

THE EFFECT OF EDUCATIONAL VIDEOS AND MCH BOOK ON POSTPARTUM MOTHERS' ANXIETY SCORES DURING BREASTFEEDING

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ABSTRACT

Anxiety is a common issue experienced by postpartum mothers, and it can interfere with the lactation process. During the postpartum adaptation period, many mothers face psychological challenges, including heightened anxiety. This emotional state can disrupt the hormonal regulation of prolactin and oxytocin—two key hormones responsible for breast milk production—thereby slowing the milk release and making breastfeeding more difficult. A preliminary observation conducted at Independent Midwifery Practice (IMP) Purwanti involving five postpartum mothers found that three mothers who experienced mild anxiety had delayed milk production, while the two mothers without anxiety had faster milk flow. This study aimed to assess changes in anxiety levels among postpartum mothers after receiving breastfeeding education through two different methods: animated videos and the Maternal and Child Health (MCH) book. The descriptive-analytic study was conducted from February to April 2023, involving all postpartum mothers on day five at IMP Purwanti, totaling 32 participants. The participants were divided equally into two intervention groups. Group one received health education via animated videos, while group two received education through the MCH book, with 16 mothers in each group. The results showed that in the animated video group, all 16 mothers (100.0%) reported no anxiety after the intervention. In the MCH book group, 15 mothers (93.8%) reported no anxiety, and only 1 mother (6.3%) experienced mild anxiety. None experienced severe anxiety. These findings suggest that both animated videos and MCH books are effective educational tools for reducing postpartum anxiety. Health services should consider integrating innovative educational strategies into routine postpartum care.

Keywords: Postpartum anxiety, Breastfeeding education video, Maternal and child health book

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INTRODUCTION

The postpartum care requires special attention, especially from family members and healthcare providers, considering that this period is a crisis phase for the mother after childbirth (Kusumawati et al., 2020). During this time, postpartum mothers undergo both physical and psychological adaptation following the arrival of their baby, which can lead to psychological issues, including anxiety. A mother's anxiety can interfere with the lactation process. The prevalence of anxiety in postpartum mothers regarding breast milk secretion in Asia is quite high, ranging from 26% to 85%. In Indonesia, according to the Ministry of Health, it was found that out of 373 million postpartum mothers, 107 million (28.7%) experienced lactation disorders due to anxiety (Suryaman et al. 2021). In West Java, the anxiety level among postpartum mothers reaches 46%, impacting breast milk secretion (Mardjun et al., 2019). A preliminary study at Independent Midwifery Practice Purwanti on five postpartum mothers revealed that three experienced mild anxiety, which correlated with delayed milk release, while two had no anxiety and experienced faster milk release.

A study by Prima Dewi Kusumawati et al. (2020) in Malang, using a cross-sectional design on 25 postpartum mothers on days 4–7, found that 13 respondents (52%) experienced mild anxiety, correlating with slower breast milk secretion [3]. Feelings of anxiety, pressure, lack of confidence, sadness, and other emotional tension can impair the hormonal systems of prolactin and oxytocin, decreasing milk production and hindering breastfeeding (Suryaman et al. 2021). Although health counseling is often provided about the breastfeeding process, many mothers still lack understanding about proper breastfeeding techniques, including expressing and storing milk, which can lead to breastfeeding failure (Supliyani&Djamilus, 2021).

Innovative health promotion is needed to capture the target audience's attention. A study by Besse Darmita Yuana Putri et al. (2021) showed that animated video-based education significantly improved the knowledge of third-trimester mothers at Independent Midwifery Practice Neli Hartati, Rengas Bandung Village, Muaro Jambi Regency. Furthermore, the MCH book is effective as a communication, education, and information medium since it is distributed to every postpartum mother by the government. Research by Mayang Sari Ayu (2019) showed that the effective use of the MCH book correlates with positive maternal behaviors at Sentosa Baru Health Center. However, interviews with five postpartum mothers at Independent Midwifery Practice Purwanti revealed that three rarely read the MCH book, especially sections on breastfeeding techniques.

Based on this background, the researcher conducted a study to evaluate the reduction in anxiety scores among postpartum mothers during breastfeeding after receiving education through animated videos and the MCH book.

METHOD

This study employed a descriptive-analytic design to examine the effectiveness of different educational media on reducing anxiety among postpartum mothers. The research was conducted from February to April 2023 at Independent Midwifery Practice (IMP) Purwanti. The target population consisted of all postpartum mothers on the fifth day after delivery during the study period, totaling 32 individuals. These participants were randomly assigned into two equal groups: Group 1 received health education using animated videos, while Group 2 received the same educational

content through the Maternal and Child Health (MCH) book. Each group comprised 16 postpartum mothers.

The instrument used to measure maternal anxiety was the Perinatal Anxiety Screening Scale (PASS), a standardized and validated tool originally developed at King Edward Memorial Hospital in Western Australia. The Indonesian version of the instrument was translated by Nourma Aulia Ulfa and has demonstrated high psychometric properties, with a validity and reliability coefficient of 0.983. The PASS consists of 31 items, with four response options on a Likert scale: 0 (never), 1 (sometimes), 2 (often), and 3 (always). Total scores are interpreted as follows: 0–31 indicates no anxiety, 32–63 indicates mild anxiety, and 64–93 reflects severe anxiety. Data collection was carried out using Google Forms, distributed to participants as a pre-test on day five postpartum, which was selected as a critical time when anxiety levels may emerge due to physical and emotional postpartum adjustments. Following the pre-test, the two groups underwent their respective educational interventions over a one-week period. On completion of the intervention, the same PASS questionnaire was re-administered as a post-test to evaluate changes in anxiety levels. The study used univariate analysis and frequency distribution to describe participant characteristics and analyze outcomes related to anxiety reduction in each group.

To ensure the protection of participants and uphold scientific integrity, this research was conducted in accordance with fundamental ethical principles, including respect for human dignity and rights, beneficence, non-maleficence, and justice. Informed consent was obtained from all participants prior to data collection, and all identifying information was kept confidential. Participants were informed of their right to withdraw at any stage of the study without consequence.

This study received ethical approval from the Ethics Committee of STIKes Budi Luhur Cimahi, under the protocol number 104/D/KEPK-STIKes/V/2023. The approval affirms that the study met all ethical standards for research involving human participants, including the provision of psychological safety and fair treatment throughout the study process. This ethical foundation ensured the reliability and accountability of the research findings.

RESULTS

The study was conducted from February to April 2023 with 32 postpartum mothers. The frequency distribution of anxiety levels post-intervention is presented below:

Table 1. Distribution of Anxiety Level

Anxiety Level	Animated Video Group (n=16)	MCH Book Group (n=16)
Not Anxious	16 (100.0%)	15 (93.8%)
Mild Anxiety	0 (0.0%)	1 (6.3%)
Severe Anxiety	0 (0.0%)	0 (0.0%)

Based on Table 1, the distribution of anxiety levels among respondents in both the animated video group and the MCH (Maternal and Child Health) book group shows a clear difference in psychological response. In the animated video group, all 16 participants (100%) were categorized as not experiencing anxiety, indicating that the use of animated educational videos may have effectively reduced feelings of stress or

uncertainty during pregnancy. This suggests that the engaging and visual nature of animated videos could provide a more reassuring and accessible way of delivering health information.

In contrast, in the MCH book group, 15 out of 16 participants (93.8%) were also not anxious, but one participant (6.3%) reported experiencing mild anxiety. Although this difference appears minor, it may highlight that traditional media such as printed materials might not be equally effective for all individuals in alleviating anxiety. The absence of severe anxiety in both groups is a positive indicator, yet the slight presence of mild anxiety in the MCH book group underscores the potential added value of more dynamic and interactive educational tools.

DISCUSSION

The results of this study reveal a noteworthy difference in anxiety levels between postpartum mothers who received health education through animated videos and those who used the MCH (Maternal and Child Health) book. All participants (100%) in the animated video group experienced no anxiety, while in the MCH book group, one respondent (6.3%) reported mild anxiety, and the rest (93.8%) did not report anxiety. This suggests that the animated video may have a more favorable impact on reducing anxiety levels compared to traditional educational materials. The complete absence of anxiety in the animated video group indicates the potential of multimedia-based interventions to offer clearer, more engaging, and emotionally supportive information.

The use of animated videos may enhance comprehension and retention of maternal health information through a combination of visual and auditory stimuli, which can be especially beneficial for individuals with lower literacy levels or who are unfamiliar with formal health materials. Moreover, animated videos can simulate real-life scenarios and deliver messages in a more empathetic and personalized way, which may contribute to reducing stress and anxiety among mothers. In contrast, static materials like books may not provide the same level of stimulation or reassurance, potentially making it harder for some mothers to internalize and apply the information confidently.

These findings align with prior research indicating that multimedia health education can positively influence psychological outcomes (Sutarso et al., 2022). While the difference in anxiety levels is small, it highlights the importance of tailoring health promotion strategies to the needs and preferences of the target population. Health workers and policymakers should consider integrating animated educational videos into maternal health programs as a complementary or alternative approach to printed materials. Further studies with larger samples and long-term follow-up are recommended to validate these findings and explore the broader impact of animated videos on maternal knowledge, emotional well-being, and behavioral outcomes.

However, it is important to highlight that the MCH book also demonstrated effectiveness in reducing anxiety among postpartum mothers. The high percentage (93.8%) of mothers in the MCH book group who reported no anxiety indicates that printed health education materials remain a valuable and accessible resource. This result is in line with previous study conducted by Sari Ayu (2019). The structured information and comprehensive guidance provided in the MCH book likely contribute to increasing maternal knowledge and confidence in postpartum care, which in turn helps reduce anxiety levels. This reinforces the importance of continuing to promote

and utilize the MCH book in maternal health services, especially in areas with limited access to digital media.

CONCLUSION

The findings of this study demonstrate that both animated videos and the MCH book are effective in reducing postpartum anxiety among mothers. However, animated video-based health education showed a slightly greater impact, with all participants in that group experiencing no anxiety. Despite this, the high proportion of anxiety-free mothers in the MCH book group also confirms its continued relevance and effectiveness. Therefore, both methods can be utilized as complementary tools in postpartum care, with consideration given to accessibility, literacy level, and mothers' preferences to maximize educational impact and emotional well-being.

RECOMMENDATIONS

Based on the findings, it is recommended that healthcare providers integrate both animated videos and the MCH book into postpartum education programs. Animated videos can be utilized as engaging tools in counseling sessions or during waiting times at health facilities to enhance understanding and emotional readiness. Meanwhile, the MCH book should remain a standard educational resource, especially for mothers who prefer reading or have limited access to digital media. Further development of culturally relevant and easy-to-understand audiovisual materials is encouraged to broaden accessibility. Additionally, future research should explore the long-term effects of these educational tools on maternal mental health and their applicability in diverse settings.

REFERENCES

- Girsang E, Yuniarty S, Sulistianingsih R. (2018). Hubungan usia pernikahan dengan tingkat kecemasan ibu nifas. *Jurnal Ilmiah Wijaya*, 11(1), 127–138.
- Kusumawati PD, Damayanti FO, Wahyuni C, Wahyuningsih AS. (2020). Analisa tingkat kecemasan dengan percepatan pengeluaran ASI pada ibu nifas. *Journal for Quality in Women's Health*, 3(1).
- Kusumawati PD, Damayanti FO, Wahyuni C, Wahyuningsih AS. (2020). Analisa tingkat kecemasan dengan percepatan pengeluaran ASI pada ibu nifas. *Journal for Quality in Women's Health*, 3(1), 102–109.
- Mardjun Z, Korompis G, Rompas S. (2019). Hubungan kecemasan dengan kelancaran ASI. *E-Journal Keperawatan*, 7(1), 2–8.
- Qiftiyah M. (2018). Studi tingkat kecemasan ibu post partum terhadap kelancaran ASI pada ibu nifas. *Asuhan Kesehatan*, 8(2), 39–43.
- Salat SYS, Suprayitno E. (2019). Hubungan kecemasan ibu menyusui dengan kelancaran pengeluaran ASI di BPS Kerta Timur.
- Subekti R. (2019). Teknik menyusui yang benar. *Jurnal PPKM*, 6(1), 45–49.

- Supliyani E, Djamilus F. (2021). Efektivitas media video tutorial penatalaksanaan ASI eksklusif terhadap keterampilan ibu dalam menyusui. *Jurnal Riset Kesehatan*, 13(1), 143–151.
- Suryaman R, Girsang E, Mulyani S. (2021). Hubungan pengetahuan dengan kecemasan ibu dalam pemberian ASI pada bayi di masa pandemi COVID-19. *Jurnal Ilmu Kesehatan*, 9(2), 116–121.
- Syahda S, Finarti Y. (2019). Hubungan pengetahuan ibu tentang menyusui dengan kelancaran ASI di RSUD Rokan Hulu. *Jurnal Doppler Universitas Pahlawan Tuanku Tambusai*, 3(1), 33–41.