at Tema General Hospital

Findings from the study showed that, seventy-four percent (74%) of the midwives do not consent that, maternal death is normal because it happens every time at the hospital. Sixty-six percent (66%) of the midwives do not believe that, pregnant women cause their own death due to non-attendant for antenatal services. Responses from fifty-six percent

(56%) of the midwives indicate that, they believe midwives have no control over the occurrence of maternal death. Findings further showed that, sixty-eight (68%) of the midwives believe that, pregnant women use concoction which causes their death. Seventy-seven percent (77%) of the midwives indicate that, they believe midwives are not provided with needed equipment to work which causes maternal death. Sixty-one percent (61%) of the midwives believe that, midwives are not properly motivated to give their best which increases maternal mortality. The attitude of the midwives is positive towards responding to maternal death issues.

3.4.4 Preventive Practices of Midwives towards Maternal Deaths.

Findings showed that, majority eighty percent (80%) of the midwives strongly agreed that, they counsel pregnant women with health information in order to reduce maternal death. The midwives fifty-five percent (55%) indicated that, they strongly agree to recommend good nutrition and drugs for pregnant women to prevent illnesses. Fifty-four percent (54%) of the respondents disagreed that, they sometimes visit pregnant women at homes to check on their condition. Fifty-seven percent (57%) of the midwives disagreed that, they organize educational programmes to educate pregnant women through the media. Responses from fifty-one percent (51%) of the respondents indicate that, they join other midwives to go on community outreach to educate pregnant women on maternal deaths. The findings showed that, the midwives employ various means in preventing maternal deaths.

3.5 Conclusion

The researchers have made the following conclusions from the findings of the study. General knowledge of midwives towards maternal death is essential in the execution of their duty. The general knowledge of the midwives is good. However, knowledge of the midwives need to be supported with positive attitude. From the study, the midwives have positive attitude towards maternal death. Maternal death is preventable and some of the measures indicated by the midwives include, counselling and education, community outreach programmes and availability of ambulances. It is therefore essential that, all stakeholders join in the fight against maternal death.

3.6 Recommendations

Based on the findings of the research, the study makes the following recommendations:

1. Pregnant women should be educated through antenatal clinics about their health and the unborn child in order to reduce maternal deaths.
2. Antenatal services should be made available and accessible in all health facilities to assist pregnant women and prevent maternal deaths.
3. Midwives should be fully educated about their work to avoid negligence and death of pregnant women and their unborn child.
4. Special counselling units should be made available for all pregnant women in all health facilities.
5. The family should support pregnant women in accessing antenatal services.
6. Midwives should be encouraged to build positive attitude towards their work and prevent maternal deaths.

7. Outreach programmes should be frequently organized by midwives in all communities especially remote areas for all pregnant women to benefit.
8. The Government in collaboration with the World Health Organization (WHO) should design training materials and guidelines for the midwives in order to prevent maternal death
9. Future studies should consider this study document when conducting research on maternal deaths and seek efforts in reducing maternal deaths.

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SECTION B: GENERAL KNOWLEDGE OF MIDWIVES ON MATERNAL DEATHS

Please tick [√] the appropriate answers

	YES	NO	NOT SURE
6. Death occurring from pregnancy related causes is called maternal death			
7. The use of Traditional Birth Attendants (TBA) can cause maternal death.			
8. Direct obstetric cause accounts for maternal death.			
9. Haemorrhage is also a cause of maternal death			
10. Availability of ambulance services in hospital can reduce maternal death.			
11. Knowledge and experience of midwives have effects on maternal death.			
12. Negligence of midwives can cause maternal death.			
13. Shortage of midwives at health facilities accounts for maternal mortality.			

SECTION C: ATTITUDE OF MIDWIVES TOWARDS MATERNAL DEATHS

Please tick [√] the appropriate answers

	TRUE	FALSE	DON'T KNOW
14. Maternal death is normal because it happens every time at the hospital.			
15. Pregnant women cause their own death due to non-attendant for antenatal services.			
16. Midwives have no control over the occurrence of maternal death.			
17. Pregnant women uses concoction instead of attending hospitals which causes their death.			
18. Midwives are not provided with the needed equipment to work which causes maternal death.			
19. Midwives are not properly motivated to give their best which increases maternal mortality.			

SECTION D: PREVENTIVE PRACTICES OF MIDWIVES TOWARDS MATERNAL DEATHS.

Please tick [√] the appropriate answers

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
20. I counsel pregnant women with health information in order to reduce maternal death.				
21. I recommend good nutrition and drugs for pregnant women to prevent illnesses.				
22. I sometimes visit pregnant women at homes to check on their condition.				
23. I organize educational programmes to educate pregnant women through the media.				
24. I join other midwives to go on community outreach to educate pregnant women on maternal deaths.				