



THE INFLUENCE OF LACTATION MANAGEMENT HEALTH EDUCATION ON THE LEVEL OF KNOWLEDGE AND *SELF-EFFICACY* OF BREASTFEEDING MOTHERS AT MAEMUNAH MIDWIFE CLINIC

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Abstract

Background: In 2020, UNICEF reported that the global coverage of exclusive breastfeeding was 38%, with developing countries at only 39%. Exclusive breastfeeding coverage in ASEAN countries such as India reached 46%, the Philippines at 34%, Vietnam at 27%, and Myanmar at 24%. In Indonesia, the exclusive breastfeeding coverage in 2022 was only 67.96%. Three reasons contribute to breastfeeding cessation: incorrect latch causing newborns difficulty in sucking (27.1%), breast milk not meeting infant needs (55.6%), and mothers believing they do not produce enough milk (52.2%). Knowledge levels are closely linked to the success of exclusive breastfeeding. **Research Objective:** To determine the influence of lactation management health education on the knowledge level and self-efficacy of breastfeeding mothers. **Research Method:** Quasi-experimental with a one-group pretest-posttest design. The sample in this study consisted of 38 breastfeeding mothers at Maemunah Midwife Clinic in Bogor, from November to December 2023, using total sampling. **Research Results:** Before receiving health education, the majority of respondents had fair to poor knowledge (34.2%), which improved to good knowledge (73.7%) afterward. Before health education, the majority of respondents had low self-efficacy (60.5%), which increased to high self-efficacy (100%) afterward. There is an influence of lactation management health education on the knowledge level and self-efficacy of breastfeeding mothers (p-value 0.000). **Conclusion and Recommendations:** Lactation management health education influences the knowledge level and self-efficacy of breastfeeding mothers. It is hoped that healthcare professionals can enhance lactation education to improve the knowledge of breastfeeding mothers.

Keywords: Knowledge, Self-Efficacy, Lactation Management

Introduction

Breastfeeding is an effective way to provide essential nutrition to infants, promoting their health and overall well-being. The United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) recommend initiating breastfeeding within the first hour of birth, followed by exclusive breastfeeding for the first 6 months, and continued breastfeeding for 2 years or more. Breastfeeding provides strong immunity to infants, preventing nutritional deficiencies, and acting as their first vaccine against common diseases. However, global exclusive breastfeeding coverage for infants aged 0-6 months was only 38% in 2020, with developing countries at 39% (UNICEF, 2021).

In Indonesia, despite efforts to promote exclusive breastfeeding, awareness remains low. The 2022 data on exclusive breastfeeding coverage in Indonesia dropped to 67.96%, a decrease from 69.7% in 2021. Simultaneously, formula milk usage increased from 45.2% in 2021 to 61.6% in 2022 (WHO, 2023). In Bogor, West Java, the exclusive breastfeeding coverage fluctuated, falling below the

national standard of 80%, emphasizing the need for continuous improvement in breastfeeding practices (Dinas Kesehatan Provinsi Jawa Barat, 2022).

While the importance of exclusive breastfeeding is widely advocated, many mothers still choose not to adhere to it. Incorrect breastfeeding latch, insufficient breast milk, and the belief of inadequate milk supply are cited as reasons for discontinuation. Knowledge plays a crucial role in the success of exclusive breastfeeding, with educated mothers more motivated to implement effective lactation management (Endriyeni & Werdani, 2020).

The success of lactation management is influenced by the mother's knowledge and education level. Higher education facilitates better understanding of information, while lower education makes it challenging to comprehend lactation management details. Therefore, continuous efforts are needed to improve mothers' understanding, knowledge, and motivation to provide exclusive breastfeeding for 6 months (Harwati & Utomo, 2020).

Effective breastfeeding management can be achieved through increased motivation, both internally (within the mother) and externally (influenced by the surrounding environment). Good maternal self-efficacy is crucial in providing effective lactation management (Ratna & Werdani, 2020). It is expected that breastfeeding mothers can enhance their knowledge, awareness, and confidence in implementing lactation management by seeking reliable information (Ambarwati & Nuzuliana, 2021).

Healthcare professionals play a vital role as trusted sources, providing information and boosting mothers' confidence in breastfeeding. Health promotion efforts, particularly those carried out by healthcare professionals, are crucial. Health promotion aims to create conducive community behaviors to improve health outcomes (Trisutrisno et al., 2022).

Counseling and lactation education are integral parts of health promotion, encouraging progress in breastfeeding by enhancing mothers' access to skilled breastfeeding counseling. Listening to and accepting mothers' opinions without judgment and assisting them in making informed choices are crucial aspects of successful counseling. These activities can motivate mothers to maintain exclusive breastfeeding (Mardhika, 2020).

Education and counseling on exclusive breastfeeding are recommended during both antenatal and postnatal care. These efforts are essential components of midwifery services, helping clients decide on and commit to exclusive breastfeeding. Counseling not only increases client satisfaction but also aids in the successful implementation of exclusive breastfeeding (Aprilina, 2019).

Based on a preliminary study at Posyandu Melati, where interviews were conducted with 10 pregnant women about their knowledge of breastfeeding, 20% had good knowledge, 30% had sufficient knowledge, and 50% had inadequate knowledge. This led to the decision to conduct a study titled "Effectiveness of Health Education with Brainstorming Method on Knowledge and Attitude of Mothers Regarding Breastfeeding and Breast Milk in the Curug Public Health Center Area, Klari, Karawang, 2023."

A survey conducted at Maemunah Midwife Clinic revealed that 4 out of 10 mothers introduced honey, formula milk, or sugar water to their newborns while waiting for breast milk to come in. However, after breast milk became available, they switched to exclusive breastfeeding until 6 months. Additionally, 3 mothers introduced supplementary foods before the age of 6 months, such as formula milk, porridge, bananas, and other solid foods. The remaining 3 mothers shifted to formula feeding due to nipple soreness and insufficient breast milk flow. This indicates a lack of knowledge about lactation management among mothers. This observation led to the decision to conduct a study titled "The Influence of Lactation Management Health Education on the Knowledge and Self-Efficacy of Breastfeeding Mothers at Maemunah Midwife Clinic, Bogor, 2023."

Research Method

Quasi-experimental design with a one-group pretest-posttest design was employed. The study included all breastfeeding mothers at Maemunah Midwife Clinic in Bogor, totaling 38 participants, during November to December 2023, using total sampling. Data analysis involved univariate and bivariate analyses, employing paired simple t-tests.

Research Results

Table 1 Frequency Distribution of Breastfeeding Mothers' Knowledge Levels Before and After Receiving Lactation Management Health Education at Maemunah Midwife Clinic

No	Knowledge	Pre Test		Post Test	
		F	%	F	%
1	Good	12	31.6	28	73.3
2	Sufficient	13	34.2	13	26.3
3	Poor	13	34.2	0	0.0
Total		38	100.0	38	100.0

Based on the table above, it can be observed that among the 38 respondents before receiving lactation management health education, the number of respondents with sufficient and poor knowledge was equal, both totaling 13 individuals (34.2%). After receiving education, the majority of respondents showed good knowledge, totaling 28 individuals (73.7%).

Table 2 Frequency Distribution of Breastfeeding Mothers' Self-Efficacy Levels Before and After Receiving Lactation Management Health Education at Maemunah Midwife Clinic, Bogor, 2023

No	Self Efficacy	Pre Test		Post Test	
		F	%	F	%
1	High	15	39.5	38	100.0
2	Low	23	60.5	0	0.0
Total		38	100.0	38	100.0

Based on the table above, it can be observed that among the 38 respondents before receiving lactation management health education, the majority had low self-efficacy, totaling 23 individuals (60.5%). After receiving education, all respondents exhibited high self-efficacy, totaling 38 individuals (100.0%).

Table 3 Influence of Lactation Management Health Education on the Knowledge Level of Breastfeeding Mothers at Maemunah Midwife Clinic, Bogor, 2023

Variable	Knowledge Category	Frequency		Mean		SD		P Value
		Pre	Post	Pre	Post	Pre	Post	
Knowledge	Good	12	28	65.79	83.66	16.308	10.678	0,000
	Good	13	10					
	Poor	13	0					

The table above indicates that among the 38 respondents before receiving lactation management health education, the majority had sufficient and poor knowledge, totaling 13 individuals each. After education, most respondents exhibited good knowledge, totaling 28 individuals. The average knowledge level of breastfeeding mothers before education was 65.79, with a standard deviation of 16.308. After education, the average knowledge level increased to 83.66, with a standard deviation of 10.678. The statistical test resulted in a p-value of 0.000, indicating a significant difference in the knowledge level of breastfeeding mothers before and after receiving health education.

Table 4 Influence of Lactation Management Health Education on the Self-Efficacy Level of Breastfeeding Mothers at Maemunah Midwife Clinic

Variable	Knowledge Category	Frequency		Mean		SD		P Value
		Pre	Post	Pre	Post	Pre	Post	
Self efficacy	Hight	15	38	48.05	80.34	7.451	12.469	0,000
	Low	23	0					

The table above indicates that among the 38 respondents before receiving lactation management health education, the majority had low self-efficacy, totaling 23 individuals. After education, all respondents exhibited high self-efficacy. The average self-efficacy level of breastfeeding mothers before education was 48.05, with a standard deviation of 7.451. After education, the average self-efficacy level increased to 80.34, with a standard deviation of 12.469. The statistical test resulted in a p-value of 0.000, indicating a significant difference in the self-efficacy level of breastfeeding mothers before and after receiving health education.

Discussion

Frequency Distribution of Breastfeeding Mothers' Knowledge Levels Before and After Lactation Management Health Education

From the research results, it's evident that among 38 respondents before receiving lactation management health education, an equal number of respondents had moderate and insufficient knowledge, totaling 13 individuals (34.2%). After the education, the majority of respondents exhibited good knowledge, totaling 28 individuals (73.7%).

Knowledge represents the result of human sensory perception towards a specific object. The sensory perception process occurs through human sensory organs, including sight, hearing, smell, taste, and touch. Knowledge or cognitive aspects are crucial for shaping an individual's actions (Notoatmodjo, 2018).

These findings align with Zafirah Istighfarraniyah's study (2023), indicating that before health education, the majority of respondents had insufficient knowledge (47%), and after the education, the majority had good knowledge (96%).

The researcher assumes that, based on the conducted research at Maemunah Midwife Clinic in Bogor, respondents had limited knowledge before receiving lactation management health education. This could be attributed to a lack of understanding about lactation management and unclear information. After the education, most respondents had improved knowledge due to the provided health education and clearer information, leading to better breastfeeding knowledge.

Frequency Distribution of Breastfeeding Mothers' Self-Efficacy Levels Before and After Lactation Management Health Education

The research results indicate that among 38 respondents before receiving lactation management health education, the majority had low self-efficacy, totaling 23 individuals (60.5%). After the education, all respondents exhibited high self-efficacy, totaling 38 individuals (100%).

Self-efficacy refers to the belief that one can master a situation and achieve positive outcomes. It strongly influences behavior. Individuals with high self-efficacy for acquiring a skill or performing a task are more likely to participate willingly, work harder, persevere in difficulties, and achieve higher outcomes. However, high self-efficacy is not effective if the required knowledge and skills are lacking (Santrock, J. W, 2018).

These results align with Ratna Prahesti's study (2018), indicating changes in self-efficacy levels before health education, with 19% having good self-efficacy, and after education, it increased to 28.6%.

The researcher assumes that, based on the research at Maemunah Midwife Clinic, breastfeeding mothers had low self-efficacy before receiving lactation management health education and high self-efficacy afterward. This is attributed to the fact that health education provides valuable information, enhancing knowledge and boosting self-efficacy in breastfeeding mothers.

Influence of Lactation Management Health Education on the Knowledge Level of Breastfeeding Mothers

The research shows that among 38 respondents before receiving lactation management health education, the majority had moderate and insufficient knowledge, totaling 13 individuals. After the education, most respondents had good knowledge, totaling 28 individuals. The average knowledge level of breastfeeding mothers before education was 65.79, with a standard deviation of 16.308. After education, the average knowledge level increased to 83.66, with a standard deviation of 10.678. The statistical test resulted in a p-value of 0.000, indicating a significant difference in the knowledge level of breastfeeding mothers before and after receiving health education.

Health education is synonymous with health counseling as both are oriented toward expected behavioral changes, i.e., adopting healthy behaviors. Health education is part of health promotion, aiming to enhance community capabilities in maintaining and improving their health. It goes beyond increasing knowledge, attitudes, and health practices, also improving both physical and non-physical environments to maintain and enhance health (Notoatmodjo, 2018).

These findings are consistent with Syifa Ningrum Suseno's study (2022), revealing a difference in the average knowledge scores of breastfeeding mothers before (27.25) and after (32.55) receiving lactation management health education.

The researcher assumes that, based on the research at Maemunah Midwife Clinic, there was an increase in knowledge about lactation management after health education. This suggests that health education was successful in achieving the expected outcomes because there was an improvement in the output. Health education supports meaningful knowledge enhancement in this research, utilizing counseling and audiovisual media to convey information more concretely and vividly. The use of integrated audiovisual and visual media provides better learning stimuli, allowing for more absorbed knowledge.

Influence of Lactation Management Health Education on the Self-Efficacy Level of Breastfeeding Mothers

The research reveals that among 38 respondents before receiving lactation management health education, the majority had low self-efficacy, totaling 23 individuals. After education, all respondents exhibited high self-efficacy, totaling 38 individuals. The average self-efficacy level of breastfeeding mothers before education was 48.05, with a standard deviation of 7.451. After education, the average self-efficacy level increased to 80.34, with a standard deviation of 12.469. The statistical test resulted in a p-value of 0.000, indicating a significant difference in the self-efficacy level of breastfeeding mothers before and after receiving health education.

Breastfeeding self-efficacy is the confidence a mother has in breastfeeding, influencing her decision to breastfeed, the effort she will put into it, her mindset, and how she responds to various problems and difficulties during breastfeeding (McKinley et al, 2018).

These findings align with Zalin Kartika Rani's study (2020), which found a significant effect of lactation management education on breastfeeding self-efficacy (p-value = 0.000).

The researcher assumes that, based on the research at Maemunah Midwife Clinic in Bogor, there was a change in breastfeeding self-efficacy from low to high after receiving lactation management health education. The average scores also indicate an increase in self-efficacy, with an average score before education of 48.05 and after education of 80.34. Breastfeeding self-efficacy is

influenced by four factors: past performance or experience, observing others, verbal persuasion (encouragement from others like friends, family, and medical staff), and physiological responses (fatigue, stress, anxiety). With these factors, breastfeeding mothers decide whether to continue breastfeeding for six months, introduce additional food or drinks, or stop breastfeeding their infants. The more comprehensive the information mothers receive, the higher their self-efficacy. The breastfeeding self-efficacy of mothers is related to their belief in their ability to overcome postpartum and breastfeeding issues (environmental, situational, and psychological), ultimately achieving exclusive breastfeeding.

Conclusion

Before receiving health education, the majority of respondents had moderate to insufficient knowledge (34.2%), and afterward, they demonstrated good knowledge (73.7%). Before the education, most respondents had low self-efficacy (60.5%), and after the education, all respondents exhibited high self-efficacy (100%). There is a significant influence of lactation management health education on the knowledge and self-efficacy levels of breastfeeding mothers (p-value 0.000).

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