

Implementation of a Holistic Approach in Preconception Programs to Improve Reproductive Health in Young Couples in Bungursari District

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KEYWORDS	ABSTRACT
Preconception, Holistic Approach, Reproductive Health, Young Couples	Reproductive health is an important aspect of preparing for a healthy pregnancy. Preconception programs aim to improve the physical, mental, social, and environmental readiness of couples before pregnancy. This study aims to analyze the implementation of a holistic approach in preconception programs to improve the reproductive health of young couples in Bungursari District. The research method used a quantitative descriptive design with a cross-sectional approach, involving 100 couples of childbearing age who participated in a preconception program at the Bungursari Health Center. Data were collected through questionnaires, in-depth interviews, and observations. The results showed that a holistic approach—including nutrition education, psychological counseling, health checks, and increased social support—was able to increase the score of reproductive health knowledge, attitudes, and practices by 35%. In conclusion, the application of a holistic approach is effective in increasing the preconception readiness of young couples. It is recommended that this program be implemented sustainably throughout the region.

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INTRODUCTION

Reproductive health represents a fundamental aspect of overall well-being, particularly for young couples preparing for pregnancy. Globally, inadequate preconception care remains a significant public health challenge, contributing to preventable maternal and neonatal complications. In Indonesia, despite national initiatives to improve reproductive health services, many young couples in regions like Bungursari District enter pregnancy without sufficient preconception preparation (Fowler et al., 2023). Data from the Bungursari Health Center indicate that only 45% of young couples possess adequate knowledge about preconception health, highlighting a critical gap in early reproductive healthcare interventions. This lack of preparedness encompasses nutritional deficiencies, mental health considerations, and insufficient understanding of healthy lifestyle practices before conception (Dean et al., 2014; Miller et al., 2025a).

Previous research by Johnson et al. (2022) demonstrated that integrated preconception programs significantly improve pregnancy outcomes through comprehensive health education. Similarly, Putri & Lestari (2021) found that preconception education effectively enhanced reproductive health knowledge among couples in rural areas. However, these studies primarily focused on fragmented interventions rather than comprehensive, multidimensional approaches. Existing programs often emphasize physical health aspects while neglecting psychological, social, and environmental dimensions that equally contribute to reproductive readiness (Hemsing et al., 2017; Hussein et al., 2022).

This research identifies a significant gap in the implementation of a holistic approach in preconception programs that simultaneously address physical, psychological, social, and environmental preparedness factors (Lassi et al., 2014). While previous studies have examined individual components of preconception care, none have implemented and evaluated a fully integrated holistic approach within Indonesia's community health context (Miller et al., 2025b). The novelty of this study lies in its development and implementation of a comprehensive holistic framework that combines nutrition education, psychological counseling, health screening, and social support enhancement specifically tailored for young couples in Bungursari District.

The purpose of this study is to analyze the implementation of a holistic approach in preconception programs to improve the reproductive health of young couples in Bungursari District. Specifically, this research aims to evaluate the program's effectiveness in enhancing knowledge, attitudes, and practices regarding preconception health, while assessing the relative contribution of each holistic component to overall reproductive health improvement.

This research offers significant theoretical and practical contributions. For theoretical development, it provides empirical evidence supporting the holistic health model in preconception care. For practical implementation, the findings can guide health centers in developing integrated preconception services. For policymakers, the results can inform reproductive health program planning and resource allocation. Ultimately, this research contributes to improving pregnancy outcomes and reducing maternal and infant mortality rates through evidence-based preconception interventions.

METHOD

This research used a quantitative descriptive design with a cross-sectional approach. The population consisted of all couples of childbearing age (PUS) who participated in the preconception program at the Bungursari Health Center during the January–June 2025 period. A sample of 100 pairs was selected using purposive sampling. The research instruments included knowledge, attitudes, and practice questionnaires (KAP), observation sheets, and in-depth interview guidelines. Data were analyzed descriptively to illustrate changes in reproductive health indicators after program implementation. The aspects of the holistic approach intervened included:

1. Nutrition education (preconception diet and folic acid supplementation)
2. Psychological counseling (stress management and mental readiness)
3. Health screening (infectious disease screening and medical history)
4. Increased social support (family and community roles).

RESULTS AND DISCUSSIONS

Following the implementation of the holistic preconception program, significant improvements were observed across all measured domains of reproductive health. Knowledge scores among young couples increased markedly from a pre-intervention average of 60% to 81% post-intervention. Positive attitudes toward preconception health showed substantial enhancement, rising from 55% to 85%. Health practices, including regular supplement consumption, health check-ups, and stress management, demonstrated a 35% overall improvement. Additionally, 78% of respondents reported feeling significantly more prepared for pregnancy after program participation. Qualitative data from in-depth interviews revealed that the holistic approach effectively reduced anxiety and strengthened partner support systems.

These results are in line with previous research that states that a holistic approach is able to improve pregnancy readiness and prevent the risk of complications. Nutrition education plays an important role in the prevention of anemia and fetal growth disorders. Psychological

counseling has been shown to reduce stress and increase the mental readiness of couples. Social support from families and communities also increases the success of the program. However, the challenges encountered were the limited time for couples to participate in counseling sessions and the lack of counselors at the Health Center.

The notable improvements observed in this study can be attributed to several key factors. The 35% enhancement in health practices likely stems from the program's multidimensional design that addressed both structural and psychosocial barriers. The integration of nutrition education with practical supplementation provision removed accessibility barriers, while psychological counseling equipped couples with concrete stress management tools. The dramatic improvement in attitudes (30% increase) suggests that addressing mental health concerns and providing social support normalization significantly reduced stigma surrounding preconception preparation.

The increase in knowledge scores (21% improvement) reflects the effectiveness of using structured educational modules combined with interactive sessions. However, it is important to critically examine whether this knowledge increase translates into sustainable behavioral change. The 78% pregnancy readiness reported, while impressive, may be influenced by social desirability bias, as participants might feel obligated to report positive outcomes after receiving intensive intervention.

Several factors influenced the program's effectiveness: the use of culturally appropriate educational materials, the involvement of partners in counseling sessions, and the integration of community health workers who understood local contexts. The program's success was particularly evident in addressing previously neglected aspects of preconception care, such as mental health and social support, which proved to be crucial components in comprehensive reproductive health preparation.

Study Limitations and Implications:

This study has several limitations that must be acknowledged. The use of purposive sampling limits generalizability, and the absence of a control group makes it difficult to attribute changes solely to the intervention. The relatively short study period (6 months) prevents assessment of long-term retention of knowledge and practices. Additionally, the self-reported nature of practice improvements may not reflect actual behavioral changes.

The cross-sectional design provides only a snapshot of outcomes without capturing the sustainability of improvements. The study also did not account for potential confounding factors such as participants' prior health knowledge or concurrent health initiatives in the community. Furthermore, the reliance on Health Center facilities for implementation may limit replicability in areas with fewer resources.

These limitations imply that while results are promising, they should be interpreted cautiously. Future research should incorporate randomized controlled designs with longer follow-up periods and objective outcome measures. The findings suggest that holistic approaches require substantial resource investment in trained personnel and materials, which may challenge implementation in low-resource settings (Miller et al., 2025c).

Despite these limitations, the study has important implications for public health practice. It demonstrates that comprehensive preconception care addressing physical, psychological, and social aspects can significantly improve reproductive health outcomes. Healthcare providers should consider integrating mental health support and partner involvement into standard preconception counseling. Policymakers should allocate resources for training healthcare workers in holistic approaches and develop standardized protocols for implementing multidimensional preconception programs (Robbins et al., 2013; Stephenson et al., 2023; Swain et al., 2021).

The program's success in improving partner support suggests that future interventions should specifically target couple-based counseling rather than individual approaches. Additionally, the significant improvement in health practices indicates that combining education with practical support (such as providing supplements) creates more effective interventions than education alone.

CONCLUSION

The implementation of a holistic approach in the preconception program effectively improved the knowledge, attitudes, and practices related to reproductive health among young couples in Bungursari District. It is recommended that Puskesmas incorporate this approach into their routine preconception services and broaden educational outreach to the wider community. Future research could explore the long-term impacts of this holistic model on pregnancy outcomes and maternal-infant health, as well as assess its adaptability and effectiveness in diverse cultural and geographic settings.

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