
Obstetric Emergency Education Among Primipara Mothers: A Basis for Enhanced Maternal-Child Health Outcomes

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ABSTRACT

Background: Knowledge and preparedness for pregnancy is vital among first-time mothers, especially in dealing with obstetric emergencies. Having poor knowledge and lack of preparedness for obstetric emergencies could affect maternal and child health outcomes. **Objective:** This study determined the level of knowledge and preparedness of primipara mothers in before/after obstetric emergency management health education. **Design/Methods:** A Quasi-experimental research design with pre/post measures was used. It involved fifteen (15) control group or the primipara mothers who attended their first obstetric emergency management; and fifteen (15) experimental group who have not attend their first obstetric emergency management health education in Barangay Health Stations of Talisay, Camarines Norte. A pen and paper survey served as a tool to facilitate the pre- and post-test. In data analysis, descriptive statistics, p-value, and effect size were applied. **Results:** Knowledge level shown before and after health education among experimental group is (pre-test/m= 5; post-test/m= 10) and control group (pre-test/m= 6.; post-test/m=11). Preparedness level shown before and after health education among experimental group is (pre-test/m= 4.8; post-test/m= 9.8) and control group (pre-test/m= 5.6; post-test/m= 9.7). No statistical significance shown in the level of knowledge ($p = .109$, $< .05$) and preparedness ($p = .105$, $< .05$). **Conclusions/Implications:** Indeed, the administered obstetric emergency management health education able achieve transformation of knowledge and preparedness primipara mothers. The pre- and post-test nature of the methodology was a limitation of this study. Moreover, follow-up and outcomes of pregnancy were not assessed in the present study. The questionnaires used in the study were self-reported and not have separate test for pre- and post-knowledge and preparedness to obstetric emergencies and its management; hence, there was a chance of subjective assessment bias.

Keywords: - Primipara mothers, Obstetric emergency management health education, Pre-test, Post-test, Knowledge, and Preparedness.

INTRODUCTION

Pregnancy, especially for first-time mothers or primipara mothers, is often accompanied by significant health risks, including obstetric emergencies such as preeclampsia, hemorrhage, and labor complications. In many low-resource settings, these emergencies can lead to adverse outcomes for both mothers and infants if not managed promptly. Health education, particularly about obstetric emergency management, is crucial in improving maternal health outcomes. Educating primipara mothers about recognizing signs of obstetric emergencies and knowing

when to seek immediate medical help is an essential step in reducing maternal morbidity and mortality.

Statement of the Problem

The study sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of;
 - A. Age
 - B. Civil Status
 - C. Educational Background
 - D. Monthly Income
2. What is the level of knowledge of primipara mothers regarding obstetric emergency education intervention?
3. What is the level of preparedness of primipara mothers in responding to obstetric emergencies for the intervention?
4. Is there a significant difference in the knowledge scores of primipara mothers before and after obstetric emergency education?
5. Is there a significant difference in the preparedness scores of primipara mothers before and after obstetric emergency education?
6. What nursing campaign can be suggested to sustain the provision of obstetric emergency education in Talisay, Camarines Norte?

Scope and Delimitations

This study examined how obstetric emergency management health education able to promote a change in knowledge and the preparedness of primipara mothers. This study involved fifteen (15) control group or the primipara mothers who attended their first obstetric emergency management; and fifteen (15) experimental group who have not attend their first obstetric emergency management health education in Barangay Health Stations of Talisay, Camarines Norte. A survey tool was made to serve as the principal data gathering tool to efficiently collect data from the respondents during Academic Year 2025-2026. The data collected were analyzed using frequency, percentage, weighted mean, and Analysis of Variance (ANOVA) to test the significant difference.

Review of Related Literature

Most maternal deaths due to complications during and following pregnancy and childbirth are preventable, and great strides have been made in improving maternal health and reducing the number of deaths (WHO, 2020b). Between 1990 and 2023, maternal mortality dropped globally by 45% according to the WHO (Nawal & Goli, 2023), nevertheless, every day approximately 800 women still die from causes related to pregnancy and childbirth. In 2013, the number of maternal deaths worldwide was 289,000 women which had a negative impact on families, communities and societies with far-reaching effects (Mbalinda et al., 2020).

Theoretical Framework

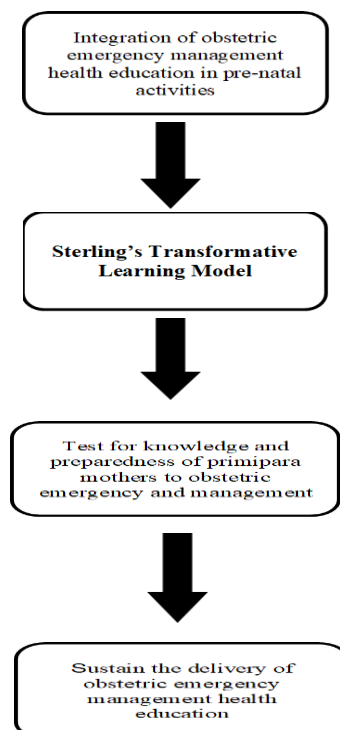
The integration of obstetric emergency management health education in pre-natal visit is a multifaceted process that requires transformation. Therefore, this study will utilize

Sterling's Transformative Learning Model to comprehensively understand how a change will take place in order to increase the level of knowledge and preparedness of primipara mothers in dealing obstetric emergencies.

The intentional domain focuses on developing learners' action competencies to exercise their knowledge of obstetric emergency management in order to achieve higher level of preparedness in dealing obstetric emergencies. Intentional domain refers to the research output or the proposed nursing campaign to sustain the provision of obstetric emergency education in Talisay, Camarines Norte (Sterling, 2014).

The diagram shows how the proposed obstetric emergency management health education transforms existing pre-natal health education of the Department of Health (DOH). Figure 2 shows how the proposed obstetric emergency management health education is able to exercise the level of knowledge and preparedness of primipara mothers. With the study, it is able to ensure that primipara mothers adapt obstetric emergency management and identify the following obstetric emergencies.

Conceptual Framework



METHODOLOGY

This chapter presented the research methodology employed by the present study which includes; research design, research site, sample and sampling design, research instruments, validation of instrument/ensuring trustworthiness, data gathering procedure, data analysis procedure, and ethical considerations of the study.

Research Design

This study utilized a quasi-experimental design with a pre- and post-test approach. Control group and experimental group were used to examine the effectiveness of the proposed obstetric emergency management health education (McCombes, 2023). The experimental group are those who will attend their first obstetric emergency management health education intervention, while the control group are those primipara mothers who attended their first obstetric emergency management health education. Both groups will be assessed before and after the intervention to examine how the proposed obstetric emergency management health education improve their knowledge and preparedness in dealing obstetric emergencies.

Data Collection and Sample Selection-

A permission was taken from Barangay Captain of Gabon, Talisay, Camarines Norte. Another, permission was taken from Barangay Health Station prior the conduct of experimental study. Before the experiment, consent was secured among primipara mothers and ensure that the understood their involvement as control and experimental group. The consent form signed explained its purpose, the mechanics of the research, the duration of the research activities, and the rights of the participants including their rights to self-determinate, right to refuse in the activity and to involve in the photographs, right to withdraw their answers, right to privacy and right to confidentiality.

Data Analysis Methods

The data were analyzed using statistical software (e.g., SPSS). Descriptive statistics (e.g., frequencies and percentage) was used in the profiling of data in SOP 1. Descriptive statistics (e.g., frequencies and mean) was used in the tally of pre- and post-test scores. A self-made scoring scale was added to interpret the level of knowledge and preparedness based from individual/group scores in SOP 2 and 3. Anova was used to test the statistical difference between the knowledge and preparedness scores before and after obstetric emergency management health education, stated in SOP 4 and 5.

Research Hypotheses and Validation

1. As to age, about 10 primipara mothers or 33 percent aged 25 years old were involved in the experiment, and they comprised the majority. Other primipara mothers were also involved, 5 of them or 16.5 percent aged 24 and 27 years old, 3 of them or 10 percent aged 20 and 22 years old, and 1 of them or 3.3 percent aged 16, 21, 23, and 28 years old. As to civil status, 28 primipara mothers or 93.4 percent are married, and they comprised the majority. 2 primipara mother or 6.6 percent remained single. As to education attainment, 15 primipara mothers or 49.5 percent are a high school graduate and they comprised the majority. 12 primipara mothers or 39.6 percent are college graduate, 2 primipara mothers or 6.6 percent completed a vocational course, and 1 primipara mother or 3.3 percent are elementary graduate. And as to monthly family income, 22 primipara mothers or 72.6 percent has a monthly income of below 21,000 pesos and they comprised the majority. 7 primipara mothers or 19.8 percent has a monthly income of 21,000 to 41,000 pesos, and 2 primipara mother or 6.6 percent has a monthly income of above 42,000 pesos.

Study Limitations and ethical considerations

Before the experiment, consent was secured among primipara mothers and ensure that the understood their involvement as control and experimental group. The consent form signed explained its purpose, the mechanics of the research, the duration of the research activities, and

the rights of the participants including their rights to self-determinate, right to refuse in the activity and to involve in the photographs, right to withdraw their answers, right to privacy and right to confidentiality. In addition, orientation will be given to ensure that they will be educated before research engagement.

RESULTS AND DISCUSSION

SOP 1. The Demographic Profile of the Respondents- The demographic profile of control and experimental group of primipara mothers as to age, civil status, educational background, and monthly income of primipara mothers were presented in Tables 1 to 4.

CONCLUSIONS

1. Most of the primipara mothers aged 25 years old, married, a high school graduate and with monthly income of below 21,000 pesos and they comprised the majority. 2 primipara mothers or 10 percent has a monthly income of 21,000 to 41,000 pesos, and 1 primipara mother has a monthly income of above 42,000 pesos.
2. The experimental and control group of primipara mothers increased their level of knowledge. Both experimental and control group have very high level of knowledge after administering the proposed obstetric emergency management health education.

RECOMMENDATIONS

1. This study recommends to include other group of mothers in order to assess their level of knowledge and preparedness in dealing to obstetric emergencies.
2. This study recommends to further educate primipara mothers to enhance and exercise their knowledge to obstetric emergencies with the booklet distributed and explore internet and social media about obstetric emergencies.

AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

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