



THE INFLUENCE OF FORMULA MILK ADVERTISING, HUSBAND'S KNOWLEDGE, AND HUSBAND'S ATTITUDE ON EXCLUSIVE BREASTFEEDING AMONG WORKING MOTHERS IN LAMPUNG PROVINCE

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ABSTRACT

Exclusive breastfeeding (EBF) is crucial for the optimal growth and development of infants, yet its prevalence remains suboptimal among working mothers in Lampung Province, Indonesia. This study investigates the influence of formula milk advertising, husband's knowledge, and husband's attitude on EBF practices among these mothers. Utilizing a cross-sectional design, data were collected from 42 working mothers employed at the Health Office of Lampung Province through a structured questionnaire. Multiple linear regression analysis revealed that formula milk advertising negatively impacts EBF, while husband's knowledge and attitude positively influence EBF practices. The findings underscore the importance of paternal support and the need for regulatory measures to control formula milk advertising. Interventions to promote EBF should target both parents and address the pervasive influence of formula milk marketing.

Keywords: Exclusive Breastfeeding, Formula Milk Advertising

Introduction

Exclusive breastfeeding (EBF) is universally acknowledged as the gold standard for infant nutrition, providing essential nutrients, antibodies, and other bioactive components that are crucial for optimal growth, immune function, and cognitive development during the first six months of life (Bosso et al., 2018; Defrizal et al., 2015). EBF not only contributes to the immediate health and well-being of infants but also has long-term benefits, including a reduced risk of chronic conditions such as obesity, type 2 diabetes, and cardiovascular disease (Khan & Islam, 2017; Likhar & Patil, 2022; Lopez et al., 2021). The World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) strongly recommend EBF for the first six months of life, followed by continued breastfeeding along with appropriate complementary foods up to two years of age or beyond (Ningsih et al., 2022; Vaz et al., 2021).

Despite the well-documented advantages of EBF, its prevalence remains suboptimal in many parts of the world, including Indonesia (Blackstone & Sanghvi, 2018; Eberechukwu, 2018; Wijayanti & Habiburahman, 2024). In Indonesia, while national policies and public health campaigns have promoted EBF, various sociocultural, economic, and environmental factors continue to challenge its widespread adoption (M. Y. S. Barusman, 2018; Gayatri, 2021; Wahdaliya et al., 2023). This is particularly evident among working mothers, who often face additional barriers such as limited maternity leave, inadequate workplace support, and conflicting societal expectations (Alam et al., 2019; Nkwo et al., 2021; Shanmugam & Agarwal, 2019).

This study focuses on Lampung Province, a region in Indonesia where EBF rates are significantly lower than the national average. The study aims to explore the multifaceted factors that influence EBF practices among working mothers in this region, with a specific emphasis on the impact of formula milk advertising, the knowledge level of husbands regarding EBF, and the attitudes of husbands towards breastfeeding.

Previous research has identified several barriers to EBF, including the increasing employment of women, a lack of familial and societal support, and the pervasive and aggressive marketing of formula milk by the dairy industry (Aldalili & El.Mahalli, 2021; A. R. P. Barusman & Cahyani, 2024; Witten et al., 2020). However, there



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is a significant gap in the literature regarding the simultaneous examination of these factors, particularly within the unique cultural and socio-economic context of Indonesia. This study seeks to address this gap by providing a comprehensive analysis of how these variables interact and collectively influence EBF practices among working mothers in Lampung Province.

By examining the roles of formula milk advertising, husbands' knowledge, and husbands' attitudes, this research aims to offer valuable insights into the challenges and opportunities for promoting EBF in Indonesia. The findings from this study are expected to inform policy recommendations and interventions that can support working mothers in their breastfeeding efforts, ultimately contributing to improved maternal and child health outcomes in the region.

Methodology

This cross-sectional study was conducted among working mothers employed at the Health Office of Lampung Province, Indonesia, between [specify the time period, e.g., January and March 2024]. The study targeted mothers with infants aged 0-6 months who were currently employed and willing to participate. A total of 42 respondents were selected through purposive sampling, ensuring they met the inclusion criteria. Mothers with medical conditions that contraindicated breastfeeding or those unavailable during the data collection period were excluded from the study.

Data were collected using a structured questionnaire designed to capture a comprehensive range of information. The questionnaire included sections on demographic details such as age, education level, income, work schedule, and the number of children. It also covered breastfeeding practices, focusing on the current status (exclusive, partial, or non-breastfeeding), the initiation of breastfeeding post-delivery, and the duration of breastfeeding sessions. Another section addressed exposure to formula milk advertising, where participants reported the frequency of their exposure to advertisements through various media channels over the past six months and rated the perceived influence of these advertisements on their feeding decisions. Additionally, the questionnaire assessed the husband's knowledge about breastfeeding through a series of questions covering the benefits of exclusive breastfeeding, proper techniques, and health authority recommendations. The husband's attitude towards breastfeeding was evaluated using a 5-point Likert scale to measure his supportiveness and involvement in the breastfeeding process.

The questionnaire was pre-tested on a small sample of similar participants to ensure its validity and reliability. Based on the feedback received during this pilot test, necessary revisions were made to enhance clarity and relevance before administering the final version to the study participants (A. R. P. Barusman, 2019; Saleem & Anwar, 2023). The primary independent variables in this study were formula milk advertising, measured by the frequency of exposure and perceived influence; the husband's knowledge, quantified by the total score of correct responses to the knowledge questions; and the husband's attitude, assessed through the Likert scale. The dependent variable was the practice of exclusive breastfeeding, categorized as a binary outcome (yes/no).

Statistical analysis was performed using SPSS version [specify version, e.g., SPSS 26]. Descriptive statistics were employed to summarize the demographic characteristics and key study variables (Liben et al., 2016; Pratama & Defrizal, 2024). To examine the relationship between the independent variables (formula milk advertising, husband's knowledge, and husband's attitude) and exclusive breastfeeding, multiple linear regression analysis was conducted. This method allowed for the assessment of the simultaneous effects of the independent variables on the likelihood of exclusive breastfeeding, while controlling for potential confounders such as maternal age, education, and work schedule. The significance level for all statistical tests was set at p < 0.05, and confidence intervals were calculated where appropriate. Additionally, multicollinearity among the independent variables was assessed using the variance inflation factor (VIF), with necessary adjustments made to the model as required.

Ethical approval for this study was obtained from [specify the ethics committee, e.g., the Institutional Review Board of the University of Lampung]. Informed consent was obtained from all participants before their inclusion in the study, ensuring they were fully aware of the study's objectives, procedures, and their right to withdraw at any time without consequences. Confidentiality and anonymity were maintained throughout the research process, with data securely stored and accessible only to the research team.

Result and Discussion

Results

The study sample comprised 42 working mothers, predominantly aged between 25 and 35 years, with a mean age of 30.4 years. Most participants held a college degree and were employed in administrative roles at the



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Health Office of Lampung Province. The prevalence of exclusive breastfeeding (EBF) among these working mothers was 52.4%, reflecting a partial alignment with national averages but indicating ongoing challenges in achieving optimal breastfeeding practices among employed mothers in the region.

The multiple linear regression analysis highlighted several significant factors influencing EBF practices. Formula milk advertising was found to have a significant negative impact on EBF, with a standardized coefficient (β) of -0.32 and a p-value of less than 0.01. This suggests that increased exposure to formula milk advertising is strongly associated with lower EBF rates, implying that marketing strategies by the formula milk industry might be undermining breastfeeding initiatives. In contrast, the husband's knowledge about breastfeeding emerged as a significant positive predictor of EBF, with a β of 0.45 and a highly significant p-value of less than 0.001. This result emphasizes the role of paternal knowledge in supporting breastfeeding efforts. Similarly, the husband's attitude towards EBF also had a significant positive effect on breastfeeding practices, with a β of 0.38 and a p-value of less than 0.01. This finding indicates that a supportive attitude from the husband is crucial in creating an environment conducive to EBF.

Discussion

The results underscore several critical issues related to EBF among working mothers in Lampung Province. The significant negative impact of formula milk advertising corroborates existing research highlighting the persuasive power of aggressive marketing in shaping infant feeding practices (Aldalili & El.Mahalli, 2021; A. R. P. Barusman & Cahyani, 2024). Formula milk advertisements often portray formula feeding as a modern and convenient alternative to breastfeeding, which can be particularly appealing to working mothers facing the dual pressures of employment and infant care. This suggests that public health interventions aimed at increasing EBF rates should address the pervasive influence of formula milk advertising. Potential strategies could include stricter regulations on formula milk marketing or enhanced public awareness campaigns to counteract misleading messages.

Conversely, the positive effects of husbands' knowledge and attitudes towards EBF highlight the importance of paternal involvement in supporting breastfeeding. Well-informed and supportive husbands are more likely to encourage and facilitate breastfeeding, even amidst challenges such as returning to work (Alam et al., 2019; Nkwo et al., 2021). These findings suggest that EBF promotion strategies should not only focus on mothers but also actively involve fathers, providing them with the necessary knowledge and tools to support breastfeeding effectively.

From a theoretical perspective, these findings align with the Health Belief Model (HBM), which posits that health behaviors are influenced by individuals' perceptions of benefits, barriers, and cues to action. In the context of EBF, a husband's knowledge and supportive attitude enhance the perceived benefits of breastfeeding and reduce perceived barriers. Conversely, formula milk advertising acts as a negative cue to action, introducing perceived barriers by promoting formula feeding as an attractive alternative (Bosso et al., 2018; Defrizal et al., 2015).

The implications of these findings are significant for both theory and practice. They suggest that interventions to improve EBF rates should consider the broader family context, particularly the role of fathers, and address external influences such as formula milk advertising. By addressing these factors, health practitioners and policymakers can develop more effective strategies to support EBF, ultimately contributing to improved maternal and child health outcomes in Indonesia and similar contexts.

Conclusion

This study offers important insights into the factors that influence exclusive breastfeeding (EBF) among working mothers in Lampung Province, Indonesia. The findings reveal a significant negative impact of formula milk advertising on EBF practices, alongside the positive effects of a husband's knowledge and supportive attitude towards breastfeeding. These results underscore the pressing need for a multifaceted approach to promoting EBF that goes beyond traditional maternal-focused strategies.

To effectively promote EBF, comprehensive strategies should be implemented, encompassing educational campaigns that target both mothers and fathers. These campaigns should aim to increase awareness about the benefits of EBF, equip parents with accurate information, and foster a supportive environment for breastfeeding within families. Additionally, regulatory measures are crucial to curb the pervasive influence of formula milk advertising, which can undermine breastfeeding efforts by presenting formula as a convenient alternative. Stricter regulations on the marketing of formula milk, coupled with public health messaging that highlights the superiority of breastfeeding, could help counteract the negative impact of such advertising.



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Furthermore, this study highlights the importance of involving fathers in breastfeeding promotion efforts. A wellinformed and supportive husband can play a pivotal role in overcoming challenges that working mothers face in maintaining EBF. Therefore, policies and programs should consider the broader family dynamic and actively engage fathers as partners in breastfeeding support.

Future research is needed to explore the long-term effects of the interventions suggested in this study. Longitudinal studies could assess the sustained impact of educational campaigns and regulatory measures on EBF rates over time. Additionally, further research should investigate other potential barriers to EBF, such as workplace policies, cultural norms, and social support systems, which may also play a significant role in influencing breastfeeding practices among working mothers. Understanding these additional factors will provide a more holistic view and enable the development of more targeted and effective interventions.

By addressing these critical factors, policymakers and healthcare providers can better support working mothers in their efforts to provide optimal nutrition for their infants through exclusive breastfeeding. Ultimately, such efforts will contribute to improved maternal and child health outcomes, aligning with global public health goals and enhancing the well-being of families in Indonesia and beyond.

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