DOI: https://doi.org/10.66206/eduheart.ijnhha.221

The Effectiveness of Community-Based Prenatal Nursing Programs in Reducing Complications in High-Risk Pregnancies in Indanan, Sulu

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ABSTRACT

This study determined the effectiveness of a community-based prenatal nursing program in reducing complications among high-risk pregnant women in selected barangays of Indanan, Sulu. Specifically, it described the respondents' profile, identified the common pregnancy complications experienced, assessed the level of community-based prenatal nursing interventions, evaluated the effectiveness of the prenatal nursing program, and examined the relationship between the interventions and program effectiveness. A quantitative descriptive-correlational research design was employed using purposive sampling. Fifty high-risk pregnant women participated in the study. Data were collected using a validated researcher-made structured questionnaire and analyzed through frequency, percentage, weighted mean, and Pearson Product-Moment Correlation Coefficient. The findings showed that most respondents were 20–29 years old, were in their first or second pregnancy, and had a monthly family income of ₱15,001 and above. Swelling of the hands and feet was the most commonly reported pregnancy-related condition, followed by hypertension, infection during pregnancy, gestational diabetes, and fetal distress. Community-based prenatal nursing interventions were perceived to be frequently implemented, with risk assessment and regular monitoring receiving the highest rating. The overall prenatal nursing program was rated effective, particularly in healthcare accessibility, maternal knowledge, and continuous monitoring with family support. However, correlation analysis revealed no statistically significant relationship between community-based prenatal nursing interventions and program effectiveness ($r = 0.015$, $p = 0.916$). The findings indicate that the perceived effectiveness of the program may be influenced by maternal, socioeconomic, and healthcare-related factors beyond nursing interventions. The study recommends strengthening community-based prenatal services, enhancing health education, and promoting family involvement.

Keywords: *Community-based prenatal nursing, high-risk pregnancy, maternal health, prenatal care, program effectiveness*

INTRODUCTION

Pregnancy is a crucial time to take care of, monitor, and support, especially for women with high-risk pregnancies. Limited access to prenatal services, lack of health information, and delayed health care seeking practices in many communities may raise the risk of mother and fetal problems. Community-based prenatal nursing programs offer a way to deliver needed education, assessment, monitoring, and support to pregnant mothers closer to home. This study is conducted to find out the impact of community-based prenatal nursing programs in

minimizing problems among high-risk pregnant women in selected barangays of Indanan, Sulu.

The purpose of this study is to evaluate the impact of nursing intervention on the improvement of prenatal knowledge, awareness, self-care practices, and maternal health outcomes.

Statement of the Problem

This study aimed to determine the effectiveness of a community-based prenatal nursing program among high-risk pregnant women in Indanan, Sulu.

Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of age, gravidity, and monthly family income?
2. What are the common pregnancy complications experienced by high-risk pregnant women?
3. What is the level of community-based prenatal nursing interventions in terms of risk assessment and monitoring, health education, referral and follow-up, and family support?
4. What is the level of effectiveness of the community-based prenatal nursing program in terms of health improvement, early detection and compliance, healthcare accessibility and knowledge, and continuous monitoring with family support?
5. Is there a significant relationship between community-based prenatal nursing interventions and the effectiveness of the community-based prenatal nursing program among high-risk pregnant women?

Scope and Delimitations

This study determined the effectiveness of community-based prenatal nursing programs among high-risk pregnancies in selected barangays of Indanan, Sulu. It involved high-risk pregnant women, community health nurses, and midwives, using structured questionnaires and available health records. Low-risk pregnancies, hospital-based prenatal care, respondents outside Indanan, Sulu, and postnatal outcomes were excluded. Therefore, the findings are limited to the study setting and participants.

Review of Related Literature

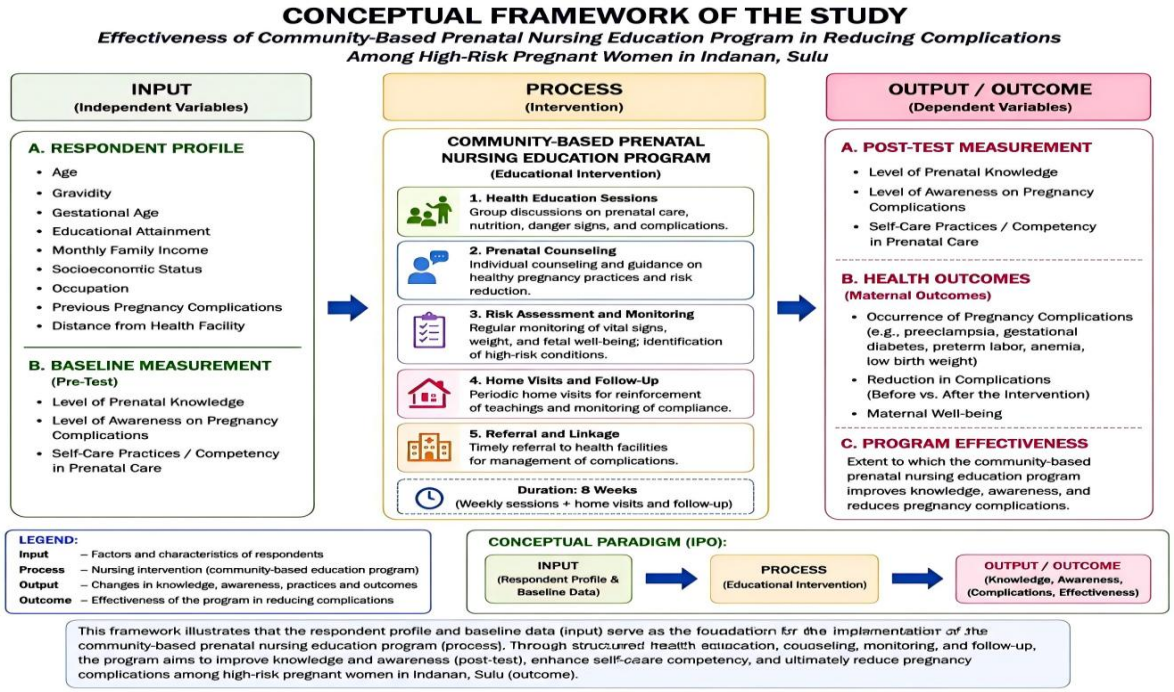
Community-based prenatal nursing programs improve maternal and fetal health by increasing access to antenatal care, especially in underserved communities. Quality antenatal care includes health education, risk assessment, preventive interventions, and continuous monitoring to support positive pregnancy outcomes (World Health Organization, 2016). These programs also promote early detection of pregnancy risks, timely referrals, and help overcome socioeconomic barriers to prenatal care (Murewanhema et al., 2022; Al-Mamun et al., 2025).

High-risk pregnancies require regular monitoring and early intervention to reduce maternal and fetal complications (Chang et al., 2023). Community-based nurses support this through assessments, health education, referrals, and continuous monitoring (Mohseni et al., 2023). Home visits, family involvement, and effective referral systems further improve prenatal care and timely management of high-risk pregnancies (Ngaya-An et al., 2020; Ghimire et al., 2022; Ximba et al., 2021; Mohammadi et al., 2022).

Despite these established benefits, limited local evidence is available on the effectiveness of community-based prenatal nursing programs among high-risk pregnant women in Indanan, Sulu. This gap highlights the need for the present study to determine the effectiveness of these interventions in improving maternal and fetal outcomes.

Theoretical Framework

This study is anchored on Orem's Self-Care Deficit Nursing Theory, Pender's Health Promotion Model, and Orlando's Nursing Process Theory, which emphasize nursing interventions, health education, and individualized care in improving maternal outcomes among high-risk pregnant women.



Conceptual Framework

This study used the Input-Process-Output (IPO) Model. The input included respondents' characteristics, the process involved community-based prenatal nursing interventions, and the output measured program effectiveness in improving maternal outcomes.

METHODOLOGY

This study employed a quantitative approach to determine the effectiveness of community-based prenatal nursing programs among high-risk pregnant women in Indanan, Sulu.

Research Design

A descriptive-correlational design was used to examine the relationship between community-based prenatal nursing programs and pregnancy-related complications.

Research Steps

The study involved a review of related literature, development and validation of the research instrument, data collection after obtaining approvals, and data analysis and interpretation.

Data Collection and Sample Selection

The respondents were high-risk pregnant women and selected community health nurses and midwives from selected barangays in Indanan, Sulu. Purposive sampling and a validated researcher-made questionnaire were used after obtaining informed consent.

Data Analysis Methods

Descriptive statistics (frequency, percentage, and weighted mean) were used to summarize the
data, while Pearson Product-Moment Correlation Coefficient (Pearson r) determined the relationship between the variables at a 0.05 level of significance.

Research Hypotheses and Validation

The study tested whether community-based prenatal nursing programs significantly reduce complications among high-risk pregnancies. The questionnaire underwent expert validation and pilot testing before data collection.

Study Limitations and Ethical Considerations

The study was limited to selected respondents in Indanan, Sulu. Ethical principles included informed consent, voluntary participation, and confidentiality.

RESULTS AND DISCUSSION

Community-based prenatal nursing interventions were consistently implemented and perceived as highly effective. However, no significant relationship was found between nursing interventions and program effectiveness ($r = 0.015$, $p = 0.916$).

SUMMARY

Community-based prenatal nursing interventions were consistently implemented, and the program was perceived as highly effective. However, no significant relationship was found between the variables.

CONCLUSIONS

Community-based prenatal nursing programs support high-risk pregnancies, but maternal outcomes are influenced by factors beyond nursing interventions.

RECOMMENDATIONS

1. **Community Health Nurses.** Strengthen prenatal assessment, monitoring, education, referrals, and family support.
2. **Healthcare Administrators.** Improve resources, staff training, and prenatal care services.
3. **Local Government Units and Policymakers.** Enhance community-based prenatal care programs and policies.

4. **Pregnant Women and Their Families.** Actively participate in prenatal care and follow health recommendations.
5. **Future Researchers.** Conduct similar studies with larger samples and additional variables.

ACKNOWLEDGMENTS

All praise and gratitude are due to Allah, the Most Gracious and Most Merciful, for His guidance and blessings. The researcher sincerely thanks the research adviser, family, friends, respondents, healthcare personnel, and everyone who contributed to the successful completion of this study.

AI DECLARATION STATEMENT

This research discloses the restricted application of artificial intelligence tools solely for literature review and initial drafting. No participant data that could be sensitive was utilized, and every piece of AI-generated content was examined manually to guarantee precision and adherence to ethical standards.

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