HTechJ Health and Technology Journal (HTechJ)

Volume 03 Number 04
August 2025
p-ISSN: 2986-5662
e-ISSN: 2985-959X

A Caring Approach to Families with Pregnant Women in the Third Trimester Regarding Clean and Healthy Living Behavior in Efforts to Prevent Stunting

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Abstract:
Stunting remains a serious challenge in Indonesia, particularly during the third trimester of pregnancy, a critical period for fetal growth. This study aims to analyze the application of a caring approach to families with pregnant women in their third trimester to improve Clean and Healthy Living Behavior (CHLB) as an effort to prevent stunting in Sebangau District. The study was conducted over six months in 2025 using qualitative and quantitative descriptive approaches. Data were collected through participatory observation, in-depth interviews, documentation, and questionnaires distributed to pregnant women and family members. Samples were taken purposively, involving intervention and control groups in six urban villages. Data analysis was conducted using descriptive methods and Principal Component Analysis (PCA) to identify the main components influencing the effectiveness of the caring approach to CHLB and the risk of stunting. The results show that the application of caring dimensions such as emotional, social, and empowerment support has a positive effect on improving CHLB in pregnant women. The dominant influencing factors are family empathy, communication with health workers, and access to sanitation facilities. In conclusion, a caring approach in families can improve CHLB in pregnant women and has significant potential in preventing stunting during pregnancy. The recommendation of this research is the need for integration of caring approaches in public health promotive and preventive programs, as well as the development of caring-based family intervention models that can be implemented at local and national levels.

Article info:
Submitted:
27-06-2025
Revised:
11-07-2025
Accepted:
15-07-2025

Keywords:
stunting, third trimester pregnancy, caring, clean and healthy living behavior

DOI: https://doi.org/10.53713/htechj.v3i4.395

INTRODUCTION

Stunting, characterized by impaired growth and development in children due to chronic malnutrition and environmental factors, remains a critical public health challenge with lifelong consequences (Soliman et al., 2021; Ritanti & Aprilia, 2024). Its impact extends beyond physical stature, affecting cognitive abilities, educational attainment, and future productivity. Addressing stunting requires multifaceted interventions, particularly during prenatal stages, as maternal health directly influences fetal development. Despite global efforts, high prevalence rates in low- and middle-income countries underscore the urgency of innovative strategies to disrupt intergenerational cycles of malnutrition (Shenoy et al., 2023; Prihayati et al., 2024).

The third trimester of pregnancy represents a pivotal phase for fetal growth, marked by rapid brain development and maturation of vital organs (Setiawan et al., 2022; Carolin et al., 2023). Nutritional deficiencies or adverse conditions during this period can exacerbate the risk of

Volume 03 Number 04
August 2025
p-ISSN: 2986-5662
e-ISSN: 2985-959X

intrauterine growth restriction, increasing susceptibility to stunting postnatally (Mulyani et al., 2024). Strengthening maternal care during this window—through improved health behaviors and psychosocial support—is essential to mitigate developmental risks and lay the foundation for healthy child outcomes (Saleh et al., 2020; Nastiti et al., 2025).

Stunting is deeply rooted in interconnected socioeconomic and environmental factors, including inadequate sanitation, limited access to clean water, and low maternal education levels (Yusriadi et al., 2024). These challenges are exacerbated in geographically marginalized regions, such as peatland areas like Palangka Raya, Indonesia, where logistical barriers hinder healthcare access. While existing interventions emphasize educational materials (booklets, posters) to promote Clean and Healthy Living Behavior (CHLB), their efficacy is often constrained by a lack of culturally tailored, emotionally resonant engagement strategies (Nurhaeni et al., 2024).

Despite advances in health education, integrating emotional and social support systems—particularly family and community-based caring approaches—remains underexplored in stunting prevention (Setiawati et al., 2025). Traditional programs often prioritize informational dissemination over relational dynamics, neglecting the role of empathy, trust, and shared responsibility in sustaining behavioral change (Hadiyanti et al., 2024). This gap highlights the need to reimagine maternal care through frameworks prioritizing interpersonal connection and technical knowledge.

Grounded in Swanson's Theory of Caring, this study adopts five core dimensions—maintaining belief (instilling hope), knowing (understanding needs), being with (empathetic presence), doing for (practical assistance), and enabling (facilitating growth)—to strengthen maternal care ecosystems. By applying these principles, families and healthcare providers can co-create supportive environments that empower pregnant women to adopt CHLB practices, such as balanced nutrition, hygiene adherence, and regular antenatal care attendance (Mårtensson et al., 2021).

Nurses and families are critical conduits for delivering care-centered interventions in community health contexts. Their involvement fosters psychosocial resilience, addresses cultural misconceptions, and bridges gaps in healthcare access. For instance, community nurses can integrate home visits with empathetic counseling, while families can reinforce CHLB through shared responsibilities like meal planning and sanitation maintenance. Such collaborative efforts align with global calls for person-centered approaches to maternal and child health (Suhardin et al., 2024).

This qualitative phenomenological study addresses the evidence gap on family-based caring strategies in stunting prevention, focusing on third-trimester pregnant women in Palangka Raya. By capturing lived experiences and cultural nuances, the research aims to develop an adaptable intervention model tailored to peatland communities. Findings will inform policies harmonizing technical health education with humanistic care, advancing sustainable maternal and child well-being solutions in resource-limited settings.

METHOD

This study employed a qualitative approach with a descriptive phenomenological approach. This approach was used to explore the perceptions and experiences of pregnant women in their third trimester in depth, receiving a caring approach from nurses regarding the implementation of Clean and Healthy Living Behavior (CHLB) indicators as an effort to prevent stunting.

The population in this study was pregnant women in their third trimester living in the Watershed and Peatland Area (DASG) of Palangka Raya City, encompassing the sub-districts of Pahandut, Jekan Raya, and Sebangau. Participants were selected using a purposive sampling technique, with the inclusion criteria being pregnant women in their third trimester who were physically and mentally healthy and willing and cooperative to participate in the study.

Volume 03 Number 04
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p-ISSN: 2986-5662
e-ISSN: 2985-959X

This study was conducted over six months to one year, with research locations in these three sub-districts. The research instruments included an open-ended interview guide, a recording device, and field notes. Data collection techniques involved participant observation, in-depth interviews, and documentation.

Data analysis was conducted using the Colaizzi method, which involved thoroughly reading interview transcripts, identifying significant statements, formulating meanings, organizing themes, and validating them through member checks with participants. The analysis results are presented in narrative descriptions to illustrate the meaning of the experiences studied.

In conducting this research, the researcher adhered to ethical principles, including maintaining the confidentiality of participants' identities, obtaining informed consent, and respecting participants' autonomy during the interviews. Data are stored on media accessible only to the researcher and will be deleted if participants refuse to allow their data to be published. This study received formal ethical clearance from the Research Ethics Committee of Universitas Eka Harap Palangka Raya, aligning with national research guidelines and the principles of the Declaration of Helsinki. Informed consent was obtained from all participants, ensuring voluntary participation, confidentiality, and the right to withdraw at any stage. The ethical endorsement underscores the study's commitment to safeguarding maternal dignity, cultural sensitivity, and data integrity, while reinforcing its potential to contribute actionable insights for public health policies targeting stunting prevention in vulnerable communities.

RESULT

This section presents demographic data on the third-trimester pregnant women participating in this study. Data include age, formal education level, and employment status. This information is crucial for understanding the background of the respondents who received a caring approach during pregnancy.

Characteristics of Pregnant Women in the Third Trimester

This study involved 100 pregnant women in their third trimester from three sub-districts in Palangka Raya City. The following table presents the respondents' baseline characteristics based on age, formal education, and occupation. This information was used to evaluate the impact of the caring approach on clean and healthy living behaviors (CHLB).

Table 1. Characteristics respondens

Characteristics	Frequency	Percentage
Age		
Adolescent	18	18.0
Adult	65	65.0
>35 years old	17	17.0
Formal Education		
No education	5	5.0
High school	20	20.0
High school	60	60.0
Higher education	15	15.0
Total	100	100.0

Most respondents were of productive age, had secondary education (high school), and were not formally employed, which reflects the general characteristics of pregnant women in the DASG area.

Caring Dimensions and CHLB Implementation

Qualitative analysis shows that implementing a caring approach through five dimensions (maintaining belief, knowing, being with, doing for, and enabling) influenced improvements in CHLB indicators. Respondents reported being more motivated to wash their hands, consume nutritious food, use clean water, and access health services.

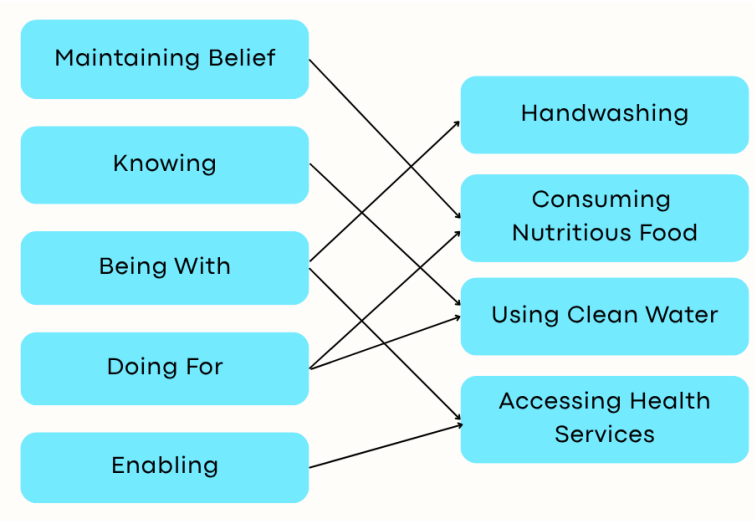

Figure 1. Relationship of Caring Dimensions to CHLB

The dimensions of being with and enabling have proven dominant in shaping mothers' awareness of the importance of healthy lifestyle behaviors. Furthermore, effective two-way communication between nurses and pregnant women strengthens the acceptance of information and the sustainability of CHLB practices in the household.

DISCUSSION

This study demonstrates that implementing a caring-centered approach among families with third-trimester pregnant women in Sebangau Subdistrict significantly improves Clean and Healthy Living Behavior (CHLB) practices. The dimensions of being with, doing for, and enabling emerged as critical drivers in fostering behavioral change, as pregnant women reported heightened emotional, social, and practical support from families and healthcare providers. These findings align with Swanson's Theory of Caring, which emphasizes relational dynamics in promoting well-being. By prioritizing empathetic presence (being with), hands-on assistance (doing for), and capacity-building (enabling), families and health workers created a supportive ecosystem that reinforced consistent hygiene practices, nutrition adherence, and prenatal care utilization, directly addressing stunting risk factors during critical fetal development stages (Ellina et al., 2022; Kim et al., 2020).

The study contributes to public health theory by validating the applicability of caring as a relational intervention framework in maternal and child health. While previous research has focused on structural determinants like sanitation and education, this work highlights the transformative potential of emotional and social support systems in sustaining health behaviors. The integration of all five caring dimensions—maintaining belief, knowing, being with, doing for, and enabling—provided a holistic strategy to navigate the transitional challenges of late pregnancy. For instance, maintaining belief strengthened maternal confidence in adopting CHLB, while knowing ensured tailored guidance responsive to individual cultural and socioeconomic contexts. This underscores

Volume 03 Number 04
August 2025
p-ISSN: 2986-5662
e-ISSN: 2985-959X

the importance of humanistic approaches in bridging gaps between health education and actionable practice (Wijaya, 2024; Alifatin, 2022).

The findings advocate for scaling family-centered caring models within national stunting prevention programs, particularly in geographically and culturally complex regions like Sebangau. Combining qualitative insights with Principal Component Analysis (PCA) results, the study identified family empathy, effective health communication, and sanitation access as pivotal success factors. These elements suggest that interventions must improve infrastructure and cultivate interpersonal skills among caregivers and health workers. For example, training families to provide empathetic support (being with) and equipping them with practical sanitation strategies (doing for) can amplify the reach of formal healthcare services. Such hybrid models are especially vital in peatland areas, where logistical barriers often limit institutional oversight (Yusriadi et al., 2024; Umar, 2021).

Despite its contributions, the study acknowledges limitations in generalizability due to its localized scope and small participant pool. Conducted in a single subdistrict with specific geographic and cultural characteristics, the findings may not fully capture variations in other regions. Additionally, the cross-sectional design limits the ability to assess the long-term sustainability of CHLB improvements post-intervention. Cultural norms, such as traditional gender roles in caregiving, might also influence the model's applicability in settings with differing social structures. These constraints highlight the need for adaptive strategies when transferring the framework to diverse contexts.

Future research should prioritize longitudinal studies across multiple regions to strengthen the evidence base and evaluate the model's durability and scalability. Expanding the intervention to include male partners and community leaders could further enhance family dynamics and social support networks. Additionally, integrating digital health tools—such as mobile apps for remote counseling—could address logistical challenges in remote areas. Policymakers are encouraged to invest in mixed-methods evaluations that balance quantitative outcomes (stunting prevalence rates) with qualitative narratives, ensuring culturally resonant and context-specific adaptations. By addressing these gaps, the caring-centered model holds promise as a transformative tool for equitable maternal and child health outcomes.

CONCLUSION

A caring approach implemented in families with pregnant women in their third trimester has significantly improved Clean and Healthy Living Behaviors (CHLB) in the Sebangau District. Through emotional, social, and empowerment support within the family, pregnant women demonstrated improvements in implementing CHLB indicators such as handwashing, nutritious food consumption, clean water use, and regular antenatal visits. The dimensions of caring, such as being with, doing for, and enabling, were the dominant factors contributing to these behavioral changes.

The caring approach within the family plays a crucial role in shaping preventive behaviors during pregnancy, which impacts the early risk reduction of stunting. Furthermore, this approach is relevant for further development as a family-based intervention model that can be adopted in public health policy, particularly in areas with geographical and sociocultural challenges such as the DASG.

There is a need to integrate the caring approach into maternal and child health promotion and prevention programs. Local governments and health workers must develop caring-based training and mentoring that engages families as active partners. Furthermore, replication of this research with a broader coverage and longer timeframe is needed to test the long-term effectiveness of this model in reducing stunting prevalence nationally.

ACKNOWLEDGEMENT

The author would like to express his deepest gratitude to the Promoter and Co-Promoter for their guidance and direction during the preparation of this dissertation. He also thanked all research participants, especially families with pregnant women in their third trimester in Sebangau District, who actively and cooperatively participated. He also thanks the Palangka Raya City Health Office and the local Community Health Center for their administrative and technical support during the data collection. This research was supported by internal funding from the University of Palangka Raya.

CONFLICT OF INTEREST

The authors declare no financial or non-financial conflicts of interest in preparing and implementing this research. All research processes were conducted independently and objectively, without any influence from any party that could affect the integrity of the research results.

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Volume 03 Number 04
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