

**KNOWLEDGE OF OBSTETRIC DANGER SIGNS AND LEVEL OF EMERGENCY
HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS**

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TABLE OF CONTENTS

	PAGE
TITLE PAGE	i
APPROVAL SHEET	ii
ACKNOWLEDGMENT	iii
LIST OF TABLES	viii
LIST OF FIGURES	ix
ABSTRACT	x
CHAPTER	
1 INTRODUCTION	1
Background and Rationale of the Study.....	1
Objectives of the Study.....	3
Hypothesis of the Study.....	3
Theoretical and Conceptual Framework of the Study.....	4
Definition of Variables and Other Key Terms.....	5
Significance of the Study.....	6
Scope and Limitations of the Study.....	8
2 REVIEW OF RELATED LITERATURE	9
Obstetric Danger Signs.....	9
Emergency Healthcare.....	10
Related Studies	
Mother's Knowledge Level About Obstetrics Danger Signs.....	11
Emergency Healthcare Utilization.....	14
Synthesis of Related Concepts and Related Studies....	15

3	METHODOLOGY.....	18
	Research Design.....	18
	Target Population and Sampling Procedures.....	18
	Instrument of the Study.....	19
	Ethical Consideration.....	20
	Validity and Reliability.....	22
	Data Collection.....	23
	Data Processing and Statistical Analysis.....	24
4	RESULTS AND DISCUSSION	26
	Socio-demographic Variables of the Respondents	26
	Level of Knowledge of Obstetric Danger Signs among Primigravidas	27
	Level of Emergency Healthcare Utilization among Primigravidas	29
	Relationship Between Level of Knowledge of Obstetric Danger Signs and Level of Emergency Healthcare Utilization.....	32
5	SUMMARY, CONCLUSION, AND RECOMMENDATION.....	35
	Summary.....	35
	Major Findings.....	36
	Conclusion.....	38
	Recommendations.....	39
	REFERENCES.....	41
	APPENDICES	
	Appendix A: Informed Consent Form.....	48

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
1	Socio-demographic Variables of Respondents in terms of Age and Educational Attainment.....	26
2a	Responses on Items Under Knowledge.....	28
2b	Distribution of Respondents According to their Level of Knowledge of Obstetric Danger Signs.....	29
3a	Responses on Items Under Utilization.....	30
3b	Distribution of Respondents According to Their Level of Utilization of Emergency Health Care Services.....	31
4	Relationship Between the Level of Knowledge of Obstetric Danger Signs and Level of Emergency Healthcare Utilization among Respondents.....	34

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1	Schematic Diagram showing the assumed relationship among variables.....	5

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ABSTRACT

The main cause of maternal death has been obstetric complications (Bolanko et. al, 2021). About 810 women per day in 2017 died from preventable causes associated with pregnancy and delivery (WHO, 2019). This study aimed to determine the level of knowledge of primigravidas who gave birth from January 2019 to May 2023 about obstetric danger signs and level of emergency healthcare utilization in selected towns and barangays within the provinces of Iloilo and Antique. The study's specific objectives were to determine the socio-demographic variables of the respondents (age and education). In order to determine the level of knowledge of obstetric danger signs, the level of emergency healthcare utilization, and the relationship between the two, a descriptive-correlational design was used, targeting 100 primigravidas which were gathered through snowball sampling. Data were collected using a validated researcher-developed questionnaire, where the findings showed a directly significant relationship between the level of knowledge of obstetric danger sign and level of emergency healthcare utilization. Statistical Package for Social Sciences (SPSS) and Spearman's rho were used for inferential statistics. The results show that the level of knowledge of obstetrics danger signs has a strong direct relationship to the level of emergency healthcare utilization among primigravidas, with statistically significant values (.435, $p = .001$). This study emphasized the importance of educational interventions in enhancing the health of pregnant women by providing them with crucial information that encourages prompt healthcare utilization. It demonstrated that higher knowledge levels increase the likelihood of primigravida mothers utilizing emergency medical services.

Keywords: knowledge, obstetric danger signs, emergency healthcare utilization, primigravidas

CHAPTER 1

INTRODUCTION

Background and Rationale of the Study

In developing nations, the main cause of maternal death has been obstetric complications (Bolanko et. al, 2021). About 810 women per day in 2017 died from preventable causes associated with pregnancy and delivery. Other complications which are either avoidable or curable do not result in death but threaten the mother's life during and after pregnancy. Other issues may occur before pregnancy but are exacerbated during pregnancy, particularly if they are identified and treated accordingly. Severe post-partum events like bleeding, infections, pre-and post-eclampsia, delivery difficulties, and botched abortion account for about 75% of all maternal mortality (WHO, 2019).

Lack of understanding of the danger signs is mostly the reason for the inability to recognize the complications resulting in the delay in seeking care. Furthermore, most maternal deaths will be prevented if women with complications can identify the signs and obtain adequate emergency obstetric care. This is why mothers must not only be educated to spot danger signs but also be prepared for emergency situations. Therefore, the primary and most important task in providing appropriate and prompt obstetric care should be teaching women about the risk factors of pregnancy and childbirth (Wassihun et al., 2020).

Educating women about the danger signs of pregnancy is one strategy to increase awareness in the use of skilled care if obstetric issues are anticipated (Bintabara et al., 2017). On the other hand, according to the study of Mwilike et al., the

measures taken to obtain healthcare were either classified as suitable (visiting a facility) or incorrect (taking no action, consulting a friend or relative, or self-medicating). A total of 67 participants (17.4%) had picked up on danger signs throughout their previous pregnancies. 91% of women who identified dangerous symptoms sought treatment at a medical facility as soon as they did. It displays the steps followed in response to each danger sign noticed. Every woman who displayed danger signs including edema and decreased fetal movement, visited a medical facility for treatment (Mwilike et al., 2018).

Obstetric complications remain the leading causes of mortality among mothers in low- and middle-income countries. Teaching women to recognize obstetric danger signs is critical for improving maternal and fetal outcomes. However, the stated level of knowledge on obstetric danger signs is poor and inconsistent (Bolanko et al., 2021). As was already said, a lack of information regarding danger signs of pregnancy causes delays in seeking and receiving medical attention. To prevent or decrease maternal mortality, it is crucial to recognize these danger signs as soon as possible (Regasa et al., 2020).

The first and most important factor in accepting appropriate and prompt referrals to obstetric care is learning the danger signs of pregnancy. In order to achieve sustainable development goal 3 (SDG 3), which calls for bringing the global MMR down to less than 70 per 100,000 live births by 2030, it encourages decision-making for obtaining medical attention should difficulties arise. Pregnant women's health-seeking behavior strongly depends on their awareness of pregnancy's danger signs (Yosef & Tesfaye, 2021).

Objectives of the Study

This study aimed to determine the level of knowledge of primigravidas who gave birth from January 2019 to May 2023 about obstetric danger signs and level of emergency healthcare utilization in selected towns and barangays within the provinces of Iloilo and Antique.

Specifically, this study sought to:

1. Determine the respondents' socio-demographic variables in terms of age and highest educational attainment;
2. Determine the level of knowledge of obstetric danger signs among primigravidas;
3. Determine the level of emergency healthcare utilization among primigravidas; and, lastly,
4. Determine whether there is a relationship between the level of knowledge of obstetric danger signs and level of emergency healthcare utilization among primigravidas.

Hypothesis of the Study

H01: There is no relationship between the level of knowledge of obstetric danger signs and the level of emergency healthcare utilization among primigravidas.

Theoretical and Conceptual Framework of the Study

This study was moored on the Health Belief Model by Irwin M. Rosenstock, Godfrey M. Hochbaum, S. Stephen Kegeles, and Howard Leventhal (1950). It argues that beliefs about health and medical conditions influence individual health-related activities. The methodology is based on the hypothesis that a person's willingness to alter their health-related choices is significantly influenced by their health beliefs. People's engagement in behaviors that promote health is determined by their understanding of the DOs and DON'Ts before initiating any action and by their level of self-efficacy. Additionally, the activity must be stimulated by a stimulus that is known as a trigger to action (Urich, n.d.).

In 1988, the HBM was enhanced to include cues to action and self-efficacy due to the more recent addition of other variables. Cues to action describe how the things that cause a particular action impact a person's attitude and behavior. These cues include any situations, people, or something that influences an individual's choices regarding their level of health. In this study, women could learn about specialized health education initiatives, mass media campaigns (radio, television), midwives, and health professionals. Therefore, it is necessary to determine if these cues influence women's perceptions.

Self-efficacy, on the other hand, refers to an individual's conviction in their ability to change their health and behavior. In this study, women's concept of self-efficacy is critical for differentiation. Education, function in the family, and the social construction of women's decision-making ability for home matters, financial issues, or health care, all have a significant impact on self-efficacy. For example, women's decisions are heavily

affected by their husbands or mothers-in-law, and negotiations between husband and wife are common before obtaining health treatment (Thapa, 2014).

In this study, the level of knowledge of obstetric danger signs is the independent variable and the level of emergency healthcare utilization among primigravidas is the dependent variable. The paradigm of variables is presented in Figure 1.

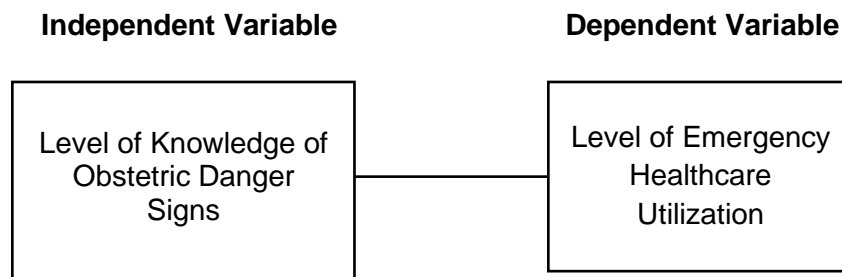


Figure 1. Schematic Diagram showing the assumed relationship among variables.

Definition of Variables and Other Key Terms

To promote clarity and understanding of the study, specific terms used here are defined on their conceptual and operational basis as follows:

Independent Variable

Knowledge Level. This refers to the nature and depth of knowledge, skill, and ability in a particular subject (Law Insider, n.d.). It describes actions an individual should be capable of performing on the job after completion of the associated training (NIST, n.d.). How much respondents know about obstetric danger signs will be used in this study to assess respondents' knowledge levels. Through questions, the level of knowledge of obstetric signs will be evaluated; the total responses will then be

transformed into percentages and classified as poor (<50%), fair ($\geq 50\%$ to <80%) and good ($\geq 80\%$).

Obstetric Danger Signs. These refer to symptoms or signs that the pregnant woman will notice and feel which suggest something wrong with her or the pregnancy (Terefe et. al, 2020). In this study, it refers to the signs experienced by pregnant women that require medical attention which may be caused by or lead to high blood pressure, gestational diabetes, preeclampsia, preterm labor, miscarriage, anemia, infections, labor complications, breech position, placenta previa, low birth weight (Cafasso, 2016). For example, severe vaginal bleeding, headaches with blurred vision, abdominal pain, difficult breathing, and convulsions (WHO, 2013).

Dependent Variable

Emergency Healthcare Utilization. This refers to the measurement or description of people's usage of services for health problem prevention and treatment, maintaining health and well-being, or learning about their health status and prognosis (Carrasquillo, 2013).

In this study, emergency healthcare utilization refers to the level of usage of emergency medical services among primigravidas. Their scores in every question will be tallied, and the final score will be interpreted as very poor (<20%), poor (>20% to $\leq 40\%$), fair (>40% to $\leq 60\%$), good (>60% to $\leq 80\%$), and excellent (>80 to ≤ 100).

Significance of the Study

The following will benefit from the results of this study:

Student nurses. This research will enable the student nurses to be exposed to specific problems to know how they will handle the situation. In addition, this research will allow them to apply their skills as they gather information from different respondents which will guide them in preparation for future real-life situations.

Administrator of Healthcare Institutions. This study can provide information regarding the adequacy of knowledge of primigravida mothers when it comes to obstetric danger signs that will be beneficial to healthcare institutions for the improvement of their programs, policies, and services regarding maternal healthcare and education.

Primigravida mothers. The result of this study will help primigravida mothers gain additional knowledge regarding obstetric danger signs and awareness and utilization of emergency medical services available in their community. In addition, this study will help primigravida mothers make better decisions during an emergency, since they know what to do and who to contact.

Community health nurses. The results of this study will help the community health nurse to effectively communicate the information regarding early detection and recognition of obstetric danger signs. Through this study, the knowledge level of primigravida mothers can help community health nurses decide on the appropriate preventive actions, strategies, and programs.

Future researchers. The results of the study will be helpful to the researchers who would plan to make any related further study. In addition, this study will serve as a reference for the researchers to enhance and improve their work.

Scope and Limitations of the Study

This study was conducted to determine the level of knowledge of obstetric danger signs and the level of emergency healthcare utilization among primigravidas who gave birth from January 2019 to May 2023 in selected towns and barangays within the provinces of Iloilo and Antique in the Philippines. This study utilized snowball sampling where respondents were gathered with the aid of other participants contacted by the researchers.

The purpose of this study was to determine whether there is a relationship between the level of knowledge of obstetric danger signs and level of emergency healthcare utilization among primigravida mothers.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Obstetric Danger Signs

Obstetric danger signs are signs and symptoms that constitute a risk to pregnant women throughout pregnancy, labor, or after childbirth and, if not addressed immediately, can result in obstetric complications and maternal mortality. Excessive vaginal bleeding, hand or facial swelling, severe abdominal discomfort, chronic backache, nausea and vomiting, decreased fetal movements, blurred vision, and convulsions are all warning signs during pregnancy. Excessive vaginal bleeding, prolonged labor (more than 12 hours), retained placenta (more than 1 hour), premature membrane rupture, fetal malposition, and convulsions are all indicators of danger of labor and delivery complications. Other major warning symptoms of the postpartum phase include abrupt lower abdomen discomfort, high-grade fever, depression within 42 days of birth, breathing difficulties, urine incontinence, loss of consciousness after labor, and foul-smelling vaginal discharge (Moloro et al., 2023).

Every year, between 4,100 and 4,900 women and girls die in the Philippines as a result of complications associated with pregnancy. Furthermore, due to complications during pregnancy and childbirth, 82,000 to 147,000 Filipino women and girls experience disability each year (Katalbas, et al., 2013).

Maternal mortality rates remain unacceptably high due to complications during pregnancy, placing among the most critical health issues in many developing nations. Pregnant women must recognize the early signs of obstetric complications in order to enhance both maternal and fetal health outcomes. Obstetric complications may arise

from women who are unaware of the danger signs of pregnancy and choose to ignore or fail to identify them as abnormal conditions (Okour et al., 2012).

According to Mulugeta et al. (2020), maternal mortality rates remain abnormally high in many developing countries, including Ethiopia, as a result of complications associated with pregnancy. Lack of knowledge about obstetric danger signs causes delays in seeking and receiving competent care, which increases maternal mortality. Studies on mothers' awareness of obstetric danger indications during gestation, during childbirth, and the puerperal period, are said to be sparse in Ethiopia. The recurrence of pregnancy-related issues is unpredictable and may cause both the mother and the fetus to pass away. 80% of maternal deaths worldwide are directly related to obstetric problems. These include infection, obstructed and protracted labor, hemorrhage, unsafe abortion, pregnancy-induced hypertension, and hemorrhage. Given that "each and every pregnancy has its set of complications," women, specifically primigravida mothers, should be guided and made aware of obstetric danger signs throughout labor, birthing, and puerperium. There are three categories of obstetric danger signs: danger signs during pregnancy, childbirth, and postpartum.

Emergency Healthcare

Emergency healthcare refers to the immediate and specialized medical care provided to individuals who are experiencing life-threatening conditions or urgent health issues. This encompasses situations where prompt intervention is crucial to save lives, prevent the worsening of the condition, and enhance patient outcomes.

The delivery of emergency healthcare involves a comprehensive system of medical services, which includes emergency medical services (EMS), emergency departments, and specialized healthcare providers. These components work together in a well-coordinated manner to ensure effective care.

Highly trained healthcare professionals play a vital role in emergency healthcare, utilizing their expertise to provide the necessary medical interventions. Advanced medical equipment is utilized to support the delivery of specialized care. Additionally, efficient communication systems are in place to facilitate seamless coordination among healthcare professionals, enabling timely and effective responses to emergencies (WHO, 2019).

Emergency medical services refer to the services that offer sick or injured persons transport to appropriate care and out-of-hospital emergency medical care. EMS contributes significantly to the emergency medical system and has been linked to lower emergency-related morbidity and mortality rates (Takele et al., 2021). In the study conducted by Aksoy et al. (2015), these refer to managing obstetric and gynecological emergencies, protecting maternal and fetal life, health, and function, maintaining sexual function, and, if feasible, preserving fertility.

REVIEW OF RELATED STUDIES

Mother's Knowledge Level About Obstetrics Danger Signs

Every expectant mother is vulnerable to complications during and after pregnancy and childbirth, which might result in maternal mortality. To encourage women to seek professional care during birth and referral in the event of complications, which

enhances the health of the mother and newborns, it is crucial to educate mothers about danger signs (Thapa et al., 2017).

Obstetric dangers are symptoms or signs that a pregnant woman may experience which are indicative to a health problem. Information about the prevalence of these signs and their contributing factors proved essential in developing programs aimed at achieving the global goal of lowering maternal morbidity and mortality (Terefe et al., 2020).

Knowledge of obstetric danger signs (during pregnancy to postpartum period) in pregnant women is low and influenced by residential areas. Therefore, maternal and child health services need to address identified awareness gaps by developing appropriate strategies such as targeted information provision, education and communication. Being knowledgeable of the danger signs of pregnancy is crucial to getting timely and appropriate obstetric care. The percentage of people who are fully aware of these obstetric complications is unknown. Likewise, while knowledge alone is no guarantee of seeking care, mothers' attitudes are also important (Regasa et al., 2020).

According to (Bintabara et al., 2017), it has been shown that a lack of recognition of the danger signs contributes to the willful delay in seeking obstetric care, which ultimately leads to high rates of maternal death and morbidity around the globe. About half of expectant mothers in low-income areas receive information about obstetric danger signs during prenatal care; however, it is uncertain what proportion of expectant mothers are completely aware of these signs.

According to (Hailu et al., 2013), if women and their families recognize the obstetric complications during pregnancy and creating the habit of willingly seeking

prompt medical care throughout labor, birthing, and the early puerperal period while being under the close supervision of a proficient obstetrician, significant maternal morbidity and death can be avoided. There is proof that increasing a woman's understanding of these inherent risks within the given gestational period and the care given afterwards improves premature problem identification and lessens decision-making processes for seeking obstetric care. This is an important first step in the process of properly and promptly referring a patient for necessary obstetric care. To increase neonatal survival, community awareness of the danger signs of neonatal complications is crucial because the majority of newborns are delivered within their homes or released from their hospitals within 24hrs of birth. As a result, it's been recognized as part of the essential methods for enhancing both the maternal and the child's health. But like other examples of developing nations, women's awareness of these obstetric danger signs are still sub-par.

Complications during childbirth remain the leading cause of maternal death in poorer regions and middle-income countries. A crucial aspect of enhancing maternal and fetal outcomes is increasing women's knowledge of obstetric dangers. Nonetheless, there is a limited and inconsistent amount of documented knowledge on obstetric complications (Bogale & Markos, 2015).

According to Yosef and Tesfaye (2021), Maternal morbidity and mortality can be prevented and reduced significantly by women's ability to recognize danger signs and seek medical attention. Insufficient knowledge about obstetric danger signs during pregnancy causes delays in seeking or receiving appropriate care, ultimately leading to maternal mortality. There are three stages to delay receiving obstetric care: delay in making the decision to seek care, delay in getting to a healthcare facility, and delay in getting the necessary treatment once at the facility. Knowing the danger signs of

pregnancy is a crucial initial step toward accepting suitable and prompt referrals for obstetric care.

Emergency Healthcare Utilization

The first crucial step to an appropriate and prompt referral is for mothers to be aware of the common obstetric complication manifestations during their pregnancy, labor, and the puerperal period. It has provided some insights into pregnant women's understanding of these risky obstetric signs, which may be used to create effective interventions and as a foundation for more extensive research in other areas of the country. It is expected that pregnant women and their families would seek care more promptly if they were aware of the danger signs (Hailu et al., 2010).

According to (Bililign & Mulatu, 2017), recognizing obstetric complications during pregnancy can improve a woman's ability to ensure timely, appropriate care and safe childbirth. Knowing obstetrical complications is part of the basic stages, that is an essential initiative for proper handling along with nicely timed referrals. It would also be a better strategy for improving skills for emergency obstetric care within financially problematic areas. In addition, greater knowledge of obstetric complications in pregnant women reduces delays in seeking medical care and improves early detection of obstetric complications. Hindering the choice to seek medical care is a main factor that has contributed towards maternal mortality and may be linked to loosely given knowledge of obstetric complications.

In developing countries like Ethiopia, proper application of integrated EMS can lessen the rate of maternal and newborn mortality. Ambulance services are by far the

most paramount of all the EMS components that are used in obstetric emergency cases. The use of the ambulance services for obstetric emergency cases in the Buno Bedele administrative zone in Southwest Ethiopia was assessed in the study. As a result, the majority of research participants (79%) reported using ambulances for institutional delivery (Wirtu et al., 2023).

Synthesis of Related Concepts and Related Studies

Obstetric danger signs, symptoms during pregnancy, labor, and the postpartum period, are significant indicators of possible complications that, if not properly addressed, can lead to grave maternal outcomes and even death. Danger signs include decreased fetal movements, blurred vision, seizures, severe abdominal pain, edema of the hands or face, nausea, vomiting, and persistent back pain throughout the pregnancy. Extended labor, retained placenta, premature rupture of membranes, fetal malposition, and convulsions are among the labor and delivery danger signs. Severe vaginal bleeding, foul-smelling vaginal discharge, breathing difficulties, urine incontinence, unconsciousness, postpartum depression, severe lower abdominal pain, and higher fever are among the postpartum signs (Moloro et al., 2023). Awareness and prompt detection of these signs are crucial for ensuring maternal and fetal health.

In many developing countries, maternal mortality remains alarmingly high. Pregnancy complications account for 4,100–4,900 maternal deaths in the Philippines each year. Furthermore, these complications cause disability for 82,000–147,000 Filipino women and girls each year (Katalbas et al., 2013). One major contributing cause to these alarming rates of death and morbidity among pregnant women is a lack of understanding and awareness of obstetric danger signs. Knowledge of these signs allow

women to seek out immediate medical care, thereby reducing the likelihood of impending risks and improving overall maternal health.

In Ethiopia and similar developing nations, maternal mortality is aggravated by delays in seeking and receiving professional care, often due to having inadequate knowledge of obstetric danger signs (Mulugeta et al., 2020). Studies indicate that a remarkable portion of maternal deaths all over the world is directly related to obstetric complications such as infection, obstructed labor, hemorrhage, unsafe abortion, and pregnancy-induced hypertension. Increasing awareness and knowledge about obstetric danger signs, especially among first-time mothers, can considerably support early detection and intervention, eventually reducing maternal and fetal mortality rates.

Emergency healthcare plays a pivotal role in managing and handling obstetric emergencies, involving immediate and specialized medical care to address life-threatening conditions. These systems include emergency medical services (EMS), emergency departments, and specialized healthcare providers operating in coordination to deliver effective care. Efficient communication and cutting-edge medical equipment are essential for prompt interventions and improved patient outcomes (WHO, 2019). Women's ability to identify, recognize danger signs and seek appropriate care is consequential in preventing maternal morbidity and mortality, with knowledge comprehension of these signs being the first and foremost step in ensuring timely referrals and interventions (Yosef & Tesfaye, 2021).

Research highlights the importance of educating women about obstetric danger signs to promote prompt and appropriate healthcare-seeking behavior. The studies found that knowledge of these signs remain shallowly low, particularly in low-income areas, where less than half of pregnant women are informed about them during

antenatal care (Regasa et al., 2020; Bintabara et al., 2017). Amplifying awareness and understanding of obstetric complications among pregnant women and their families can significantly diminish setbacks in seeking medical care, thereby further preventing even more maternal and neonatal deaths. Targeted educational interventions and community awareness programs are essential for the betterment of maternal and child health outcomes (Hailu et al., 2013; Bogale & Markos, 2015).

CHAPTER 3

METHODOLOGY

This chapter discusses the research design, target population, sampling procedure, data collection, data processing and analysis.

Research Design

The descriptive correlational research design was utilized in this study. Descriptive research design aims to describe a population, condition, or phenomenon. What, where, when, and how inquiries can be answered, excluding why questions. A descriptive research design may examine one or more variables using various methodologies (McCombes, 2022). The descriptive research design focuses primarily on characterizing the nature of a demographic segment, without concentrating on "why" a particular occurrence happens (Bhat, 2022).

In correlational research design, no variables are within the researcher's direct control or manipulation. It displays the degree to which and/or the direction of the relationship between two (or more) variables. A correlation's direction might either be positive or negative (Bhandari, 2022).

Target Population and Sampling Procedures

The target population of this study were the primigravida mothers who gave birth from January 2019 to May 2023 in selected towns and barangays within Iloilo and Antique. The researchers used a snowball sampling to get 100 respondents.

Inclusion and Exclusion Criteria

Inclusion Criteria

- Women who are pregnant for the first time aged 18 and above at the time of delivery
- Able to read and write.
- Have access to a mobile phone, tablet or computer with internet access.
- Those without internet access as long as their place of residence is within 20 km from the study setting.
- Willing to sign the informed consent form.

Exclusion Criteria

- Women who are pregnant for the first time under the age of 18.
- Women who have had multiple pregnancies and deliveries.
- Women who are unable to read and write.
- Women who do not have access to a mobile phone, tablet or computer with internet access.
- Women who are unwilling to participate.

Instrument of the Study

This study utilized a researcher-developed questionnaire based on the study objectives. The questionnaire is composed of three parts.

The first part gathered information about the respondents' socio-demographic variables in terms of the age and highest educational attainment. The second part of the

questionnaire is composed of three item questions and two checklist-type questions to determine the knowledge level of obstetric danger signs. The knowledge level consisted of the "True" or "False" choices corresponding to the respondent's answer. The third part of the questionnaire consisted of one checklist-type question to determine the level of emergency healthcare utilization. The level of emergency healthcare utilization was answerable either by "Never", "Rarely", "Sometimes", "Often", or "Always".

Ethical Consideration

Prior to data collection, the study was submitted to the university's Research Ethics Review Board (RERB) for review and approval. Following the approval of the study, a letter was sent to the Dean of the College of Nursing seeking permission to conduct the study off-campus specifically in selected towns and barangays within the provinces of Iloilo and Antique as the study setting.

Risk Assessment

This research study was considered low risk. This risk pertained to the possibility that participants might feel uncomfortable when answering the questionnaire about their pregnancy, for which they had the option to discontinue answering.

Benefits Assessment

This study would help student nurses increase awareness of obstetric danger signs, which can lead to earlier detection and management of complications, reducing maternal and neonatal morbidity and mortality. This study provided information to the administrators of healthcare institutions for the improvement of their programs, policies,

and services regarding maternal healthcare and education. Moreover, primigravida mothers could gain additional knowledge regarding obstetric danger signs and awareness of and utilization of healthcare available in their community.

Future researchers can make this study as a reference to enhance and improve their work.

Withdrawal Criteria of Participants

Respondents were free to withdraw from participating at any time without any questions asked from the proponents. Respondents may withdraw from the study if at any time they felt uncomfortable answering any of the questions without facing any penalties or negative consequences.

Anonymity and Confidentiality of Respondents

Respondents were anonymized by using aliases instead of their real names. The electronic copy of the data will be kept in a password-protected computer and hard copies are stored in a locked drawer of a filing cabinet that only the researchers will have the key to open. The researchers assured the respondents that their identities are kept private and confidential to the extent provided by the law.

Voluntary, Non-Coercive Recruitment of Respondents

Recruitment of respondents was purely voluntary. The proponents discussed the study objectives, benefits derived from study, voluntariness, confidentiality of their responses in a non-coercive manner. The researchers gave the respondents time to ask questions.

Disposal of Research Material

The data would be destroyed after five years post presentation of its findings by shredding hardcopies and deleting online data.

Contribution To Local Capacity Building

The results of the study would help the community health nurse to effectively communicate the information regarding early detection and recognition of obstetric danger signs. This study could help local healthcare providers to gain insight into knowledge gaps and emergency healthcare utilization among primigravidas. It would further assist the local communities in the advancement of maternal and child healthcare knowledge. This knowledge could lead to a positive behavioral change in pregnant women, their families, and the community at large, fostering a culture of proactive healthcare-seeking behavior.

Validity and Reliability

The researcher-developed questionnaire was subjected to validation and reliability tests. The survey questionnaire was validated by three (3) experts who were familiar with the study constructs and research process. The three experts were clinical instructors with master's degrees and are also knowledgeable about women's health. The experts judged the tool's clarity and relevance to the study objectives using a validation form. Comments and corrections were taken into consideration.

Furthermore, pilot testing was conducted before the actual data gathering to test the instrument's reliability. According to Connelly (2008), extant literature suggests that a

pilot study sample should be 10% of the population of projected study. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. George and Mallery (2003) provide the following rules of thumb: "≥.9 – Excellent, ≥.8 – Good, ≥ .7 – Acceptable, ≥ .6 – Questionable, ≥ .5 – Poor, and ≤ .5 – Unacceptable."

In this study, twenty (20) mothers who were not part of the study were selected to participate in the pilot testing. The Statistical Package for Social Sciences (SPSS) was employed to analyze the reliability of responses for each question. The initial analysis using SPSS yielded a Cronbach's Alpha value of 0.849, indicating the reliability of the instrument is good.

Data Collection

Data collection commenced after the approval of the Research Ethics Review Board. After the Dean's approval to conduct the study off-campus, the researchers identified the potential respondents in selected towns and barangays within the provinces of Iloilo and Antique. These included Sibalom, San Remigio, and Patnongan in Antique, as well as Jaro, Lapaz, Cabatuan, and Dingle in Iloilo. Moreover, aliases were used instead of real names to ensure privacy and confidentiality of information. Researchers contacted the individuals indicated on the list gathered based on their identified targets and invited them to participate in the survey. An informed consent form was sent to the participants through their email address or messenger account, together with the validated tool utilizing Google forms for those with email access. Alternatively, participants preferring a hard copy received the printed questionnaire directly from the

researchers. The respondents had smartphone, tablet, or computer to answer the Google forms. An orientation and giving of instructions were done virtually, and the link to the survey questionnaire was forwarded to the respondents with access to the internet using smart phones, tablets, or computers. The proponents personally met the respondents who did not have access to the internet and/or are technically challenged, to provide instructions and collect the data.

Data were collected from April 13-19, 2024. The researchers used a snowball sampling to acquire a sample size of one hundred (100) respondents. The respondents were given one (1) week to return the questionnaires, which took 10 to 15 minutes to answer. This timeframe accommodated individuals with busy schedules or other obligations. Respondents who were present during the distribution of questionnaires were given 10-15 minutes to answer. The researchers provided phone numbers that the respondents could contact if necessary. Hard copies of the completed questionnaires are kept in a locked drawer accessible only to the researchers. Additionally, Google Forms were kept in a password protected electronic file only researchers have access.

Data Processing and Statistical Analysis

Data collected were organized, tabulated, and encoded for processing using the Statistical Package for Social Sciences (SPSS), specifically descriptive statistics in order to arrive at the analyses of the varied responses.

For descriptive data, frequency distribution, percentages and mean were used to describe the characteristics of the primigravida such as age and highest educational attainment. Weighted mean was used to determine the weight of the responses for the

knowledge level of the respondents in terms of knowledge of obstetric danger signs and level of emergency healthcare utilization. For inferential data, Spearman's Rho was used to test for the strength of relationships between and among variables. The level of significance was at $p=.001$.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter presents the respondents' socio-demographic profile, statistical findings, analysis, and interpretation of the data. The findings are discussed in the following areas: respondents' socio-demographic profile: age and highest educational attainment, level of knowledge of obstetric danger signs, and level of emergency healthcare utilization.

Socio-demographic Variables of the Respondents

The data presented in Table 1 illustrates the respondent's socio-demographic variables in terms of age and highest education attainment.

Table 1 shows there are 36 (36%) respondents who are 23 years old or below, 38 (38%) respondents who are in the age group of 24 to 28 years old, and 26 (26%) respondents who are 29 years old or above. Meanwhile, 29 (29%) of the respondents have junior and senior high school as their highest educational attainment, 70 (70%) who reached college, and 1 (1%) respondent who holds a postgraduate degree.

Table 1

Socio-demographic Variables of Respondents in terms of Age and Educational Attainment

	f	%
Age		
23 or below	36	36.0
24 to 28	38	38.0
29 or above	26	26.0

Highest Educational Attainment

JHS & SHS	29	29.0
College	70	70.0
Postgraduate	1	1.0

Level of Knowledge of Obstetric Danger Signs among Primigravidas

In measuring the level of knowledge of the respondents about obstetric danger signs, a 16-item questionnaire answerable by True or False was used. Responses are presented in Table 2.a and 2.b, which show their answers, respectively.

In Table 2.a, among the items based on the highest percentage of correct answers, item 12, "Sudden swelling of the face, hands, and feet (*Gulpyada nga pag manas sang guya, mga kamot, kag mga ti-il*)," has the highest percentage of 95 corresponding to correct answers, followed by item 13, "Awareness of fast heartbeat (*Nabatyagan ang pagdasig sang pitik ka corazon o heart*)," with 94%. Item 6, "Severe and persistent abdominal pain during the first trimester (*Grabe kag wala untat nga pagsakit sang tiyan samtang sa una nga tatlo ka bulan sang pagbusong*)," has 91% correct responses; item 3, "Anemia (hemoglobin less than 11.0 g/dl) (*Kulang sa dugo (Mas nubo ang hemoglobin sa 11.0g/dl)*)," and item 10, "Severe headache (*Tama kasakit ang ulo*)," have the same percentage of 87 of the correct answers.

On the other hand, there are 5 items that attained the lowest percentage of correct answers. Item 4, "Convulsions (fits) of pregnancy (*Kombulsyon samlang nagabusong*)," has a percentage of 75; item 5, "Breast tenderness and swelling (*Gasakit kag gabanog ang susu*)," with 61% of the correct answers; item 2, "Nausea and vomiting (*Daw masuka or gasuka-suka*)," and item 7, "Light spotting (*Gamay gamay nga pagdugo*),"

have the same percentage of 59, and lastly, item 11, "Fatigue (*Grabe nga kapoy*)," recorded the lowest percentage of correct answers.

Table 2.a

Responses on Items Under Knowledge

Knowledge Items	Correct	Wrong
	%	%
Sudden swelling of the face, hands and feet (<i>Gulpyada nga pag manas sang guya, mga kamot, kag mga ti-il</i>)	95.0	5.0
Awareness of fast heartbeat (<i>Nabatyagan ang pagdasig sang pitik ka corazon o heart</i>)	94.0	6.0
Severe and persistent abdominal pain during the first trimester (<i>Grabe kag wala untat nga pagsakit sang tiyan samtang sa una nga tatlo ka bulan sang pagbusong</i>)	91.0	9.0
Anemia (hemoglobin less than 11.0 g/dl) (<i>Kulang sa dugo (Mas nubo ang hemoglobin sa 11.0g/dl)</i>)	87.0	13.0
Severe headache (<i>Tama kasakit ang ulo</i>)	87.0	13.0
Convulsions (fits) of pregnancy (<i>Kombulsyon samlang nagabusong</i>)	75.0	25.0
Breast tenderness and swelling (<i>Gasakit kag gabanog ang susu</i>)	61.0	39.0
Nausea and vomiting (<i>Daw masuka or gasuka-suka</i>)	59.0	41.0
Light spotting (<i>Gamay gamay nga pagdugo</i>)	59.0	41.0
Fatigue (<i>Grabe nga kapoy</i>)	52.0	48.0

Table 2.b shows the distribution of respondents based on their level of knowledge of obstetric danger signs. The results showed that there were 29 (29%) respondents who scored 11 or below in total for correct answers, 30 (30%) respondents who scored between 12 and 14 for correct answers, and 41 (41%) respondents who scored 15 or above. Overall, the minimum score was 3, while the maximum was 16 for correct responses among the respondents, with a mean score of 12.58 and a standard deviation of 3.77.

Table 2.b

Distribution of Respondents According to their Level of Knowledge of Obstetric Danger Signs

	f	%
11 or below	29	29.0
12 to 14	30	30.0
15 or above	41	41.0
Total	100	100.0
Minimum = 3	Maximum= 16	Mean= 12.58
		S.D= 3.77

Level of Emergency Healthcare Utilization among Primigravidas

In measuring the level of knowledge of the respondents about emergency healthcare utilization, a 5-item questionnaire answerable by “Always”, “Often”, “Sometimes”, “Rarely” or “Never” was used. Responses are presented in Table 3a and 3b, which show their answers, respectively.

Table 3.a shows the distribution of respondents based on their level of emergency health care utilization among primigravidas. The results show that a significant 30 out of 100 primigravidas (30%) always went to the hospital when they experienced danger signs, indicating a relatively high level of hospital utilization. The Rural Health Unit (RHU) was also a common point of care, with 24 (24%) of respondents always visiting the RHU when they experienced danger signs. Calling a nurse or physician was less common, with only 20 (20%) and 17 (17%) of respondents, respectively, always doing so when they experienced danger signs. Private clinics were the least utilized, with only 14 (14%) of respondents always visiting a private clinic when they experienced danger signs.

Table 3.a

Responses on Items Under Utilization

Utilization Items	Always (4)	Often (3)	Sometimes (2)	Rarely (1)	Never (0)
	%	%	%	%	%
I went to the nearby hospital when I experienced any of the danger signs. (<i>Nagkadto ko sa malapit nga ospital sang naka eksperyensya ako sang mga delikado nga sintomas samtang naga busong.</i>)	30.0	17.0	33.0	15.0	5.0
I went to the nearby Rural Health Unit (RHU) when I experienced any of the danger signs. (<i>Nagkadto ko sa malapit nga RHU sang naka eksperyensya ako sang mga delikado nga sintomas samtang naga busong.</i>)	24.0	27.0	26.0	10.0	13.0

When I experienced any of the danger signs, I called for a nurse. (<i>Sang naka eksperyensya ako sang mga delikado nga sintomas samtang naga busong, nagtawag ako sa nars.</i>)	20.0	14.0	31.0	18.0	17.0
When I experienced any of the danger signs, I called for a physician. (<i>Sang naka eksperyensya ako sang mga delikado nga sintomas samtang naga busong, nagtawag ako sa doktor.</i>)	17.0	16.0	33.0	15.0	15.0
I went to the nearby private clinic when I experienced any of the danger signs. (<i>Nagkadto ko sa malapit nga pribadong klinika sang naka eksperyensya ako sang mga delikado nga sintomas samtang ga busong.</i>)	14.0	14.0	38.0	14.0	20.0

Table 3.b shows the distribution of respondents based on their level of emergency healthcare utilization. The results showed that there were 29 (29%) respondents who scored 1.64 or below in total for the utilization responses, 44 (44%) respondents who scored between 1.65 to 2.64 for the utilization responses, and 27 (27%) respondents who scored 2.65 or above. Overall, the minimum score was .00, while the maximum was 4 for the utilization responses among the respondents, with a mean score of 2.16 and a standard deviation of 1.04.

Table 3.b

Distribution of Respondents According to Their Level of Utilization of Emergency Health Care Services

	f	%
1.64 or Below	29	29.0
1.65 to 2.64	44	44.0
2.65 or Above	27	27.0
Total	100	100.0
Minimum= .00	Maximum= 4.00	Mean= 2.16
		S.D= 1.04

Relationship Between Level of Knowledge of Obstetric Danger Signs and Level of Emergency Healthcare Utilization

The respondents are distributed based on their knowledge of obstetric danger signs and their utilization of emergency healthcare services. The findings indicate that among the individuals with a utilization score of 1.64 or below, 13 individuals (44.8%) had a knowledge score of 11 or below, 12 individuals (40%) had a score of 12 to 14 on the knowledge scale, reflecting a difference of 4.8%. Moreover, when comparing the group with a score of 12 to 14 on the knowledge scale to the group with a score of 15 or higher, which is comprised of 4 individuals (9.8%), the resulting difference is 30.2% of the sample population.

Similarly, of those with a utilization score of 1.65 to 2.64, (n=10; 34.5%) had a knowledge score of 11 or below, (n=12; 40%), had a score of 12 to 14 on the knowledge scale, indicating a difference of 5.5%. Furthermore, there is a 13.7% difference when comparing the group with a score of 12 to 14 on the knowledge scale to the group with a score of 15 or higher, (n=22; 53.7%).

Lastly, in the midst of those with a utilization score of 2.65 or above, (n=6; 20.7%), had a knowledge score of 11 or below. Whereas 6 individuals (20%) had a score of 12 to 14 on the knowledge scale, representing a difference of 0.7%. Additionally, comparing the group with a score of 12 to 14 on the knowledge scale with the group with a knowledge score of 15 or higher, (n=15; 36.6%), the resulting difference is 16.6%.

The relationship between the two identified variables was tested using Spearman's rho value, and the result was .435 which shows a strong direct relationship between the respondents' level of knowledge of obstetric danger signs and level of emergency healthcare utilization. The relationship is significant as shown by the p-value of .001. Therefore, the hypothesis stating that there is no relationship between level of knowledge of obstetric danger signs and level of emergency healthcare utilization among primigravidas is rejected.

The results show that the level of knowledge of obstetrics danger signs is directly related to the level of emergency healthcare utilization among primigravidas. The findings of this study agree with the results of Bintabara et al. (2017), (Billigin & Mulatu, 2017), Hailu et al. (2010), Wirtu et al. (2023), and Yosef and Tesfaye (2021) because there is a positive significant relationship between level of knowledge of obstetric danger signs and level of emergency healthcare utilization. It shows that the higher the knowledge, the more likely primigravida mothers utilize emergency medical services.

The theory known as the Health Belief Model (HBM), which suggests that beliefs about health and medical conditions influence individual's health-related activities, can be utilized to explain the correlation between increased emergency healthcare utilization of primigravidas (first-time pregnant women) who have a high level of knowledge about

obstetric danger signs. In this study, primigravidas who have an adequate knowledge of obstetric danger signs are more likely to use emergency medical services as soon as needed because they recognize the benefits of seeking prompt medical attention, understand the risks involved, and recognize the seriousness of these signs. The relationship between behavior and knowledge emphasizes the importance of educational interventions in enhancing the health of pregnant women by providing them with crucial information that encourages prompt healthcare utilization.

Table 4.

Relationship Between the Level of Knowledge of Obstetric Danger Signs and Level of Emergency Healthcare Utilization Among Respondents

Utilization	Knowledge							
	11 or Below		12 to 14		15 or Above		Total	
	f	%	f	%	f	%	f	%
1.64 or Below	13	44.8	12	40	4	9.8	29	29
1.65 to 2.64	10	34.5	12	40	22	53.7	44	44
2.65 or Above	6	20.7	6	20	15	36.6	27	27
Total	29	100	30	100	41	100	100	100

Spearman's Rho = .435 (direct, strong relationship) p = .001 (significant)

CHAPTER 5

SUMMARY, CONCLUSION, AND RECOMMENDATION

Summary

This study aimed to determine the level of knowledge of primigravidas who gave birth from January 2019 to May 2023 about obstetric danger signs and level of emergency healthcare utilization in selected towns and barangays within the provinces of Iloilo and Antique. It sought to determine whether there is a significant relationship between the level of knowledge of obstetric danger signs and level of emergency healthcare utilization among primigravidas. This was a descriptive-correlational type of study that utilized a survey questionnaire. The target population of this study were the primigravida mothers who gave birth from January 2019 to May 2023 in selected towns and barangays within the provinces of Iloilo and Antique.

This study utilized a researcher-developed questionnaire based on the objectives and variables of the study. The questionnaire is composed of three parts. The first part gathered information about the respondents' socio-demographic variables in terms of the age and highest educational attainment. The second part of the questionnaire is composed of three item questions and two checklist-type questions to determine the knowledge level of obstetric danger signs. The knowledge level consists of the "True" or "False" choices corresponding to the respondent's answer. The third part of the questionnaire consisted of one checklist-type question to determine the level of emergency healthcare utilization. The level of emergency healthcare utilization consisted of "Never", "Rarely", "Sometimes", "Often", or "Always" choices corresponding to the respondent's answer.

The researcher-developed questionnaire was subjected to validation and reliability tests. The questionnaire was validated by three (3) experts with master's degrees who are knowledgeable about women's health and serve as clinical instructors in the College of Nursing. The experts judged the tool's clarity and relevance to the study objectives using a validation form. Comments and corrections were taken into consideration. In this study, twenty (20) mothers who were not part of the study were selected to participate in the pilot testing. The Statistical Package for Social Sciences (SPSS) was employed to analyze the reliability of responses for each question. The initial analysis using SPSS yielded a Cronbach's Alpha value of 0.849, indicating the reliability of the instrument is good

On the other hand, the researchers used a snowball sampling to get 100 respondents. Researchers collected the informed consent and conducted surveys both online and face-to-face with the respondents. Spearman's rho was used to identify the correlation between the level of knowledge of obstetric danger signs and level of emergency healthcare utilization among primigravidas.

Major Findings

1. Majority of the respondents (38%) were in the age group of 24 to 28, followed by 36% of participants who were aged 23 years or below, while 26% were 29 years old or above. However, 70 respondents with the highest percentage of 70% have college as their highest educational attainment. Furthermore, 29% of the respondents indicated junior highschool and senior highschool as their highest educational attainment and 1% of the respondent held a post graduate degree.

2. The highest percentage of respondents with 95% that corresponds to correct answer was item 12, "Sudden swelling of the face, hands, and feet (Gulpyada nga pag manas sang guya, mga kamot, kag mga ti-il), followed by item 13, "Awareness of fast heartbeat (Nabatyagan ang pagdasig sang pitik ka corazon o heart)," with 94%. Item 6, "Severe and persistent abdominal pain during the first trimester (Grabe kag wala untat nga pagsakit sang tiyan samtang sa una nga tatlo ka bulan sang pagbusong)," has 91% correct responses; item 3, "Anemia (hemoglobin less than 11.0 g/dl) (Kulang sa dugo (Mas nubo ang hemoglobin sa 11.0g/dl))," and item 10, "Severe headache (Tama kasakit ang ulo)," have the same percentage of 87 of the correct answers. On the other hand, there are 5 items that attained the lowest percentage of correct answers. Item 4, "Convulsions (fits) of pregnancy (Kombulsyon samlang nagabusong)," has a percentage of 75; item 5, "Breast tenderness and swelling (Gasakit kag gabanog ang susu)," with 61% of the correct answers; item 2, "Nausea and vomiting (Daw masuka or gasuka-suka)," and item 7, "Light spotting (Gamay gamay nga pagdugo)," have the same percentage of 59, and lastly, item 11, "Fatigue (Grabe nga kapoy)," recorded the lowest percentage of correct answers.
3. The highest percentage of the respondents (30%) always went to the hospital when they experienced danger signs, followed by 24% in the rural health unit selected by the respondents who always visited the RHU when they experienced danger signs. 20% and 17% of the respondents, respectively, consistently called a nurse or doctor when they experienced danger signs. With 14% of the respondents always going to a private clinic when they saw danger signs, private clinics were the least used.

4. There is a direct relationship between the level of knowledge of obstetric danger signs and the level of emergency healthcare utilization among primigravidas (Spearman's rho .435 and $p=.001$).

Conclusion

The following conclusions were derived from the study:

1. Nearly 95% of primigravidas obtained the correct answer on Sudden swelling of the face, hands and feet (*Gulpyada nga pag manas sang guya, mga kamot, kag mga ti-il*), while only 5% obtained the wrong answer. This indicates that most respondents who are knowledgeable on this symptom have a high level of emergency healthcare utilization among primigravidas.
2. More than half (52%) of primigravidas obtained the correct answer on Fatigue (*Grabe nga kapoy*), while a notable 48% obtained the wrong answer. This indicates that only a discernible portion of respondents who are knowledgeable on this symptom have the lowest level of emergency healthcare utilization among primigravidas.
3. A significant proportion (30%) of primigravidas always went to the hospital when they experienced danger signs. This indicates a relatively high level of emergency healthcare utilization.
4. Only a few primigravidas (14%) utilized private clinics when they experienced danger signs. This indicates that the private clinic is the least utilized.
5. There is a significant relationship between the respondent's level of knowledge of obstetric danger signs and the level of emergency healthcare utilization. It indicates that higher levels of knowledge among primigravidas correspond with

higher levels of emergency healthcare utilization. On the other hand, it shows that the primigravidas who are least knowledgeable have a lower level of emergency healthcare utilization.

Recommendations

The following recommendations were made based on the results and conclusion.

Administrator of Healthcare Institutions. Engage in developing and carrying out plans to educate primigravida mothers. In order to encourage mothers to make informed choices about their health and seek medical assistance as soon as necessary, these efforts should concentrate on increasing mothers' knowledge of obstetric danger signs.

Community Health Nurses. Primigravida mothers should be informed about obstetric danger signs and encouraged to seek emergency medical attention through tailored health education programs organized by community health nurses. These programs should prioritize assisting primigravida mothers who have completed up to a secondary education. Informing people about obstetric danger signs and the importance of obtaining medical assistance as soon as possible should be done through interactive methods, visual aids, and easily understood terminology in regular health education programs.

Barangay Health Workers. Adequate training on identifying obstetric danger signs and utilizing emergency medical services would be helpful in order to enhance the skills of barangay health workers in assisting primigravida mothers. BHWs should be educated to use effective health-education methods, such as the use of visual aids and

the mother tongue language so they can communicate with primigravida mothers properly and efficiently.

Pregnant Mothers. It is advised that pregnant women make frequent antenatal care consultations in order to get information on obstetric danger signs and advice on using emergency medical services. Health education and awareness programs should be put in place through seminars or home visits to assist pregnant women in becoming aware of warning signs of obstetric complications.

Student Nurses. Student nurses should actively engage in similar research studies to enhance their professional development. This research exposes them to obstetric problems and effective handling techniques. Gathering information from respondents helps them apply practical skills, especially in health teaching, and identify areas for improvement, better preparing them for real-life clinical scenarios.

Future Researchers. It is suggested that future researchers consider amounts of related studies and literature about factors influencing primigravida mothers' knowledge of obstetric danger signs, in such a manner mothers could have high levels of utilization of emergency medical services.

REFERENCES

- Aksoy, H., Aksoy, U., Ozturk, M., Ozyurt, S., Acmaz, G., Karadag, O. I., Yucel, B., & Aydin, T. (2015). Utilization of emergency service of obstetrics and gynecology: A cross-sectional analysis of a training hospital. *Journal of Clinical Medicine Research, 7*(2), 109–114. <https://doi.org/10.14740/jocmr2013w>
- Bhandari, P. (2022). *Correlational research*. Scribbr. Retrieved October 18, 2022, from <https://www.scribbr.com/methodology/correlational-research/>
- Bhat, A. (2022). *Descriptive research: Definition, characteristics, methods, examples and advantages*. QuestionPro. Retrieved October 18, 2022, from <https://www.questionpro.com/blog/descriptive-research/>
- Bililign, N., & Mulatu, T. (2017). Knowledge of obstetric danger signs and associated factors among reproductive age women in Raya Kobo district of Ethiopia: A community based cross-sectional study. *BMC Pregnancy and Childbirth, 17*(1). <https://doi.org/10.1186/s12884-017-1253-4>
- Bintabara, D., Mpembeni, R. N. M., & Mohamed, A. A. (2017). Knowledge of obstetric danger signs among recently-delivered women in Chamwino district, Tanzania: a cross-sectional study. *BMC Pregnancy and Childbirth, 17*(1). <https://doi.org/10.1186/s12884-017-1469-3>
- Bogale, D., & Markos, D. (2015). Knowledge of obstetric danger signs among child bearing age women in Goba district, Ethiopia: a cross-sectional study. *BMC Pregnancy and Childbirth, 15*(1). <https://doi.org/10.1186/s12884-015-0508-1>

- Bolanko, A., Namu, H., Minsamo, K., Addisu, N., & Gebre, M. (2021). Knowledge of obstetric danger signs and associated factors among pregnant women in Wolaita Sodo town, South Ethiopia: A community-based cross-sectional study. *SAGE Open Medicine*, 9, 205031212110011. <https://doi.org/10.1177/20503121211001161>
- Cafasso, J. (2016). *Complications during pregnancy and delivery*. Healthline. <https://www.healthline.com/health/pregnancy/delivery-complications>
- Carrasquillo, O. (2013). Health Care Utilization. *Springer EBooks*, 909–910. https://doi.org/10.1007/978-1-4419-1005-9_885
- Connelly, L.M. (2008). Pilot studies. *MEDSURG Nursing*, 17, 411–412.
- Gliem, J., & Gliem, R. (2003). *Midwest Research to Practice Conference in Adult, Continuing, and Community Education*. https://scholarworks.iupui.edu/bitstream/handle/1805/344/gliem+&+gliem.pdf?sequence=1&fbclid=IwAR3QliVRc95x9fWikUyZr7mAX9tRzig2_h3wYQyrNzpOHlsiaifcOpmCQIA
- Hailu, D., & Berhe, H. (2013). Knowledge about obstetric danger signs and associated factors among mothers in Tsegedie District, Tigray Region, Ethiopia 2013: Community based cross-sectional study. *PLOS ONE*, 9(2). <https://doi.org/10.1371/journal.pone.0083459>
- Hailu, M., Gebremariam, A., & Alemseged, F. (2010). Knowledge about obstetric danger signs among pregnant women in Aleta Wondo District, Sidama Zone, Southern Ethiopia. *Ethiopian Journal of Health Sciences*, 20(1), 25–32. <https://doi.org/10.4314/ejh.s.v20i1.69428>

How the health belief model influences your health choices. (2022). Verywell Mind.

Retrieved from <https://www.verywellmind.com/health-belief-model-3132721>

Knowledge levels. (n.d.). National Institute of Standards and Technology. Retrieved from

https://csrc.nist.gov/glossary/term/knowledge_levels?fbclid=IwAR2CwY_cG-oKMbowj3D1ROg55GDmJBHIKD8tJ0fl_EWmp3slyHhh6JXvxk

Level of knowledge. (n.d.). Law Insider. Retrieved October 12, 2022, from

https://www.lawinsider.com/dictionary/level-of-knowledge?fbclid=IwAR3wwzqTVyywCnQBaw1dpcBeFVINAGtCp_MBAAjkSiDp9tRzySCgD8KRnrE

McCombes, S. (2022). *Descriptive research | definition, types, methods & examples.*

Scribbr. Retrieved October 18, 2022, from

<https://www.scribbr.com/methodology/descriptive-research/>

Moloro, A. H., Waritu, T. U., Haso, M. K., & Ibrahim, R. M. (2023). A systematic review

and meta-analysis protocol on knowledge of obstetric danger signs and

associated factors among women in Africa. *SAGE Open Medicine*, 11,

205031212311781. <https://doi.org/10.1177/20503121231178102>

Mulugeta, A. K., Giru, B. W., Berhanu, B., & Demelew, T. M. (2020). Knowledge about

birth preparedness and complication readiness and associated factors among

primigravida women in Addis Ababa governmental health facilities, Addis Ababa,

Ethiopia, 2015. *Reproductive Health*, 17(1). [https://doi.org/10.1186/s12978-020-](https://doi.org/10.1186/s12978-020-0861-z)

0861-z

Mwilike, B., Nalwadda, G., Kagawa, M., Malima, K., Mselle, L., & Horiuchi, S. (2018).

Knowledge of danger signs during pregnancy and subsequent healthcare seeking

actions among women in Urban Tanzania: a cross-sectional study. *BMC Pregnancy and Childbirth*, 18(1). <https://doi.org/10.1186/s12884-017-1628-6>

Okour, A. M., Alkhateeb, M., & Amarin, Z. (2012). Awareness of danger signs and symptoms of pregnancy complication among women in Jordan. *International Journal of Gynaecology and Obstetrics*, 118(1), 11–14.
<https://doi.org/10.1016/j.ijgo.2012.01.020>

Primigravida. (2022). CambridgeWords. Retrieved from
<https://dictionary.cambridge.org/us/spellcheck/english/?q=primigravida>

Regasa, M.T., Markos, J., Habte, A., & Upashe, S. P. (2020). 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. *Obstetrics and Gynecology International*, 2020, 1–8. <https://doi.org/10.1155/2020/6573153>

Takele, G. M., Ballo, T. H., Gebrekidan, K. B., & Gebregiorgis, B. G. (2021b). Utilization, barriers and determinants of emergency medical services in Mekelle City, Tigray, Ethiopia: a Community-Based Cross-Sectional study. *Open Access Emergency Medicine*, Volume 13, 325–334. <https://doi.org/10.2147/oaem.s315459>

Terefe, N., Nigussie, A., & Tadele, A. (2020). Prevalence of obstetric danger signs during pregnancy and associated factors among mothers in Shashemene Rural District, South Ethiopia. *Journal of Pregnancy*, 2020, 1–7.
<https://doi.org/10.1155/2020/6153146>

Thapa, B., & Manandhar, K. (2017). Knowledge on obstetric danger signs among antenatal mothers attending a tertiary level hospital, Nepal. *Journal of College of*

Medical Sciences-Nepal, 13(4), 383–387.

<https://doi.org/10.3126/jcmsn.v13i4.18093>

Thapa, S. (2014). *Risk perception of women on pregnancy, childbirth and the postpartum phase and the association to the first delay: A case of rural Nepal.*

<https://edepot.wur.nl/400696>

Urich, A. (n.d.). *The health belief model*. Pressbooks.

<https://psu.pb.unizin.org/kines082/chapter/the-health-belief-model/>

Wassihun, B., Negese, B., Bedada, H., Bekele, S., Bante, A., Yeheyis, T., Abebe, A., uli, D., Mohammed, M., Gashawbez, S., & Hussen, E. (2020). Knowledge of obstetric danger signs and associated factors: A study among mothers in Shashamane town, Oromia region, Ethiopia. *Reproductive Health*, 17(1). <https://doi.org/10.1186/s12978-020-0853-z>

Wirtu, R., Yeshanew, S., & Geda, A. (2023). Utilization of ambulance services and associated factors during pregnancy and labor among lactating mothers in Buno Bedele Zone, Southwest Ethiopia. *Health Services Insights*, 16.

<https://doi.org/10.1177/11786329231157227>

World Health Organization (2019). *Emergency care system for universal health*

coverage: ensuring timely care for the acutely ill and injured. Retrieved May 24,

2024, from [https://apps.who.int/gb/ebwha/pdf_files/WHA72/A72_31-](https://apps.who.int/gb/ebwha/pdf_files/WHA72/A72_31-en.pdf#:~:text=URL%3A%20https%3A%2F%2Fapps.who.int%2Fgb%2Febwha%2Fpdf_files%2FWHA72%2FA72_31)

[en.pdf#:~:text=URL%3A%20https%3A%2F%2Fapps.who.int%2Fgb%2Febwha%2Fpdf_files%2FWHA72%2FA72_31](https://apps.who.int/gb/ebwha/pdf_files/WHA72/A72_31-en.pdf#:~:text=URL%3A%20https%3A%2F%2Fapps.who.int%2Fgb%2Febwha%2Fpdf_files%2FWHA72%2FA72_31)

World Health Organization. (2019). *Trends in maternal mortality 2000 to 2017*. World Health Organization. <https://iris.who.int/bitstream/handle/10665/327596/WHO-RHR-19.23-eng.pdf?ua=1>

World Health Organization. (2013). *Counseling for maternal and newborn health care: a handbook for building skills*. <https://apps.who.int/iris/handle/10665/44016>

Yosef, T., & Tesfaye, M. (2021). Pregnancy danger signs: Knowledge and health-seeking behavior among reproductive age women in southwest Ethiopia. *Women's Health, 17*, 174550652110632. <https://doi.org/10.1177/17455065211063295>

APPENDICES

Appendix A

Informed Consent Form



RESEARCH ETHICS REVIEW BOARD
CENTRAL PHILIPPINE UNIVERSITY
 Lopez Jaena St., Jaro, Iloilo City, Philippines
 329-1971 to 79 local 3336



INFORMED CONSENT FORM (ICF) TEMPLATE

(VERSION No. 02-2023)

1. KEY INFORMATION ABOUT THE RESEARCHERS

Title of the Study: KNOWLEDGE OF OBSTETRIC DANGER SIGNS AND LEVEL OF EMERGENCY HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS

Name of Researcher/s: Nicole Sheena Marie F. Marfil, Maria Elijah L. Marfil, Quenniee Lou F. Martinez, Lee Allyah C. Matutino, Eudelyn B. Melchor, Jame Pauline Kayla B. Meren, John Micheal C. Mesa

Research Adviser: Sarla F. Duller PhD, MN, RN, NP

Department/College: College of Nursing

Institution: Central Philippine University

2. INTRODUCTION/BACKGROUND OF THE STUDY

You are invited to take part in this research study. This form contains information that will help you in deciding whether to participate or not in this study/research. Before you decide to participate in this study, you will be given enough time to read and understand the contents of the informed consent. If there are words or concepts that you do not understand feel free to ask questions at any time, the researchers are willing to explain it to you and your questions will be answered to your satisfaction. The study will begin once you have signed the informed consent form.

This study shows that in developing nations, the main cause of maternal death has been obstetric complications (Bolanko et. al, 2021). About 810 women per day in 2017 died from preventable causes associated with pregnancy and delivery (WHO, 2019). Lack of understanding of the danger signs is mostly the reason for the inability to recognize the complications resulting in the delay of seeking care. Furthermore, most maternal deaths will be prevented if women with complications can identify the signs and obtain adequate emergency obstetric care. This is why mothers must not only be educated to spot danger signs but also be prepared for emergency situations. Therefore, the primary and most important task in providing appropriate and prompt obstetric care should be teaching women about the risk factors of pregnancy and childbirth (Wassihun et al., 2020).

3. PURPOSE OF THE RESEARCH

The purpose of this study is to determine whether there is a relationship between the knowledge of obstetric danger signs and level of emergency healthcare utilization among primigravida mothers. There can be other variables that can influence the psychosocial aspect, but this study will only consider the mentioned variables. The demographic profile of the respondents is age and highest educational attainment. They will be asked to answer a researcher-developed questionnaire prepared by the researchers.

4. TYPE OF RESEARCH INTERVENTION/DATA GATHERING INSTRUMENT

This study utilized a researcher-developed questionnaire based on the objectives and variables of the study. The questionnaire is composed of three parts. The first part will gather information about the respondents socio-demographic variables in terms of the age and highest educational attainment. The second part of the questionnaire is composed of three item questions and two checklist-type questions to determine the knowledge level of obstetric danger signs. The knowledge level consists of the "True" or "False" choices corresponding to the respondent's answer. The third part of the questionnaire will consist of one checklist-type question to determine the level of emergency healthcare utilization. The level of emergency healthcare utilization consists of "Never", "Rarely", "Sometimes", "Often", or "Always" choices corresponding to the respondent's answer.

5. PARTICIPANT SELECTION (INCLUSION & EXCLUSION CRITERIA)

You are chosen as a participant based on the following criteria:

Inclusion Criteria

- Women who are pregnant for the first time aged 18 and above at the time of delivery
- Able to read and write.
- Access to a mobile phone, tablet or computer with internet access.
- Those without internet access as long as their place of residence is within 20 km from the study setting.
- Willing to sign the informed consent form.

Exclusion Criteria

- Women who are pregnant for the first time under the age of 18.
- Women who have had multiple pregnancies and deliveries.
- Women who are unable to read and write.
- Women who do not have access to a mobile phone, tablet or computer with internet access.
- Women who are unwilling to participate.

6. VOLUNTARY PARTICIPATION

Your participation in this study is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate or to withdraw from the study at any time, there will be no penalty or other consequences and without need to give any reason.

7. PROCEDURE

Before you decide to participate in this study, you will be given enough time to read and understand the contents of the informed consent. Your questions will be answered to your satisfaction. The study will begin once the informed consent form has been signed.

This study utilized a researcher-developed questionnaire based on the objectives and variables of the study. Quantitative data will be collected through a survey questionnaire. The questionnaire is composed of three parts. The first part will gather information about the respondents socio-demographic variables in terms of the age and highest educational attainment. The second part of the questionnaire is composed of three item questions and two checklist-type questions to determine the knowledge level of obstetric danger signs. The knowledge level consists of the "True" or "False" choices corresponding to the respondent's answer. The third part of the questionnaire will consist of one checklist-type question to determine the level of emergency healthcare utilization. The level of emergency healthcare utilization consists of "Never", "Rarely", "Sometimes", "Often", or "Always" choices corresponding to the respondent's answer.

During the study, the researcher(s) will ensure the following procedures:

- **Data Collection:** Researchers will be contacting the individuals indicated on the list gathered based on their identified targets and invite them to participate in the survey. Then, if they are willing to participate, an informed consent form will be sent through their email address or messenger account, together with the validated tool utilizing Google forms for those with email access. Alternatively, participants preferring a hard copy will receive the printed questionnaire directly from the researchers. The respondents must have a smartphone, tablet, or computer to answer the Google forms. An orientation and giving of instructions will be done virtually, and the link to the survey questionnaire will be forwarded to the respondents with access to the internet using smart phones, tablets, or computers. In case the respondents do not have access to the internet and/or are technically challenged, the researchers will personally visit them to provide instructions and collect the data.

The procedure mentioned above was developed and designed particularly with the purpose of this study in mind. All data acquired in this study will be treated with utmost privacy and confidentiality.

8. DURATION OF THE STUDY

This study will be conducted from March 2024 to April 2024. You will be given a maximum of 15 minutes in completing the survey questionnaire. If given a hard copy

questionnaire, you will be given one (1) week to answer and return the questionnaires.

9. RISKS AND INCONVENIENCES

In this research study, there is a research-related risk categorized as low risk. This risk pertains to the possibility that participants might experience momentary stress or anxiety when discussing their experiences during their pregnancy. If participants find the questions or the overall process uncomfortable, they have the option to choose not to answer or continue. In such cases, the researcher will create a supportive and empathetic environment during the interviews. Participants will be encouraged to take breaks when needed, ask for clarifications on any parts of the conversation, and share their experiences at a pace that feels comfortable to them.

10. BENEFITS

This study will help student nurses increase awareness of obstetric danger signs, as well as the importance of emergency medical services, that can lead to earlier detection and management of complications, reducing maternal and neonatal morbidity and mortality. This study will provide information to the administrator of healthcare institutions for the improvement of their programs, policies, and services regarding maternal healthcare and education. Moreover, primigravida mothers can gain additional knowledge regarding obstetric danger signs and awareness of and utilization of emergency medical services available in their community.

Future researchers can make this study as a reference to enhance and improve their work.

11. REIMBURSEMENTS

Please be informed that there will be no compensation given to the respondents who will take part in this research study. We appreciate the time and effort you will put forth to participate in the advancement of knowledge through your involvement. Moreover, your participation is greatly appreciated, and we assure you to treat your contribution with the highest respect and privacy. Please do not hesitate to contact us if you have any questions or concerns about this subject or any other part of the study. We truly value your engagement in our research endeavor as your contribution is genuinely important.

12. CONFIDENTIALITY

The information you have provided is solely for the purpose of this study. Your identity will be kept private and confidential to the extent provided by law. You will be anonymized by using aliases and will be assigned an ID number, and your data will be stored with utmost respect to your privacy. You will be anonymized by using aliases in lieu of your real names.

13. RIGHT TO REFUSE OR WITHDRAW

You are free to withdraw from participating at any time without any questions asked from the researchers. You may withdraw from the study if at any time you feel uncomfortable answering any of the questions without facing any penalties or negative consequences. If at any time you withdraw from the study, your data will be discarded properly.

14. DECLARATION OF CONFLICT INTEREST

The researchers declare that there is no conflict of interest associated with the conduct of the study and there will be no circumstances that could influence the results.

15. STORAGE AND DISPOSAL OF RESEARCH DATA/MATERIALS

The electronic copy of the data will be kept in a computer that only the researcher(s) has/have access to. Hard copies will be stored in a locked drawer or filing cabinet that only the researcher(s) will have access to for a specific duration as determined by the research protocol and ethical guidelines after publication and will be destroyed after that period of time by shredding hardcopies and deleting online data at the end of this study.

16. SHARING OF RESULTS/DISSEMINATION PLAN

The results of this study will be shared to the respondents upon request. For those who will be utilizing google forms in answering the questionnaire, the results will be sent in your email while for those who will be visited by the researchers, the results will also be given to them personally. Furthermore, the respondents are also informed that the research findings will be shared more broadly to the general public and scientific community, locally and internationally. This can include publications in sharing findings through websites or social media platforms, presenting at conferences or seminars, or publishing articles in scholarly journals. Finally, respondents are assured that their identities will be kept confidential in any public dissemination of the research findings.

17. WHO TO CONTACT

If you have any questions or clarifications regarding your participation in the study, you may contact:

Lead Researcher: NICOLE SHEENA MARIE F. MARFIL
Address: Central Philippine University - College of Nursing
Contact Number: 09519915757
Email address: nicolesheenamarie.marfil-20@cpu.edu.ph

If you have questions pertaining to your rights as a participant, you may contact:

Joy G. Raso, PhD.

Chair, CPU Research Ethics Review Board
 Email: researchethics@cpu.edu.ph
 Phone: 329-1971 (local 3336)

18. CERTIFICATE OF CONSENT

I have read the foregoing information, or it has been read and explained to me in a language/dialect I know and understand. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print name of participant _____

Signature of participant _____

Date _____

MM/DD/YYYY

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done.

- 1.
- 2.
- 3.
- 4.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Print Name of Researcher/person taking the consent _____

Signature of Researcher/ person taking the consent _____

Date: _____

MM/DD/YYYY

Appendix B

Letter of Approval to the Dean



CENTRAL PHILIPPINE UNIVERSITY
College of Nursing
 Jaro, Iloilo City, 5000



Melba C. Sale, M.A.N
 Officer-in-Charge, College of Nursing
 Central Philippine University
 Jaro, Iloilo City

Dear Professor Sale,

Greetings!

We, a group of third year student nurses at Central Philippine University are conducting a study entitled: **“Knowledge Of Obstetric Danger Signs And Emergency Healthcare Utilization Among Primigravidas”** in partial fulfillment of our course, Bachelor of Science in Nursing NCM 3113 – Nursing Research II.

The researchers are:

1. Marfil, Maria Elijah L. (BSN 3E)
2. Marfil, Nicole Sheena Marie F. (BSN 3E)
3. Martinez, Quennie Lou F. (BSN 3E)
4. Matutino, Lee Allyah C. (BSN 3E)
5. Melchor, Eudelyn B. (BSN 3E)
6. Meren, Jame Pauline Kayla B. (BSN 3E)
7. Mesa, John Micheal C. (BSN 3E)

In line with this, we would like to ask permission to conduct our survey in one of the private hospitals in Jaro, Iloilo City. Your support regarding this matter is very much appreciated.

Thank you and God bless.

Very respectfully yours,


A handwritten signature in black ink, appearing to read "Nicole Sheena Marie F. Marfil".

NICOLE SHEENA MARIE F. MARFIL
 Group Leader

Noted:


PARLA F. DULLER, PhD, MN, RN, NP
Research Adviser

Approved by:


MELBA C. SALE, M.A.N
Officer-in-Charge, College of Nursing
Central Philippine University

Appendix C

Research Questionnaire

Name:	Marfil, M. Marfil, N. Martinez Matutino	Melchor Meren Mesa
Course & Year:	BSN 4-E	

Knowledge of Obstetric Danger Signs and Level of Emergency Healthcare Utilization Among Primigravidas

QUESTIONNAIRE

SECTION I – Sociodemographic Information

Directions: Please answer the following by putting a check (✓) on the corresponding boxes.

Palihog sabti ang mga blanko sa dalom sang sakto nga impormasyon kag butangi sang tsek (✓) ang mga kahon para sa imong mga sabat.

Age as of last birthday (Edad sa pinaka-ulihing kaadlawan): ____

Highest Educational Attainment (Pinakataas nga tinaposan sa pag-eskwela):

- Elementary
Elementarya
- Junior High School
Junyor Hayskul
- Senior High School
Senyor Hayskul
- College
Kolehiyo
- Others (Please specify): _____
Iba pa (Palihog isulat)

SECTION II – Knowledge

Directions: Answer the following questions by checking (✓) the corresponding boxes
Palihog sabti sang saktong impormasyon kag butangi sang tsek (✓) ang mga kahon para sa imong mga sabat.

A. Obstetric Danger Signs

Did you know that unexpected problems occur during pregnancy or childbirth that could put the life of the mother at risk?

Bal-an mo bala nga may mga problema nga wala gina paabot nga matabo samtang naga busong kag kon magbata nga makabutang sang kabuhi sang nanay sa delikado?

True

Tuod

False

Indi

Do you know that there might be danger signs during pregnancy?

Nakabalo ka bala kon ano ang mga posible nga mga delikado nga sintomas samtang naga busong?

True

Tuod

False

Indi

Please identify the danger signs during pregnancy by putting a check (✓) in the column that corresponds to your answer: "True" or "False."

Palihog pilia ang mga delikado nga sintomas samtang gabusong kag butangi sang tsek (✓) sa tupad sang imong mga sabat; "Tuod" ukon "Hindi".

	True (Tuod)	False (Indi)
Heavy vaginal bleeding <i>Tama kadamo nga pagdugo halin sa kinatawo</i>		
Nausea and vomiting <i>Daw masuka kag gasuka-suka</i>		
Anemia (hemoglobin less than 11.0 g/dl) <i>Kulang sa dugo (Mas nubo ang hemoglobin sa 11.0 g/dl)</i>		

Convulsions (fits) of pregnancy <i>Kombulsyon samtang nagabusong</i>		
Breast tenderness and swelling <i>Gasakit kag gabanog ang susu</i>		
Severe and persistent abdominal pain during the first trimester <i>Grabe kag wala untat nga pagsakit sang tiyan samtang sa una nga tatlo ka bulan sang pagbusong</i>		
Light spotting <i>Gamay gamay nga pagdugo</i>		
High-grade fever (39-39.9 °C) <i>Mataas nga hilanat nga nagalab-ot sa (39-39.9 °C)</i>		
High blood pressure (140/90 mmHg or more) <i>Mataas nga presyon sang dugo (140/90 mmHg ukon mas mataas)</i>		
Severe headache <i>Tama kasakit ang ulo</i>		
Fatigue <i>Grabe nga kapoy</i>		
Sudden swelling of the face, hands and feet <i>Gulpyada nga pag manas sang guya, mga kamot, kag mga ti-il.</i>		
Awareness of fast heartbeat <i>Nabatyagan ang pagdasig sang pitik ka corazon (heart).</i>		
Reduced or absence of fetal movement <i>Maluya o wala na gahulag ang ginabusong nga bata</i>		
Blurring vision <i>May pagburon ang panulokan</i>		
Sudden gush of amniotic fluid and no signs of labor <i>Gulpyada nga pag -ilig sang panubigan nga wala sang sintoma nga mabata.</i>		

SECTION III – Utilization

Directions: Please answer by checking (✓) the corresponding boxes.

Palihog sabat sa idalom sang mga insakto nga impormasyon paagi sa pagtsek (✓) sa mga gakaigo nga sabat lamang.

A. Healthcare Services

If you have experienced any of the danger signs, please check (✓) how often you have utilized these emergency healthcare services by selecting one of the categories in the column below:

Kung ikaw ang naka-eksperyensya sang mga delikado nga sintoma samtang naga busong, palihog tsek (✓) kung pila ka beses mo ginamit ini nga mga serbisyo paagi sa pagpili sang isa sa mga katagorya sa idalom.

	Never <i>Hindi</i>	Rarely <i>Malaka</i>	Sometimes <i>Kon-kaisa</i>	Often <i>Masami</i>	Always <i>Permi</i>
<p>1. I went to the nearby Rural Health Unit (RHU) when I experienced any of the danger signs</p> <p><i>Nagkadto ko sa malapit nga RHU sang naka eksperyensya ako sang mga delikado nga sintomas samtang naga busong.</i></p>					
<p>2. I went to the nearby private clinic when I experienced any of the danger signs</p> <p><i>Nagkadto ko sa malapit nga pribadong klinika sang naka eksperyensya ako sang mga delikado nga sintomas samtang ga busong</i></p>					
<p>3. I went to the nearby hospital when I experienced any of the danger signs</p> <p><i>Nagkadto ko sa malapit nga ospital sang naka eksperyensya ako sang mga delikado nga sintomas samtang naga busong.</i></p>					
4. When I experienced					

<p>any of the danger signs, I called for a physician.</p> <p><i>Sang naka eksperyensya ako sang mga delikado nga sintomas samtang naga busong, nagtawag ako sa doktor.</i></p>					
<p>5. When I experienced any of the danger signs, I called for a nurse.</p> <p><i>Sang naka eksperyensya ako sang mga delikado nga sintomas samtang naga busong, nagtawag ako sa nars.</i></p>					

Appendix D

Certificate of Validation for Research Instrument



Central Philippine University
College of Nursing
Jaro, Iloilo city

CERTIFICATION OF RESEARCH INSTRUMENT VALIDATION (QUANTITATIVE RESEARCH)

This is to certify that the study entitled: KNOWLEDGE OF OBSTETRIC DANGER SIGNS AND LEVEL OF EMERGENCY HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS, has undergone instrument validation. Necessary changes have been checked and approved.

This certification is issued upon the request of the authors: Nicole Sheena Marie F. Marfil, Maria Elijah L. Marfil, Quennie Lou F. Martinez, Lee Allyah C. Matutino, Eudelyn B. Melchor, Jame Pauline Kayla B. Meren, and John Micheal C. Mesa. As an expert of this subject, I have reviewed the instruments and its contents as to its appropriateness and accuracy based on the problem statement, objectives, conceptual framework, and operational definition of terms.

Issued this 2nd day of April, 2024 to the above mentioned student researchers in compliance with their requirements in their research subject.

Respectfully,


RITA E. PENASO, MAN, RN
Validator



Central Philippine University
College of Nursing
Jaro, Iloilo city

CERTIFICATION OF RESEARCH INSTRUMENT VALIDATION
(QUANTITATIVE RESEARCH)

This is to certify that the study entitled: KNOWLEDGE OF OBSTETRIC DANGER SIGNS AND LEVEL OF EMERGENCY HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS, has undergone instrument validation. Necessary changes have been checked and approved.

This certification is issued upon the request of the authors: Nicole Sheena Marie F. Marfil, Maria Elijah L. Marfil, Quennie Lou F. Martinez, Lee Allyah C. Matutino, Eudelyn B. Melchor, Jame Pauline Kayla B. Meren, and John Micheal C. Mesa. As an expert of this subject, I have reviewed the instruments and its contents as to its appropriateness and accuracy based on the problem statement, objectives, conceptual framework, and operational definition of terms.

Issued this 2nd day of April, 2024 to the above mentioned student researchers in compliance with their requirements in their research subject.

Respectfully,


AILEEN M. SOBREMISANA, MAN, RN
Validator



Central Philippine University
College of Nursing
Jaro, Iloilo city

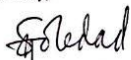
CERTIFICATION OF RESEARCH INSTRUMENT VALIDATION
(QUANTITATIVE RESEARCH)

This is to certify that the study entitled: KNOWLEDGE OF OBSTETRIC DANGER SIGNS AND LEVEL OF EMERGENCY HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS, has undergone instrument validation. Necessary changes have been checked and approved.

This certification is issued upon the request of the authors: Nicole Sheena Marie F. Marfil, Maria Elijah L. Marfil, Quennie Lou F. Martinez, Lee Allyah C. Matutino, Eudelyn B. Melchor, Jame Pauline Kayla B. Meren, and John Micheal C. Mesa. As an expert of this subject, I have reviewed the instruments and its contents as to its appropriateness and accuracy based on the problem statement, objectives, conceptual framework, and operational definition of terms.

Issued this 2nd day of April, 2024 to the above mentioned student researchers in compliance with their requirements in their research subject.

Respectfully,


NOVIE JOY C. SOLEDAD, MN, RN
Validator

Appendix E

Technical Approval Sheet



Central Philippine University
Jaro, Iloilo City
College of Nursing
The First Nursing School in the Philippines, 1906
Bachelor of Science in Nursing



ENDORSEMENT SHEET FOR ETHICS REVIEW

(Technical Panel Approval Sheet)

This undergraduate thesis proposal entitled **Knowledge of Obstetric Danger Signs, Emergency Medical Services and Emergency Healthcare Utilization Among Primigravidas**, prepared and submitted by **Nicole Sheena Marie F. Marfil, Maria Elijah L. Marfil, Quennie Lou F. Martinez, Lee Allyah C. Matutino, Eudelyn B. Melchor, Jame Pauline Kayla B. Meren, and John Micheal C. Mesa** in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN NURSING, has been presented in a Proposal Review on **March 23, 2023**.

Further, the suggestions and recommendations of the technical panel have been complied with.

This proposal is now recommended for ethical review.

VERNA LYNN H. DUEÑAS, MAEd, RN
Panelist

PARLA F. DULLER, PhD, MN, RN, NP
Panelist/Adviser

Approved by:

MELBA C. SALE, MAN, RN
OIC Dean, College of Nursing

Appendix F

Letter to the Research Ethics Committee Chair



CENTRAL PHILIPPINE UNIVERSITY
COLLEGE OF NURSING
The First School of Nursing in the Philippines, 1906
 Jaro, Iloilo City 5000
 Philippines



June 16, 2023

JOY G. RASO, Ph.D.
 Chair, Research Ethics Review Board
 Central Philippine University
 Jaro, Iloilo City 5000

Dear Dr. Raso,

Greetings!

The BSN – 3E Group 6 students at Central Philippine University - College of Nursing, are currently conducting a research entitled, "KNOWLEDGE OF OBSTETRIC DANGER SIGNS, EMERGENCY MEDICAL SERVICES AND EMERGENCY HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS."

The researchers are:

1. Marfil, Nicole Sheena Marie F. (BSN 3E)
2. Marfil, Maria Elijah L. (BSN 3E)
3. Martinez, Quennie Lou F. (BSN 3E)
4. Matutino, Lee Allyah C. (BSN 3E)
5. Melchor, Eudelyn B. (BSN 3E)
6. Meren, Jame Pauline Kayla B. (BSN 3E)
7. Mesa, John Micheal C. (BSN 3E)

The study objectives are:

General Objective:

This study aims to determine the level of knowledge of primigravida about obstetric danger signs, emergency medical services and emergency healthcare utilization admitted from May 2022-April 2023 in a private healthcare institution in Iloilo City, Philippines.

Specifically, this study aims to:

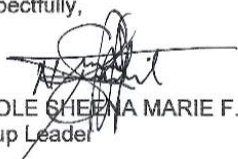
1. Determine the respondents' socio-demographic variables in terms of age and highest educational attainment.
2. Determine the level of knowledge of primigravida about obstetric danger signs.
3. Determine the level of knowledge of primigravida about emergency medical services.
4. Determine extent of emergency medical healthcare utilization among primigravida.
5. Determine whether there is a relationship between age, highest educational attainment and level of knowledge of primigravida about obstetric danger signs.

- 6. Determine whether there is a relationship between age, highest educational attainment and level of knowledge of primigravida about emergency medical services.
- 7. Determine whether there is a relationship between age, highest educational attainment and emergency healthcare utilization among primigravida.
- 8. Determine whether there is a relationship between the level of knowledge of primigravida about obstetric danger signs and emergency healthcare utilization.
- 9. Determine whether there is a relationship between the level of knowledge of primigravida about emergency medical services and emergency healthcare utilization.

In line with this, we would like to ask permission from your good office to conduct our study.

Your favorable response regarding this matter is greatly appreciated. Thank you very much.

Respectfully,



NICOLE SHEENA MARIE F. MARFIL
Group Leader

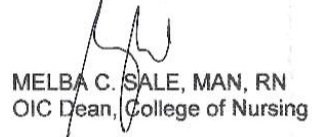
Noted by:



SARLA F. DULLER, PhD, MN, RN, NP
Research Adviser



ALVIN JOHN H. GUSTILO, MAN, RN
Research Coordinator



MELBA C. SALE, MAN, RN
OIC Dean, College of Nursing

Approved: _____
Date: _____
Signed: _____

Appendix G

Ethical Clearance



RESEARCH ETHICS REVIEW BOARD
CENTRAL PHILIPPINE UNIVERSITY
Lopez Jaena St. Jaro, Iloilo City, Philippines
329-1971 to 79 local 3336



ETHICAL CLEARANCE

RERB Form No 22-2
Version No 04
Date of Effectivity 17 May 2023

Date of Approval: November 10, 2023

RERB Code: 2023-225-UG-MARFIL et al.

Protocol Title: **"KNOWLEDGE OF OBSTETRIC DANGER SIGNS, EMERGENCY MEDICAL SERVICES AND EMERGENCY HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS"**

Version No. 03

Researcher/s **MARFIL, NICOLE SHEENA MARIE F.**
MARFIL, MARIA ELIJAH
MARTINEZ, QUENNIE LOU
MATUTINO, LEE ALLYAH
MELCHOR, EUELYN
MEREN, JAME PAULINE KAYLA
MESA, JOHN MICHEAL

Upon resubmission of the following documents, Research Proposal Chapters 1, 2, and 3 with references and Informed Consent Form, the above protocol is hereby **APPROVED** by the CPU-RERB. This ethical clearance is valid from **November 10, 2023 to November 10, 2024**.

The researcher/s are hereby required to submit the following:

- ✓ Progress Report on or before **December 10, 2023** to researchethics@cpu.edu.ph
- ✓ Final Report Form and one (1) copy of the completed protocol **within one (1) month** after completion of the study.

For any amendment or alteration in the protocol that will change the nature, or the level of risk involved after approval, the Research Ethics Review Board must be notified through writing and accomplishing the following forms as needed: Protocol Deviation Form, Serious Adverse Events, Amendment Form, and/or Early Termination Report.

Very truly yours,


JOY G. RASO, PhD
Chair, CPU-RERB

Date: 11/10/23

Appendix H

Plagiarism Scan Certification



CENTRAL PHILIPPINE UNIVERSITY
REVIEW, CONTINUING EDUCATION and CONSULTANCY CENTER
Jaro, Iloilo City
Tel. No. 329-1971 local 1008 email: rceccsec@cpu.edu.ph
Website: rcecc.cpu.edu.ph

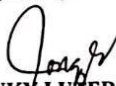


June 13, 2024

CERTIFICATION

This is to certify that the paper entitled “Knowledge of Obstetric Danger Signs and Level of Emergency Healthcare Utilization among Primigravidas” by Nicole Sheena Marie F. Marfil, Maria Elijah L. Marfil, Quennie Lou F. Martinez, Lee Allyah C. Matutino, Eudelyn B. Melchor, Jame Pauline Kayla B. Meren, and John Micheal C. Mesa had undergone Turnitin Similarity Checking with a passing percentage of 12% and had passed the requirements (Chapters 1-5).

Prepared by:


PINKY LUTERIO-TONGOL
Staff-in-charge

Appendix I
Statistician's Certification



Central Philippine University
Jaro, Iloilo city

STATISTICIAN'S CERTIFICATION

This is to certify that this research study entitled, Knowledge of Obstetric Danger Signs and Level of Emergency Healthcare Utilization Among Primigravidas and submitted by Marfil, Nicole Sheena Marie F.; Marfil, Maria Elijah L.; Martinez, Quennie Lou F.; Matutino, Lee Allyah C.; Melchor, Eudelyn B.; Meren, Jame Pauline Kayla B.; Mesa, John Micheal C.

For the degree of Bachelor of Science in Nursing is certified to have undergone statistical analysis and reviewed by the undersigned.

Issued this 30th day of April, 2024, Central Philippine University, Jaro, Iloilo City, Philippines.

A handwritten signature in black ink, consisting of several vertical strokes and a horizontal line.

Prof. Tony Ray A. Canaman
Statistician

Appendix J
Grammarian's Certification



COLLEGE OF ARTS AND SCIENCES
CENTRAL PHILIPPINE UNIVERSITY
Department of Languages, Mass Communication, and Humanities

CERTIFICATION

This is to certify that the research entitled **KNOWLEDGE OF OBSTETRIC DANGER SIGNS AND LEVEL OF EMERGENCY HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS** by *Nicole Sheena Marie F. Marfil, Maria Elijah L. Marfil, Quennie Lou F. Martinez, Lee Allyah C. Matutino, Eudelyn B. Melchor, Jame Pauline Kayla B. Meren, and John Micheal C. Mesa* was checked and verified for grammar and other mechanics of writing.

Issued this 13th of June, 2024.

RHYS DE LA BANDA CAMACHO, MA English (major in TESOL)
DLMCH Faculty
This University

Appendix L

Letter of Approval for Major Revisions to the Research Ethics Committee Chair



CENTRAL PHILIPPINE UNIVERSITY
 COLLEGE OF NURSING
The First School of Nursing in the Philippines, 1906
 Jaro, Iloilo City 5000
 Philippines



March 25, 2024

JOY G. RASO, Ph.D.
 Chair, Research Ethics Review Board
 Central Philippine University
 Jaro, Iloilo City 5000

Dear Dr. Raso,

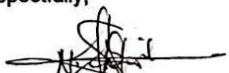
Good day!

We, the BSN 4E - Group 6 students at Central Philippine University College of Nursing, are conducting a research entitled, "KNOWLEDGE OF OBSTETRIC DANGER SIGNS AND LEVEL OF EMERGENCY HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS."


We are writing this letter because we amended our protocol and questionnaire. Attached is the Amendment Form showing the recommended changes and their rationale.

Thank you for your attention and consideration as we eagerly anticipate your positive response.

Respectfully,


 NICOLE SHEENA MARIE F. MARFIL
 BSN 4E - Group 6, Leader

Noted:

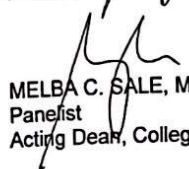

 SARLA FERRER DULLER, PhD, MN, RN, NP
 Research Adviser

Approved:


 DR. EDGARDO P. GERADA
 Panelist





VERNA LYNN H. DUEÑAS, MAEd, RN
Panelist



MELBA C. SALE, MAN, RN
Panelist
Acting Dean, College of Nursing

Appendix M

Research Ethics Decision Form

 RESEARCH ETHICS REVIEW BOARD CENTRAL PHILIPPINE UNIVERSITY Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336	
DECISION FORM	RERB Form No. 22-1
	Version No. 04
	Date of Effectivity: 17 May 2023

Date: April 11, 2024

NAME OF PROPONENT: NICOLE SHEENA MARIE F. MARFIL

MARIA ELIJAH L. MARFIL
 QUENNIE LOU F. MARTINEZ
 LEE ALLYAH C. MATUTINO
 EUDELYN B. MELCHOR
 JAME PAULINE B. KAYLA MEREN
 JOHN MICHEAL C. MESA

Institution: CENTRAL PHILIPPINE UNIVERSITY

Re: **"KNOWLEDGE OF OBSTETRIC DANGER SIGNS AND LEVEL OF EMERGENCY HEALTHCARE UTILIZATION AMONG PRIMIGRAVIDAS"**

RERB code: 2023-225-UG-MARFIL et al.

Dear Mr/Ms. Marfil,

This is to acknowledge receipt of the following documents dated April 01, 2024:

1. Letter of amendment addressed to CPU- RERB Chair
2. Accomplished Amendment Form (Form 10-1)

The above documents were presented and deliberated during the board meeting and generated the following recommendations/decisions:

DECISION: Approved Minor revision
 Disapproved Major revision

Very truly yours,


 Joy G. Raso, PhD



Chair, CPU-RERB

Date: 4/11/24

- This form contains the CPU-RERB recommendations. Please comply within ten (10) days and wait for the Ethical Clearance before the conduct of the study.

Appendix N

Progress Report

 <div style="text-align: center;"> CENTRAL PHILIPPINE UNIVERSITY RESEARCH ETHICS REVIEW BOARD Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336 </div> 	
PROTOCOL REVIEW OF PROGRESS REPORT	RERB Form No. 09-1 Version No. 01 Date of Effectivity: 17 May 2023

INSTRUCTIONS TO THE RESEARCHER/s:

This form is required thirty (30) days after your Data Collection. Obtain an electronic copy of this form and supply All information required in the space provided. This form shall be signed by the researcher and adviser before submission to researchethics@cpu.edu.ph

GENERAL INFORMATION

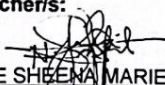
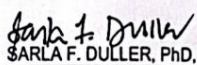
Title of Study	Knowledge of Obstetric Danger Signs and Level of Emergency Healthcare Utilization Among Primigravidas		
RERB Code:	2023-225-UG-MARFL et al.	Study Site	Selected towns and barangays within Iloilo (Cabatuan, Dingle, and Jaro) and Antique (Patnongon, San Remigio, and Sibalom)
Name of Researcher	Nicole Sheena Marie F. Marfil Maria Elijah L. Marfil Quennie Lou F. Martinez Lee Allyah C. Matutino Eudelyn B. Melchor Jame Pauline Kayla B. Meren John Micheal C. Mesa		
Contact No.	09519915757	Email Address	nicolesheenamarie.marfil-20@cpu.edu.ph
Co-researcher (if any)			
Institution	Central Philippine University		
Address of Institution	Lopez Jaena Street, Jaro, Iloilo City 5000		
Ethical clearance effectivity period:	From: <u>November 10, 2023</u>		To: <u>November 10, 2024</u>

PROGRESS REPORT

1. Start of study: The conceptualization of this study started last September 2022.
2. Expected end of study: The study was expected to end in May 2024.



participants should not be less than 30.
5. Number of participants who withdrew: None of the participants withdrew from the study. However, they were free to withdraw from participating at any time without any questions asked.
6. Deviations from the approved protocol: There were no deviations from the approved protocol. All changes in the protocol and actions done during the study were reported and given permission and approval.
7. New information (literature or in the conduct of the study) that may significantly change the risk-benefit ratio: There is no specific mention of new information that may significantly change the risk-benefit ratio. However, it is important to recognize the dynamic nature of healthcare knowledge and the potential for new insights to emerge in the future.
8. Issues/problems encountered: There was a revision of our title, wherein we removed the antecedent variables and ensured the quantifiability of the dependent variable. Collaboration with our panel members and validators was integral to refining the questionnaire and research. We awaited the approval of our amendment form by RERB, causing a delay in our data gathering process.

CPU-RERB

Recommendations (For RERB use only)	
DECISION: (For RERB use only)	<input type="checkbox"/> Ask for further information <input type="checkbox"/> Noted and Accept report
Comments of Primary Reviewer (For RERB use only)	
RERB Primary Reviewer: (For RERB use only)	
_____ Signature over Printed Name	
Date:	
Researcher/s:	
	
NICOLE SHEENA MARIE F. MARFIL	
_____ Signature Over Printed Name	
Date: June 14, 2024	
Adviser:	
	
SARLA F. DULLER, PhD, MN, RN, NP	
_____ Signature Over Printed Name	
Date: June 14, 2024	

Appendix O

Final Report

 CENTRAL PHILIPPINE UNIVERSITY RESEARCH ETHICS REVIEW BOARD Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336	
FINAL REPORT FORM	RERB Form No. 13-1 Version No. 01 Date of Effectivity: 17 May 2023

INSTRUCTIONS TO THE RESEARCHER/s:

This form is required upon completion of the study. Obtain an electronic copy of this form and supply all information required in the space provided. This form shall be signed by the researcher and adviser before submission to researchethics@cpu.edu.ph

GENERAL INFORMATION			
RERB Code	2023-225-UG-MARFIL et al.	Date (DD/MM/YYYY)	14/06/2024
Protocol Title	Knowledge of Obstetric Danger Signs and Level of Emergency Healthcare Utilization Among Primigravidas		
Principal Investigator/s	Nicole Sheena Marie F. Marfil Maria Elijah L. Marfil Quennie Lou F. Martinez Lee Allyah C. Matutino Eudelyn B. Melchor Jame Pauline Kayla B. Meren John Micheal C. Mesa		
Department/College	College of Nursing		
Contact No.	09519915757	*Email Address	nicolesheenamarie.marfil-20@cpu.edu.ph
Co-investigator/s (if any)			
Contact No.		Email Address	
Institution of Researcher/s	Central Philippine University		
Address of Institution	Lopez Jaena Street, Jaro, Iloilo City 5000		
Effective period of Ethical Clearance	From: <u>November 10, 2023</u> To: <u>November 10, 2024</u>		
(*for RERB) Primary Reviewer/s			
Type of Study	<input type="checkbox"/> Clinical <input type="checkbox"/> Epidemiology <input type="checkbox"/> Observational study <input type="checkbox"/> Document Review <input type="checkbox"/> Individual based <input type="checkbox"/> Genetic <input checked="" type="checkbox"/> Social Survey <input type="checkbox"/> Others, specify _____		
Review Status	<input type="checkbox"/> Full Board <input type="checkbox"/> Expedited		

FINAL REPORT
1. Start/end of the Study: The conceptualization of this study started last September 2022 until June of 2024.
2. Number of enrolled participants: The total number of enrolled participants was 120, including those that participated in our pilot study (20 respondents) and actual data

gathering (100 respondents). The researchers used snowball sampling to get 100 respondents.
3. Number of required participants: The required number of participants for our pilot study was 10% of the total respondents, which was 100. For the actual data gathering, the required participants should not be less than 30.
4. Number of participants who withdraw: None of the participants withdrew from the study. However, they were free to withdraw from participating at any time without any questions asked.
5. Deviations from the approved protocol: There were no deviations from the approved protocol. All changes in the protocol and actions done during the study were reported and given permission and approval.
6. Issues/problems encountered: There was a revision of our title, wherein we removed the antecedent variable and ensured the quantifiability of the dependent variable. Alterations to the research questionnaire, such as the addition and removal of items, were made after consultations with panel members and validators. As a result, actual data gathering was delayed due to the major revision of our research and the awaited approval of our amendment form from RERB.
<p>7. Summary of findings: This study aimed to determine the level of knowledge of primigravidas who gave birth from January 2019 to May 2023 about obstetric danger signs and level of emergency healthcare utilization in selected towns and barangays within the provinces of Iloilo and Antique. It sought to determine whether there is a significant relationship between the level of knowledge of obstetric danger signs and level of emergency healthcare utilization among primigravidas. This was a descriptive-correlational type of study that utilized a survey questionnaire. The target population of this study were the primigravida mothers who gave birth from January 2019 to May 2023 in selected towns and barangays within the provinces of Iloilo and Antique.</p> <p>This study utilized a researcher-developed questionnaire based on the objectives and variables of the study. The questionnaire is composed of three parts. The first part gathered information about the respondents' socio-demographic variables in terms of the age and highest educational attainment. The second part of the questionnaire is composed of three item questions and two checklist-type questions to determine the knowledge level of obstetric danger signs. The knowledge level consists of the "True" or "False" choices corresponding to the respondent's answer. The third part of the questionnaire consisted of one checklist-type question to determine the level of emergency healthcare utilization. The level of emergency healthcare utilization consisted of "Never", "Rarely", "Sometimes", "Often", or "Always" choices corresponding to the respondent's answer.</p> <p>The researcher-developed questionnaire was subjected to validation and reliability tests. The questionnaire was validated by three (3) experts with master's degrees who are knowledgeable about women's health and serve as clinical instructors in the College of Nursing. The experts judged the tool's clarity and relevance to the study objectives using a validation form. Comments and corrections were taken into consideration. In this study, twenty (20) mothers who were not part of the study were selected to participate in the pilot testing. The Statistical Package for Social Sciences (SPSS) was employed to analyze the reliability of responses for each question. The initial analysis using SPSS yielded a Cronbach's Alpha value of 0.849, indicating the reliability of the instrument is good.</p> <p>On the other hand, The researchers used a snowball sampling to get 100 respondents. Researchers collected the informed consent and conducted surveys both online and face-to-face with the respondents. Spearman's rho was used to identify the correlation between the level of knowledge of obstetric danger signs and level of emergency healthcare utilization among primigravidas.</p> <p>MAJOR FINDINGS</p> <p>1. Majority of the respondents (38%) were in the age group of 24 to 28, followed by 36% of participants who were aged 23 years or below, while 26% were 29 years old or above. However, 70 respondents with the highest percentage of 70% have college as their highest educational attainment. Furthermore, 29% of the respondents indicated junior highschool and senior highschool as their highest educational attainment and 1% of the respondent held a post graduate degree.</p>

<ol style="list-style-type: none"> 2. The highest percentage of respondents with 95% that corresponds to correct answer was item 12, "Sudden swelling of the face, hands, and feet (<i>Gulpyada nga pag manas sang guya, mga kamot, kag mga ti-il</i>), followed by item 13, "Awareness of fast heartbeat (<i>Nabatyagan ang pagdasig sang pitik ka corazon o heart</i>)," with 94%. Item 6, "Severe and persistent abdominal pain during the first trimester (<i>Grabe kag wala untat nga pagsakit sang tiyan samtang sa una nga tatlo ka bulan sang pagbusong</i>)," has 91% correct responses; item 3, "Anemia (hemoglobin less than 11.0 g/dl) (<i>Kulang sa dugo (Mas nubo ang hemoglobin sa 11.0g/dl)</i>)," and item 10, "Severe headache (<i>Tama kasakit ang ulo</i>)," have the same percentage of 87 of the correct answers. On the other hand, there are 5 items that attained the lowest percentage of correct answers. Item 4, "Convulsions (fits) of pregnancy (<i>Kombulsyon samlang nagabusong</i>)," has a percentage of 75; item 5, "Breast tenderness and swelling (<i>Gasakit kag gabanog ang susu</i>)," with 61% of the correct answers; item 2, "Nausea and vomiting (<i>Daw masuka or gasuka-suka</i>)," and item 7, "Light spotting (<i>Gamay gamay nga pagdugo</i>)," have the same percentage of 59, and lastly, item 11, "Fatigue (<i>Grabe nga kapoy</i>)," recorded the lowest percentage of correct answers. 3. The highest percentage of the respondents (30%) always went to the hospital when they experienced danger signs, followed by 24% in the rural health unit selected by the respondents who always visited the RHU when they experienced danger signs. 20% and 17% of the respondents, respectively, consistently called a nurse or doctor when they experienced danger signs. With 14% of the respondents always going to a private clinic when they saw danger signs, private clinics were the least used. 4. There is a direct relationship between the level of knowledge of obstetric danger signs and the level of emergency healthcare utilization among primigravidas (Spearman's rho .435 and $p=.001$).
<p>8. Conclusions/Recommendations:</p> <p>Conclusions:</p> <ol style="list-style-type: none"> 1. Nearly 95% of primigravidas obtained the correct answer on Sudden swelling of the face, hands and feet (<i>Gulpyada nga pag manas sang guya, mga kamot, kag mga ti-il</i>), while only 5% obtained the wrong answer. This indicates that most respondents who are knowledgeable on this symptom have a high level of emergency healthcare utilization among primigravidas. 2. More than half (52%) of primigravidas obtained the correct answer on Fatigue (<i>Grabe nga kapoy</i>), while a notable 48% obtained the wrong answer. This indicates that only a discernible portion of respondents who are knowledgeable on this symptom have the lowest level of emergency healthcare utilization among primigravidas. 3. A significant proportion (30%) of primigravidas always went to the hospital when they experienced danger signs. This indicates a relatively high level of emergency healthcare utilization. 4. Only a few primigravidas (14%) utilized private clinics when they experienced danger signs. This indicates that the private clinic is the least utilized. 5. There is a significant relationship between the respondent's level of knowledge of obstetric danger signs and the level of emergency healthcare utilization. It indicates that higher levels of knowledge among primigravidas correspond with higher levels of emergency healthcare utilization. On the other hand, it shows that the primigravidas who are least knowledgeable have a lower level of emergency healthcare utilization. <p>Recommendations:</p> <p>Administrator of Healthcare Institutions. Engage in developing and carrying out plans to educate primigravida mothers. In order to encourage mothers to make informed choices about their health and seek medical assistance as soon as necessary, these efforts should concentrate on increasing mothers' knowledge of obstetric danger signs.</p> <p>Community Health Nurses. Primigravida mothers should be informed about obstetric danger signs and encouraged to seek emergency medical attention through tailored health education programs organized by community health nurses. These programs should prioritize assisting primigravida mothers who have completed up to a secondary education. Informing people about obstetric danger signs and the importance of obtaining medical assistance as soon as possible should be done through interactive methods, visual aids, and easily understood terminology in regular health education programs.</p> <p>Barangay Health Workers. Adequate training on identifying obstetric danger signs and utilizing emergency medical services would be helpful in order to enhance the skills of barangay health workers in assisting primigravida mothers. BHWs should be educated to use effective</p>