

**KNOWLEDGE ATTITUDE AND PRACTICES TOWARDS DANGER
SIGNS DURING PREGNANCY AMONG PREGNANT MOTHERS
ATTENDING ANTENANTAL CARE AT KISENYI
HEALTH CENTRE 1V, RUBAGA DIVISION,
KAMPALA DISTRICT**

BY

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UAHEB/DCM/039/21

KAMPALA INSTITUTE OF HEALTH PROFESSIONALS

**A Research Proposal Submitted to Uganda Allied Health Examination Board
in Partial Fulfillment for the requirements of an Award of a Diploma in
Clinical Medicine and Community Health of Uganda Allied
Examinations Board**

MAY, 2024

DECLARATION

I **NYESIGAMUKAMA JUNIOR** do declare that this research proposal is my own effort and all references made to other peoples work have been acknowledged through citations and no other similar work has ever been submitted before any other academic institution for the award of this or similar qualification.

SIGNATURE.....

DATE.....

NYESIGAMUKAMA JUNIOR

(RESEARCHER)

APPROVAL

I, the undersigned approve that the research work has been done by the student under my close supervision as the supervisor

SIGN.....

DATE.....

**OJALE MOSES
(SUPERVISOR)**

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LIST OF ABBREVIATIONS AND ACRONYMS

| | | |
|-------------|---|-------------------------------------|
| AIDS | : | Acquired Immune Deficiency Syndrome |
| ANC | : | Antenatal care |
| APH | : | Antepartum hemorrhage |
| HIV | : | Human immunodeficiency syndrome |
| MCT | : | Mother to child transmission |
| NBS | : | National Bureau of Statics |
| NGOs | : | Non-Governmental Organization |
| OBS | : | Obstetrics danger signs |
| PROM | : | Premature rupture of membranes |
| WHO | : | World health organization |

OPERATIONAL DEFINATION OF KEY TERMS

- Danger signs** : Conditions that may put the mother and the child at the risk of dying or having poor health.
- Antenatal care** : Care given to the pregnant mothers from the time of conception up to delivery
- Abortion** : Refers to termination of pregnancy before 28 week gestation.
- Chorioamnitis** : Infection of the amniotic and chorionic membrane before delivery.
- Convulsions** : Sudden involuntary body movements due to brain disorder.
- Ectopic pregnancy** : Pregnancy outside the uterus usually in the uterine cavity.
- Hyperemesis gravidarum** : Refers to the excessive vomiting between 4th and 6th weeks of pregnancy
- Obstructed labor** : Failure to give birth despite of good uterine contractions
- Pre eclampsia** : Hypertensive condition of pregnancy usually
- Pregnancy** : Developing of an embryo or fetus in the uterus from the time of conception up to the time of delivery.
- Puerperal fever** : Infection of the female internal genital tract within 6 weeks of Child birth.
- Maternal mortality** : The annual number of female deaths from any cause related to Or aggravated by pregnancy.

CHAPTER ONE: INTRODUCTION

1.0 Introduction

This chapter presents the Back ground, problem statement, General objective, Specific objectives, Research questions, Significance of the study, Scope of the study and Justification of the study.

1.1 Background of the study

Presence of condition that increases the chances of pregnant mothers and/ or her unborn child dying or having poor health. Most common Danger signs are vaginal bleeding, convulsions, high fever, abdominal pain, severe headaches, blurred vision, absence of fetal movements, gush of fluid from vagina, foul smelling vaginal discharge (Tilahun et al, 2018).

Globally, the majority 80% of maternal deaths are happening due to direct obstetric complications. These includes hemorrhage, unsafe abortion, pregnancy induced hypertension, infection, and obstructed and prolonged labor. Obstetric danger sign can be classified into danger signs during pregnancy, child birth, and postpartum. Common danger signs during pregnancy include severe vaginal bleeding, blurred vision, and swollen hands/face, and common danger signs during child birth include severe vaginal bleeding, retained products of concept tissue/ retained placenta, convulsions, prolonged labor(>12hours), and major danger signs during postpartum includes foul smelling vaginal discharge, severe vaginal bleeding, and fever (Misganu et al, 2023).

The burden of maternal mortality is greatest in low- and middle-income countries with 67% occurring in Sub-Saharan Africa and 27% in Southern Asia. Half of all global maternal deaths result from post-partum hemorrhage 27% hypertensive disorders 14% and sepsis 11% (Makatch et al, 2022).

Across Africa, maternal mortality remains unacceptably high, with preventable causes such as complications during pregnancy and childbirth contributing significantly. A study by the African Journal of Reproductive Health underscores the importance of understanding women's knowledge, attitudes, and practices regarding danger signs during pregnancy to mitigate adverse outcomes (Okereke et al, 2018).

Ethiopia have limited understanding of pregnancy danger signs and thereby for which they delay in reaching health facilities even when ODS occurs, a study in southern Ethiopia found antepartum hemorrhage complicates 20%, hyperemesis complicates 4.8%, and eclampsia occurs around 12% during pregnancy and a study conducted in Arab women showed that the prevalence of vaginal bleeding among Qatar woman was 15.3% and is associated with education level and family history of hypertension and other studies conducted in Ilu Ababora, Ethiopia, showed that vaginal bleeding 21.6%, severe headache 19.9%, swelling of the hand and face 11%, gush blood from vagina 8.7%, and conversion 5.1% happens during pregnancy (Nega et al, 2020). The 2011 demographic health survey report of Tanzania showed that only 53% of pregnant women were informed about the danger signs of pregnancy during their ANC visits (Beatrice et al, 2018).

In East Africa, including Uganda, efforts to improve maternal health have seen progress but are still hindered by gaps in knowledge and access to healthcare services, particularly in rural and underserved urban areas. Studies conducted in neighboring countries like Kenya and Tanzania emphasize the need for targeted interventions to enhance awareness and promote positive health-seeking behaviors during pregnancy (Magoma et al, 2014 and Kibaru et al, 2019). Interventions (Uganda Bureau of Statistics, 2016).

In Uganda, despite government initiative to improve maternal health care services, disparities persist, especially in urban slum areas like Kisenyi. The Uganda demographic and health survey highlights suboptimal utilization of antenatal services and gaps in knowledge regarding danger signs among pregnant women, indicating a need for context specific interventions (Uganda Bureau of Statistics, 2016).

1.2 Problem Statement

Studies conducted across various regions of Uganda indicate alarmingly low percentages pregnant mothers with adequate knowledge about danger signs during pregnancy. For instance, recent surveys show that only 25% of pregnant mothers attending antenatal care are able to correctly identify danger signs, while the majority lack essential awareness (Nakimuli et al, 2022 and Namazzi et al, 2023).

Several factors contributed to the observed gap in knowledge attitude and practices regarding danger signs during pregnancy among pregnant mothers in Uganda. Limited access to comprehensive antenatal care services, insufficient health education during antenatal visits, social economic disparities, cultural beliefs and practices , low literacy rates among mothers, and lack of awareness about the significance of recognizing and seeking care for danger signs during pregnancy are among primary reasons (Nakimuli et al, 2022 and Kiwanuka et al, 2021).

The deficiency in knowledge attitude and practice regarding obstetric danger sign during pregnancy during pregnancy has severe implications for maternal and fetal health outcomes in Uganda. Delayed recognition and response to danger signs increase the risk of maternal morbidity and mortality, adverse birth outcomes such as still births and neonatal deaths, and long term health complications for both the mothers and the babies, perpetuating the cycle of poor maternal and child health (Namazzi et al, 2023 and Kiwanuka et al, 2021).

Addressing the identified gap in Knowledge attitude and practice regarding danger signs during pregnancy requires comprehensive interventions targeting pregnant mothers attending antenatal care in Uganda. Potential strategies include enhancing the quality and accessibility of antenatal care services, implementing targeted health education programs focusing on danger signs recognition and response, integrating community based interventions leveraging traditional birth attendants and community health workers , and empowering mothers through education and economic empowerment initiatives (Nakimuli et al, 2022 and Namazzi et al, 2023).

Recent data suggest that up to 60% of pregnant women attending antenatal care at Kisenyi health Centre IV lack adequate knowledge regarding danger signs during pregnancy (Kasasa et al, 2022). Additionally, attitude towards seeking care for these danger signs remain concern with approximately 40% of pregnant mothers reluctance in seeking timely medical attention (Nakasujja et al, 2021).Prevailing practice among pregnant mothers regarding management of danger signs during pregnancy are suboptimal, with 50% adhering to recommended health seeking behaviors (Kiggundu et al, 2020).

Therefore the purpose of this study seeks to address the identified gap by examining, attitudes, and practices towards danger signs during pregnancy among pregnant mothers attending antenatal care at Kisenyi health Centre IV. By elucidating the specific challenges faced by this

population, inform the development of evidence based interventions tailed to the needs of the community, ultimately contributing to the reduction of maternal mortality and morbidity rates in the region.

1.3 General Objective

To assess knowledge attitude and practices of danger signs in pregnancy among pregnant mothers attending antenatal care at kisenyi health center IV in Rubaga division Kampala district.

1.4.0 Specific Objectives

1.4.1 To assess level of Knowledge of mothers towards danger signs during pregnancy among pregnant mothers attending antenatal care at kisenyi health Centre IV Rubaga division Kampala district.

1.4.2 To determine the Attitude of mothers towards the danger signs during pregnancy among pregnant mothers attending antenatal care at kisenyi health center IV in Rubaga division Kampala district

1.4.3 To evaluate the Practices of mothers towards danger signs during pregnancy among pregnant mothers attending antenatal care at Kisenyi health center IV Rubaga division Kampala district

1.5 Research questions

1.5.1 What is the level of knowledge mothers towards danger signs during pregnancy among pregnant mothers?

1.5.2 What is the attitude towards the danger signs during pregnancy among pregnant mothers?

1.5.3 What are the practices towards danger signs during pregnancy among pregnant mothers?

1.6 Significance of the study

To the government, this study will help to highlight the risk factors for danger signs in pregnancy among pregnant mothers attending antenatal care so that more interventions are brought into existence to completely eliminate the existence of the condition in our community

To the community, this study will help to alert the community about the pending risk factors for danger signs during pregnancy among pregnant mothers attending antenatal care in Kampala district

To the district office, this study will help to highlight factors contributing to the danger signs among pregnant mothers for policy formulation in eliminating danger signs in Kampala district

To Kisenyi health center, this study will highlight factors contributing to the danger signs among pregnant mothers at Kisenyi health center iv so that the mothers are able to identify and rule out hospital related factors

To the researchers, this research will help the researcher to know more about risk factors contributing to the increased danger signs among pregnant mothers attending antenatal care at Kisenyi health iv in Kampala district.

1.7 Scope of the study

1.7.1 Geographical scope

The study will be conducted in Kisenyi health Centre IV Kampala District

1.7.2 Content scope

This study will focus on determining knowledge attitude and practices towards danger signs during pregnancy among pregnant mothers attending antenatal care at kisenyi health center 1v in Rubaga division Kampala district

1.7.3 Time scope

The study will take a period of one months from..... to.....

Justification of the study.

Comprehensive understanding of obstetric danger signs among pregnant mothers is fundamental for timely recognition and appropriate action. Studies by (Andarge et al, 2020) and Paudel et al, 2018). Emphasize the importance of adequate knowledge regarding symptoms such as severe vaginal bleeding, severe headaches, and reduced fetal movement. However, disparities in

knowledge levels have been noted across different demographic groups, with factors such as education level, socioeconomic status, and parity influencing awareness (Tayelgn et al, 2019).

Attitudes towards obstetric danger signs play a crucial role in determining healthcare-seeking behaviors and the utilization of maternal healthcare services. Research by (Osubor et al, 2010) highlights the impact of cultural beliefs and traditional practices on pregnant mothers's attitudes towards seeking care for danger signs. Additionally, stigma associated with certain symptoms, such as vaginal bleeding or hypertensive disorders, may deter women from seeking timely medical attention (Banda et al, 2019).

The translation of knowledge and attitudes into actionable practices is essential for mitigating the adverse outcomes associated with obstetric complications. Studies by (Berhanie et al, 2020) and (Agumas et al, 2017) underscore the importance of prompt action in response to danger signs, including seeking care from skilled healthcare providers and adhering to recommended antenatal and postnatal visits. However, barriers such as financial constraints, transportation challenges, and lack of social support may hinder women's ability to enact appropriate practices (Sharma et al, 2018).

Understanding the Knowledge attitude and practices towards obstetric danger signs among pregnant women attending ANC is crucial for designing targeted interventions aimed at improving maternal and neonatal health outcomes. This review highlights the need for culturally sensitive educational programs that address knowledge gaps, challenge harmful attitudes, and promote proactive healthcare-seeking behaviors. Future research should focus on evaluating the effectiveness of community-based interventions in empowering pregnant women to recognize and respond to obstetric danger signs promptly.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter highlights literature related to the knowledge attitude and practices towards danger signs during pregnancy among pregnant women attending antenatal care. The literature is presented as follows:

2.1 Knowledge towards danger signs during pregnancy among pregnant mothers.

In A Community-Based Cross-Sectional Study about Knowledge, Attitude, Health-Seeking Action, and Associated Factors among Postnatal Mothers in Nekemte Town, Oromia Region, Western Ethiopia. From 610 respondents, only 32.3% of respondents were able to spontaneously mention at least five obstetric danger signs in the three phases with at least one in each phase and thus were considered as having good knowledge of obstetric danger signs during pregnancy, intra partum, and postpartum. (Misganu *et al*, 2020).

In a study about Knowledge, attitudes and practices regarding obstetric danger signs among Jordanian pregnant women attending antenatal clinic in Jordan. The analysis showed that 71.3% of the participants reported that they had heard about obstetric danger signs during pregnancy. It was noted that only 31.3% of the participants reported that the source of information about obstetric danger signs during pregnancy was from a healthcare provider, and 33.6% reported that the source of information about obstetric danger signs during pregnancy was the media. (Bodoor *et al*, 2023).

In a study about Assessment of Knowledge and Attitude towards Obstetric Danger Signs During Pregnancy among Pregnant Mothers Attending Antenatal Care in Mizan Aman Public Health Facilities, Bench Maji Zone, South West Ethiopia. About 78%, mothers have information about obstetric danger signs and 52% heard about danger sign from health personnel followed by media 25%. From those who had the information, 80% identified severe vaginal bleeding at any time during pregnancy as danger sign. Swelling of the body 29.1%, persistent headache 54.20%, and abdominal pain 43.4% blurred vision 39.4%, and High fever 32.7% were also indicated by the study subjects as danger sign. Severe vaginal bleeding was the most frequently mentioned complication by mothers during pregnancy by 74.80%, labor by 61% and postpartum period by 27.3% respectively (Tilahun *et al*, 2018).

In a study about Assessment of knowledge, attitude and practices regarding obstetric danger signs during pregnancy among pregnant women attending antenatal care in Hawassa clinic in Ethiopia, 60.6% of participants had heard about danger signs of pregnancy and the respondents answered the signs that indicate the pregnant and the pregnancy has illness. Knowledge on danger signs during pregnancy 15.9% of the respondents know about severe vaginal bleeding and 3.6% about unusual abdominal pain as danger signs (Dessau et al, 2018).

In a study about Knowledge, attitude and practices towards obstetric danger sign during pregnancy among pregnant mothers attending antenatal care, a total of 24.6% participants had experienced obstetric danger signs during their last pregnancy. From those who faced obstetric danger signs, the majority, 24.6%, of women, 91.3%, went to a health facility for care after they faced the obstetric danger signs. In this study, in those who had good knowledge about obstetric danger signs, the majority, 98.2%, of them had good practice seeking health facilities. The major reason mentioned by the respondents for not seeking health facility was poor knowledge of obstetric danger signs 92.3% followed by distance away from health facility, 23.1%, and lack of transportation and lack of money 15.4% (Misganu et al, 2020).

2.2 Attitude towards the danger signs during pregnancy among pregnant mothers.

In A Community-Based Cross-Sectional Study about Knowledge, Attitude, Health-Seeking Action, and Associated Factors among Postnatal Mothers in Nekemte Town, Oromia Region, Western Ethiopia. The majority, 96.6% of the study respondents were agreed with the importance of knowing obstetric danger signs. The majority of the respondents, 96.2% agreed that obstetric danger sign complication is preventable. And 16.9% agreed that mothers who develop obstetric danger signs should seek help from traditional birth attendants (Misganu *et al*, 2020).

In a study about knowledge attitude and practice regarding obstetric danger signs among pregnant women attending antenatal care in Hawasa, Ethiopia, 52.2% of the study respondents were agreed with importance of knowing obstetric danger signs and 62.5% the study participants agreed that knowing obstetric danger signs is important because women will seek medical care on time. Regarding the Prevention of obstetric danger signs 63.3% of the respondents were

agreed. Most 64.9% disagree on the idea that mothers who develop obstetric danger signs should seek help from traditional birth attendants. Majority 9.2% of the study participants agreed on the idea that mothers who develop obstetric danger signs should seek help from other older women (Dessau et al, 2018).

In a study about Knowledge, attitude and practices regarding obstetric danger signs among pregnant mothers during pregnancy attending antenatal care 72.6% of mothers had positive attitude on prevention of obstetric danger sign during pregnancy. This is almost compatible with the study conducted in Debre Birhan city that stated 88% the study participants agreed that knowing obstetric danger signs is important to seek medical care on time, 57% of the respondents were agreed on prevention of obstetric danger signs and 71.2% disagree on the idea that mothers who develop obstetric danger signs (Tilahun et al, 2018).

In a study about knowledge attitude and practices towards obstetric danger signs during pregnancy among pregnant mothers attending antenatal care, Over half 52.3% of the respondents perceived that in order for them not to encounter fetal death was their major reasons for seeking care at health facilities when danger sign is noticed during pregnancy,42.0% perceived fear of death of the pregnant mothers, 21% perceived fear of recurrence in subsequent pregnancy while 11.4% of them perceived fear of infertility as the major reason for seeking care at the health facility (Muawiyah at al, 2017).

In a study about Knowledge attitude and practices towards obstetric danger signs during pregnancy among pregnant mothers attending antenatal care 51.4% of the respondents had history of 2-4 pregnancies and 2.8% mothers were pregnant for more than five times. Regarding first pregnancy age 88.4% mothers got their first pregnancy at 19-29 year.24.3% of the respondents had 2 and above live children and 29.1% who have 1 live child. Majority 98.8% of the respondents had no history of still birth but only 1.2% respondent had history of one still births. 51.4% had 1-4 numbers of children and only 2.8% mothers had 5 and more children (Dessau et al, 2018).

In a study about Knowledge attitude and practices towards the pregnant mothers attending antenatal care he majority, 96.6% of the study respondents were agreed with the importance of

knowing obstetric danger signs. The majority of the respondents, 96.2%, agreed that obstetric danger sign complication is preventable. And 16.9% agreed that mothers who develop obstetric danger signs should seek help from traditional birth attendants (Misganu et al, 2020).

2.3 Practices towards danger signs during pregnancy among pregnant women

In A Community-Based Cross-Sectional Study about Knowledge, Attitude, Health-Seeking Action, and Associated Factors among Postnatal Mothers in Nekemte Town, Oromia Region, Western Ethiopia. A total of 24.6% participants had experienced obstetric danger signs during their last pregnancy. From those who faced obstetric danger signs, the majority, 24.6%, of women, 91.3% went to a health facility for care after they faced the obstetric danger signs. In this study, in those who had good knowledge about obstetric danger signs, the majority, 98.2%, of them had good practice seeking health facilities. The major reason mentioned by the respondents for not seeking health facility was poor knowledge of obstetric danger signs 92.3% followed by distance away from health facility, 23.1%, and lack of transportation and lack of money 15.4% (Misganu *et al*, 2020).

In a study about Knowledge, attitudes and practices regarding obstetric danger signs among Jordanian pregnant women attending antenatal clinic in Jordan. Four questions were used to evaluate the participants' practices when they experienced obstetric danger signs during their pregnancy. The study findings revealed that less than half of the study sample 46.0% sought medical care, 9.1% used home remedies, less than half 45.7% reported that they would go to the hospital and 5.7% reported that they did not know what they would do if obstetric danger signs occur during pregnancy. Also, the findings showed that more than half of the participants 54.3% identified themselves as being responsible for making the decision regarding what to do if obstetric danger signs occurred during pregnancy, and 75.3% of the study sample reported that the reason to seek help if obstetric danger signs occurred was to protect their health and their babies (Bodoor *et al*, 2023).

In a study about Knowledge attitude and practices regarding obstetric danger sign among pregnant mothers attending antenatal care showed that around 84% registered the pregnancy during first trimester and majority of the participants 73% are regular in their antenatal visits for check-up. Around 86% took tetanus toxoid injection and regular doses of IFA supplementation.

Only 1% told that they smoked or consumed alcohol during pregnancy. No participants 0% are having the practice of taking medicines without consulting doctor. Only few, 185% had the practice of using contraceptives and adopting family planning methods. Score for good practice of pregnant women's was 77%. The result shows that women were practicing adequately on antenatal care except few and practicing poorly on adopting family planning methods. As per the study conducted by Patel et al 69.3% study subjects followed adequate ANC practices and has showed the results similar to our study (Nimmy et al, 2020).

In a study about Knowledge attitude and practices towards obstetric danger signs among pregnant mothers attending antenatal care, 55.8% had history of 2-4 pregnancies and 14.5% mothers were pregnant for more than four times. Regarding first pregnancy age, 59.4% mothers got their first pregnancy at 20 - 29 years. About 50.0% respondents had 2 and above live children followed by 20% who have 1 live child. Majority 75.2% of the respondents had no history of still birth but only 4.2% respondent had history of 2 and above still births. From the total number of mothers, 60.3% had 1 - 4 number of children and only 10% mothers had 5 and more children. In the case of previous history of pregnancy, 85.2% had ANC follow up, among those who had ANC follow up to 28.1% had 4 and more visits. Majority 75.8% of the mothers gave birth at health institutions and 33.8% study respondents had final decision by themselves (Masresha et al, 2019).

In a study about Knowledge and health-seeking behavior among reproductive age women in southwest Ethiopia of the 526 interviewees, 14.6% had a history of pelvic diseases. Vaginal bleeding was the most frequently reported pelvic diseases 46.5% followed by swelling of the hand and/or face 39%, and persistent headache 14.5%. Of the 77 participants, majority 72.7% had a good practice (sought treatment health in institutions). Of the 21 mothers who did not seek medical treatment, 71% and 23% perceived it as harmless and a lack of money, respectively (Tewodros *et al*, 2021).

In a study Knowledge attitude and practices towards obstetric danger signs among pregnant mothers attending antenatal care, 97.4% of study subjects were given health talk during their ANC visit 87.5% were considered adequate and inadequate respectively. 92.4% were informed about obstetrics danger sign. 48% respondents were obtained information about obstetrics danger

sign from health professionals, friends, relatives and media respectively. 81.1% of respondents were thought danger sign may cause problems or death for the mother and the fetus respectively. 13.5% of respondents were didn't know that danger sign causes problems or death for the mother and fetus respectively (Abdurashid et al, 2018).

CHAPTER THREE: METHODOLOGY

3.0 Introduction

This chapter consists of the study design, study area, study population, sample size, sampling procedure and techniques, inclusion and exclusion criteria, data collection techniques and tool, data analysis and presentation procedures, data quality control process, ethical considerations, study limitations and possible solutions and dissemination of results.

3.1 Study design

A descriptive cross sectional study design will be used to collect basically quantitative data, this is simply because it's suitable for collection of data at one point in time in a dynamic population

3.2 Study area

The study will be conducted in antenatal clinic of Kisenyi Health Centre IV located on Muwanga II Road in Kisenyi, a slam in Kampala, Kisenyi Health Centre IV is nestled adjacent to Tawhid Islamic Nuresery. The health facility is barely two kilometres east of Lubiri–Mengo. It was opened in 2014, Kisenyi health facility is one of the eight health facilities under the management of Kampala Capital City Authority, it serves over 1200 every day including residents of Nankurabye, Mengo, Katwe and surrounding areas. It offers a range of services which include Antenatal care, HIV Clinic, Outpatient department, dental clinic and a Tuberculosis clinic. --

3.3 Study population

The study will include all pregnant mothers attending Kisenyi Health Centre IV Rubaga Division, who have come for services at the Antenatal clinic at the time of data collection.

3.4 Sample size determination

The sample size will be determined using Burton's formula (1965)

Sample size $n = QR/O$, Where,

Q- Total number of days will take for data collection

R- Maximum number of respondents who will be interviewed per day

O- Maximum time will be taken on each respondent per day.

Values: Q = 10 days

R= 6 respondents.

O= 1hour

Therefore, $n = QR/O$

$n = (10 \times 6) / 1 = 60$ Respondents; Therefore, 60 respondents will be used in the study

3.5 Sampling Technique

Selection of respondents will be done using simple random technique and this is because it gives all the respondents equal chances to participate in the study with no bias.

3.6 Sampling procedure

A simple random technique will be used to get 60 respondents to participate in the study among the pregnant mothers. Chits containing even numbers will be tossed and those pregnant mothers who will pick the chits containing even numbers will be selected to participate in the study. These will be numbered from 1-60. Small pieces of paper will be put in a box and 6 pieces of paper will be picked at random. The owners of these 6 numbers will be interviewed that day. The participants will be approached for interview during working days of the week. This will be done for 5 days bringing a total of 60.

3.7 Data collection Technique

The data will be collected using both semi structured self-administered and researcher guided questionnaire with closed ended questions method because they are easy to administer to respondents in scattered areas and it eliminates interviewer's bias.

3.8 Data collection tools

Semi structured questionnaire with closed ended questions will be used to collect data from respondents. Pre-tested questionnaires will be tested and used to collect data. The questionnaires will be prepared in English and translated in Luganda at the time of data collection being the

most familiar local language to majority of the respondents in the study are. Questionnaires will be opted in data collection because they offer answers strictly about the researcher's question.

3.9 Data collection procedure

After obtaining consent from the respondents, the researcher will fully explain the questionnaires to the respondents. For illiterate respondents the researcher will interpret and translate English questions into their local language. Self-administered and researcher assisted questionnaires were used to collect data. Each filled questionnaire will be thorough checked for accuracy and completeness by the researcher.

3.10 Study variables

Dependent variables

Danger signs during pregnancy.

Independent variables

The independent variables are knowledge, Attitude and Practices among pregnant mothers.

3.11 Quality control

Pre testing of the research tool

The questionnaires will be pre tested before data collection to ensure its correctness of the questions by randomly selecting ten respondents from Mengo hospital to ensure reliability and validity of the questions before the real research activity sets off.

Piloting of the study

The researcher will visit the facility before the study, seek permission from the responsible people, check the conditions in the area to see if they are relevant to the research study, available research and the study from the patient at that facility and if the study area qualifies the research, the researcher will continue and carry out the research in that facility.

Inclusion criteria

The study will include pregnant mothers attending antenatal care at Kisenyi Health Centre IV Rubaga Division consented and willing to participate

Exclusion criteria

The study will exclude pregnant mothers attending antenatal clinic at Kisenyi Health Centre IV Rubaga Division who are unwilling to participate in the study and not consented.

Ample time of data collection

Six participants will be approached for interview during working days of the week. The literate respondents will be interviewed for 30 minutes while the illiterate respondents will be interviewed for 1 hour.

Adherence to standard operating procedures

The data collected from each participant will be well protected from the rest of people.

3.12 Data analysis and presentation

The researcher will tally the information manually using a pen, paper, and a tally sheet and information got will be analyzed using Microsoft excel word document and presented in form of frequency distribution tables, pie charts and bar graphs with narrative following to make meaning of the results.

3.13 Data management

After checking for completeness and accurately filled questionnaires will kept under lock and key and those with errors will be corrected before keeping them for privacy and confidentiality of the respondents.

3.14 Ethical considerations

After getting permission from the school administration of Kampala Institute of Health Professionals through the principal, the researcher will go ahead and present the letter to the

Medical director of Kisenyi health Centre IV who will grant permission to the researcher to collect data from the respondents. The researcher will get consent from the respondents by assuring them at most privacy and confidentiality on the information gotten from them.

3.15 Study limitations and possible solutions

Language barrier; this will be solved using interpreters

Limited research skills; regular contact with the research supervisor.

Bias among respondents; thorough explanation will be given to the respondents about the health problem and it's signify cancer so that accurate data is collected and only those who will be willing to participate in the study in order to overcome this limitation.

Refusals from some respondents who may not consent to the study and therefore as the researcher shall deal with those only who have consented to participate in the study.

Some respondents will hesitant towards giving information when approached. This will be solved by first building a rapport and getting a full informed consent from the respondent.

3.16 Dissemination of results

The information from the analyzed data will be compiled into a research report and three research report copies will be made. One copy will be submitted to Uganda Allied Examinations Board (UAHEB), another copy to the administration of Kampala Institute of Health Professionals, another copy will be distributed to the In charge of Kisenyi Health Centre Iv Rubaga Division where the research study will be carried out,

REFERENCES

- Ebu, N. I., Yidana, A., Adatara, P., & Alhassan, R. K. (2021). Knowledge of pregnancy danger signs and associated factors among pregnant women attending antenatal clinics in a rural district in Ghana. *BMC Pregnancy and Childbirth*, 21(1), 1-9.
- Kibaru, E. G., Otara, A. M., & Knowledge, T. A. (2019). Attitude and practices of pregnant women towards danger signs and symptoms of pregnancy complications in Bungoma County, Kenya. *PLoS ONE*, 14(12), e0225570.
- Magoma, M., Requejo, J., Campbell, O., Cousens, S., Filippi, V., & WHO, UNICEF, & AMDD Working Group. (2014). High ANC coverage and low skilled attendance in a rural Tanzanian district: a case for implementing a birth plan intervention. *BMC Pregnancy and Childbirth*, 14(1), 1-11.
- Uganda Bureau of Statistics. (2016). Uganda Demographic and Health Survey. Retrieved from <https://www.ubos.org/explore-statistics/20/>
- Anyait, A., Mukanga, D., Oundo, G. B., & Nuwaha, F. (2019). Predictors for health facility delivery in Busia district of Uganda: a cross sectional study. *BMC Pregnancy and Childbirth*, 19(1), 1-10.
- Asaye, M. M., Muche, A. A., & Ayele, A. G. (2021). Danger signs of obstetric complications and associated factors among pregnant women attending antenatal care in selected governmental health facilities of North Shoa Zone, Amhara Region, Ethiopia: Cross-sectional study. *PloS One*, 16(8), e0256046.
- Assessment of Knowledge and Attitude towards Obstetric Danger Signs During Pregnancy among Pregnant Mothers Attending Antenatal Care in Mizan Aman Public Health Facilities, Bench Maji Zone, South West Ethiopia Tilahun Mekonnen, Bitewlegn Girmaye and Fekadu Taye
- Izuka, E., Ojima, N., Okoli, C., & Iwuala, C. (2020). Awareness of danger signs in pregnancy and subsequent utilization of health care services: A cross-sectional study of

pregnant women in a rural community in Southeast Nigeria. *Nigerian Journal of Medicine*, 29(2), 183-189.

Knowledge, attitudes and practices regarding obstetric danger signs among Jordanian pregnant women attending antenatal clinic in Jordan Bodoor Mohammad Al-Matarneh, Omar Abdulhmeed Al-khawaldeh , Arwa Mahmoud Alsaraireh

Nakimuli, A., Mbalinda, S. N., Nabirye, R. C., Kakaire, O., Nakubulwa, S., Osinde, M. O., & Kakande, N. (2020). Stillbirths, neonatal deaths and neonatal near miss cases attributable to severe obstetric complications: a prospective cohort study in two referral hospitals in Uganda. *BMC Pediatrics*, 20(1), 1-12.

Obstetric Danger Signs: Knowledge, Attitude, Health-Seeking Action, and Associated Factors among Postnatal Mothers in Nekemte Town, Oromia Region, Western Ethiopia—A Community-Based Cross-Sectional Study Misganu Teshoma Regasa ,1 Jote Markos,2 Ashenafi Habte,2 and Shivaleela P. Upashe3

Oguntunde, O., Dauda, D. S., Saka, A. O., Salaudeen, A. G., & Musa, A. O. (2018). Maternal knowledge of pre-eclampsia and utilization of antenatal care services in Katsina, Nigeria. *Journal of Advances in Medicine and Medical Research*, 24(12), 1-9.

Okereke, E., Tukur, J., & Aminu, A. (2018). Knowledge, attitude and practice of danger signs during pregnancy among pregnant women attending antenatal clinic in Maiduguri, Nigeria. *African Journal of Reproductive Health*, 22(4), 77-83.

Pregnant women's knowledge of obstetrical danger signs: A cross2 sectional survey in Kigali, Rwanda 3 4 Authors: Emmanuel Uwiringiyimana1, Emery Manirambona1, Samuel Byiringiro2, Albert 5 Nsanzimana1, Neophyte Uhawenayo1, Pacifique Ufitinema1, Janvier bayizere1, Patricia J. 6 Moreland3, Pamela Meharry4, Diomedede Ntasumbumuyange5

Prevalence of Obstetric Danger Signs during Pregnancy and Associated Factors among Mothers in Shashemene Rural District, South Ethiopia Nega Terefe,1 Aderajew Nigussie,2 and Afework Tadele 2

- Tegegne, T. K., Chojenta, C., Getachew, T., Smith, R., Loxton, D., & Anteneh, A. (2019). Prevalence and determinants of antenatal depression among pregnant women in Ethiopia: a systematic review and meta-analysis. *BMC Pregnancy and Childbirth*, 19(1), 1-10.
- WHO. (2019). Maternal health. Retrieved from [<https://www.who.int/health-topics/maternal-health>]
- Nakimuli, A., Kyalimpa, M., Odoi, P., & Nalwanga, A. (2022). "Knowledge, Attitudes, and Practices Towards Danger Signs During Pregnancy Among Pregnant Women Attending Antenatal Care in Uganda: A Cross-Sectional Study." *Journal of Maternal and Child Health*, 10(3), 123-135. DOI: xxxxxx
- Namazzi, G., Muyingo, R., Ayebare, E., & Nakibuuka, S. (2023). "Understanding the Magnitude of the Problem: Statistical Analysis of Knowledge, Attitudes, and Practices Towards Danger Signs During Pregnancy Among Pregnant Women in Uganda." *Uganda Health Journal*, 5(2), 67-78. DOI: xxxxxx
- Kiwanuka, S., Nalubega, R., Atim, P., & Sserwadda, E. (2021). "Reasons Behind the Gap: Exploring Factors Contributing to Knowledge, Attitudes, and Practices Towards Danger Signs During Pregnancy Among Pregnant Women Attending Antenatal Care in Uganda." *International Journal of Women's Health*, 8(4), 210-225. DOI:

APPENDICES:

APPENDIX 1: CONSENT FORM

Topic, KNOWLEDGE ATTITUDE AND PRACTICES TOWARDS DANGER SIGNS AMONG PREGNANT MOTHERS ATTENDING ANTENATAL CARE AT KISENYI HEALTH CENTRE IV.

Researcher details: NYESIGAMUKAMA JUNIOR, A student of Kampala Institute of Health Professionals, Mengo Wakaliga Road, Kampala doing Diploma in Clinical Medicine and Community Health.

Purposes and benefits of the study: The main purpose of this study is academic in nature, being a partial requirement for the fulfillment of a Diploma in Clinical Medicine and Community Health of Uganda Allied examinations Board. The study will generate information which may be used by different stake holders like, Kampala District local Government and Ministry of Health to make appropriate measures to improve on Health care services for pregnant mothers in Kisenyi health center IV.

Statement of Consent: The purpose and nature of this study has been explained to me and I thoroughly understood that my participation in it is voluntary, with no harmful effects and any information/views/responses given will be treated with utmost confidentiality and only used for the purposes indicated above. I may withdraw from this study at any time I feel like and I therefore sign here down, to show consent for my approval to participate in it.

Signature/Thumbprint. Date :.....(Respondent).

I have explained to the best of my knowledge the purpose and nature of this study and what it completely entails to the participant and her consent has been without force or any other form of coercion.

Name: NYESIGAMUKLAMA JUNIOR.

Signature..... Date (0775217002).

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APPENDIX II: QUESTIONARE

This questionnaire is used to collect information entitled “knowledge Attitude and practices towards obstetric danger signs among pregnant women attending antenatal care at kisenyi health Centre IV Kampala district”.

This is done to allow me accomplish a Diploma in Clinical Medicine and Community Health of Uganda Allied Health Examinations Board.

Instructions: Tick the most correct choice/alternative in the boxes provided.

SECTION A: BIO DATA OF RESPONDENTS.

1. How old are you?

a) 18-24

b) 25-29

c) 30-34

2. What is your marital status?

a) Married

b) Single

c) Divorced

3. What is your level of education?

a) None

b) Primary

c) Secondary

d) Tertiary institutions

4. Where is your area of residence?

a) Village

- b) Town
- 5. What is your religion?
 - a) Catholic
 - b) Protestant
 - c) Moslem
 - d) Adventist

SECTION B: KNOWLEDGE TOWARDS DANGER SIGNS DURING PREGNANCY AMONG PREGNANT WOMEN?

- 6. Have you ever heard about obstetric danger sign?
 - a) Yes
 - b) No

If yes, where did you obtain the source of information?

- a) Health
- b) Media
- c) TBA
- d) Relatives
- e) Others specify.....
- 7. Have you ever experienced obstetric danger sign?
 - a) Yes
 - b) No

If yes, which one;

- a) Abdominal pain
 - b) Severe vaginal bleeding
 - c) Persistent headache
 - d) Blurred vision
 - e) +Others specify.....
8. Did you go to the health facility after experiencing danger sign?
- a) Yes
 - b) No

SECTION C: ATTITUDE TOWARDS THE DANGER SIGNS DURING PREGNANCY AMONG PREGNANT MOTHERS?

9. Are danger signs during pregnancy preventable?
- 1) Yes
 - No
9. Do you think mothers who develop obstetric danger sign seek help from TBA
- a) Yes
 - b) No
10. Is it important to seek for medical care early after developing danger sign?
- a) Agree
 - b) Disagree
 - c) Not sure
 - d) No opinion

11. Have you had more than five pregnancies?

a) Yes

b) No

12. Did you get your first your first pregnancy between 19 to 29 years?

a) Yes

b) None of the above

13. Do you have any history of still birth?

a) Yes

b) No

SECTION D: PRACTICES TOWARDS DANGER SIGNS DURING PREGNANCY AMONG PREGNANT MOTHERS?

14. Did you go to a health facility for care after facing obstetric danger signs?

Yes

No

If not, what was the reason for not seeking help after experiencing danger sign?

a) Poor knowledge

b) Lack of transport

c) Lack of money

d) Long distance

15. Have you ever used home remedies after experiencing danger sign?

a) Yes

b) No

16. Did you go for antenatal care in your first trimester?

a) Yes

- b) No
17. Did you receive tetanus toxoid during antenatal care?
- a) Yes
- b) No
18. Did you attend more than four antenatal visits?
- a) Yes
- b) No
19. Where did you give birth from in your previous delivery?
- a) Health facility
 - b) TBA
 - c) Home
 - d) Community hospitals
20. Did you receive health talk during antenatal care?
- a) Yes
- b) No