ISSN: 2345-2897; Health Education and Health Promotion. 2023;11(3):441-445. 6 10.58209/hehp.11.3.441





Effect of Lactation Psychoeducation Using a Video-Based Comprehensive Model on the Mothers' Level of Anxiety in Breastfeeding







ARTICLE INFO

Article Type

Original Research

Authors

Dewi U.M. 1* MSc Windarti Y. 2 MSc Hayani H. 3 MSc

How to cite this article

Dewi UM, Windarti Y, Hayani H. Effect of Lactation Psychoeducation Using a Video-Based Comprehensive Model on the Mothers Level of Anxiety in Breastfeeding Health Education and Health Promotion. 2023;11(3):441-445.

ABSTRACT

Aims Community behavior regarding culture and myths about breastfeeding needs to be changed through a psychological approach to providing education or psychoeducation. The myth of breastfeeding is a legacy passed down from generation to generation, so in overcoming this problem, it is necessary to involve the family, both parents and husband. This research aimed to analyze the effect of lactation psychoeducation using a comprehensive video-based model on maternal anxiety levels in breastfeeding.

Materials & Methods This quasi-experimental research was conducted with a pre- and posttest one-group design from June to August 2023 in all postpartum mothers in the working area of the Surabaya City health center. The sample size used the total population, namely 213 respondents. The instrument used was the State-Trait Anxiety Inventory questionnaire to measure anxiety before and after providing lactation psychoeducation. Data was analyzed using the paired T-test.

Findings Before being given lactation psychoeducation, 18.3% experienced severe anxiety, which then decreased to 0.9% after being given lactation psychoeducation. Moderate anxiety level before being given psychoeducation was 35.7 to 20.7%. The level of mild anxiety before being given psychoeducation was 18.3% to 0.9% after being given psychoeducation (p<0.0001).

Conclusion Lactation psychoeducation using a comprehensive video-based model influences anxiety levels in breastfeeding.

Keywords Mothers; Anxiety; Postpartum Period; Lactation

CITATION LINKS

[1] Performance Accountability Report (LAKIP) ... [2] Design educational psychology programs ... [3] Comparing the effect of a lactation-specific relaxation and visualization intervention versus standard care on lactation and [4] Effects of relaxation therapy on maternal psychological state, infant growth, and ... [5] The role of fathers in promoting exclusive ... [6] Pengaruh Video Edukasi Terhadap Pengetahuan dan Sikap Ibu dalam ... [7] Perinatal psychological interventions to promote ... [8] The effect of body and mind stressreleasing techniques on the breastfeeding of ... [9] The effectiveness of an interactive digital-based educational program in improving breastfeeding ... [10] Effectiveness of education using video media and leaflets on ... [11] Education for working mothers uses leaflet and electronic media ... [12] Motherhood and COVID-19: A digital psychoeducational ... [13] How should a virtual agent present psychoeducation? ... [14] Support for the reliability and validity of a six-item ... [15] Maternal anxiety and breastfeeding: Findings from ... [16] mpact of maternal anxiety on breastfeeding outcomes: ... [17] Anxiety and its influence on maternal ... [18] Validation of the State Version of the State-Trait Anxiety ... [19] Maternal postpartum feeding anxiety was associated ... [20] Erikson's stages of psychosocial ... [21] The urgency of the elderly welfare law ... [22] Life Span Development ... [23] Exclusive breastfeeding protects young children from ... [24] Mother's beliefs, attitudes, and decision making ... [25] Effects of prenatal breast-feeding education on postnatal breast-feeding ... [26] WHO-Leitlinie : Beratung von müttern zur ... [27] Guideline: Counselling of Women to Improve ... [28] Counselling interventions to enable women to initiate and continue ... [29] Which factors influence women in the decision ... [30] Factors affecting mother's ... [31] Factors affecting exclusive breastfeeding ... [32] Effectiveness of a smartphone-based educational intervention to ... [33] Exploring social media group use among breastfeeding ... [34] Utilizing a video-based learning platform for teaching ... [35] The impact of breastfeeding education using audio-visual media on increasing ...

*Correspondence

Address: Jl. Smea No.57, Wonokromo, Kec. Wonokromo, Surabaya, Jawa Timur. Postal Code: 60243 Phone: +62318291920 Fax: +62318298582 uke@unusa.ac.id

Article History

Received: August 2, 2023 Accepted: September 20, 2023 ePublished: October 18, 2023

¹ Department of Midwife, Faculty of Nursing and Midwifery, University Nahdlatul Ulama Surabaya, Surabaya, Indonesia

² Department of Midwife Profession Education, Faculty of Nursing and Midwifery, University Nahdlatul Ulama Surabaya, Surabaya, Indonesia

³ Department of Psychology, Faculty of Psychology, University 45 Surabaya, Surabaya, Indonesia

Introduction

The achievement of exclusive breastfeeding in Indonesia has decreased in the last three years. This achievement reached 68.7% in 2018, decreased to 65.8% in 2019, and became 52.5% in 2021. This achievement has slightly increased to 67.96% in 2022. Achievements in exclusive breastfeeding in Java East reached 50.95% lower than in Central Java and West Java.

Culture and myths in breastfeeding related to colostrum are considered spoiled milk, use of formula milk is considered better and supports social status, and covert promotion of breastfeeding products through online media is alleged to be an inhibiting factor in breastfeeding [1]. Colostrum will turn into mature milk on day 14. Delaying breastfeeding until waiting for mature milk can cause delays in milk production and a lack of bonding between mother and baby. Little milk production due to delaying breastfeeding can cause anxiety for breastfeeding mothers, so they decide to give formula milk as a complement to breast milk. Efforts that have been made to increase exclusive breastfeeding include breastfeeding outreach, IYCF ToT training, and the development of IYCF tele-counseling websites. Community behavior regarding culture and myths about breastfeeding needs to be changed through a psychological approach to providing education or psychoeducation. Psychoeducation integrates and synergizes psychotherapy and educational interventions to strengthen coping strategies or a special way of dealing with mental changes [2-4].

The myth of breastfeeding is a legacy passed down from generation to generation, so in overcoming this problem, it is necessary to involve the family, both parents and husband. Support from husbands and families in implementing lactation psychoeducation can increase mothers' compliance and confidence in breastfeeding [5]. In line with the increasingly rapid technology, development of information psychoeducation can be implemented digitally without having to meet face-to-face with resource persons. Several studies have proven that providing digital education on breastfeeding can significantly increase the knowledge of breastfeeding mothers [6]. Providing psychoeducation needs to be carried out in stages over several sessions, requiring an agreed time to meet with a therapist. Sometimes the implementation of psychoeducation is hampered due to obstacles in arranging time for the implementation of psychoeducation. The flexibility of methods and media in the implementation of psychoeducation is needed so that it can provide the expected results. Comprehensive psychoeducation also supports the successful implementation of psychoeducation [7, 8]. Implementation of a comprehensive psychoeducation model combines providing information, skills training, and support.

Breastfeeding mothers and their families need comprehensive psychoeducation regarding breastfeeding. It is hoped that all stages in implementing psychoeducation for breastfeeding mothers and their families can be provided coherently. Flexibility in implementing psychoeducation can be supported using various psychoeducation media choices, including posters, booklets, leaflets, and videos [2, 9-11]. Implementing digital-based lactation psychoeducation that is easily accessible can increase interest in implementing psychoeducation [12, 13].

This study aimed to analyze the effect of lactation psychoeducation using a comprehensive video-based model on maternal anxiety levels in breastfeeding.

Materials and Methods

This quasi-experimental research was conducted with a pre- and post-test one-group design from June to August 2023 in all postpartum mothers in the working area of the Surabaya City health center. The cluster random sampling method was used to divide the work areas of Surabaya City Health Centers, namely Central Surabaya, West Surabaya, East Surabaya, North Surabaya, and South Surabaya. The selection of Community Health Centers in each work area was carried out randomly, and 213 respondents were selected.

The comprehensive model of lactation psychoeducation is implemented through three stages; (1) initial assessment stage using an anxiety and behavior questionnaire in breastfeeding, which aims to determine the respondent's level of anxiety and behavior in breastfeeding; (2) providing videobased material about myths and facts about breastfeeding by involving breastfeeding mothers and their families; (3) final assessment which aims to measure changes in postpartum anxiety levels and behavior in breastfeeding (Figure 1).



Figure 1. Stages of implementing psychoeducation

Before and after being given psychoeducation, anxiety levels were measured using *the* State-Trait Anxiety Inventory (STAI) which consists of 20 items using 4 Likert scales (1=never, 2=sometimes, 3=often, 4=almost always) with a total score 20-80 with division into categories of mild anxiety (Score

20-40), moderate anxiety (Score 41-60), severe anxiety (Score 61-80) [11-18].

The recap results of filling out the questionnaire were analyzed using a paired T-test to determine whether or not there was an effect before and after treatment.

Findings

Most of the respondents 71.4% were aged 20-30 years, 93% of respondents had secondary education, 70.9% of respondents were multigravida, 29.6% of respondents were postpartum mothers 6 hours postpartum, 55.4% were normal birth types, 53.1% of babies are female, 70.4% of respondents were housewives, 55.4% of respondents had received lactation IEC after giving birth, 69.5% of IEC providers were midwives, 62.4% of families who supported breastfeeding were husbands (Table 1).

Table 1. Mean and frequency (the numbers in parentheses are percentages) of the characteristics of the respondents

Characteristics	Value
Mother's age	2.15±0.52
<20	15 (7)
20-30	152 (71.4)
>30	46 (21.6)
Last education	2.02±0.27
Basic education	5 (2.3)
Middle Education	198 (93)
higher education	10 (4.7)
Baby gender	1.53±0.50
Man	100 (46.9)
Woman	113 (53.1)
Parity	1.74±0.47
Primipara	59 (27.7)
Multipara	151 (70.9)
Grand multipara	3 (1.4)
Postpartum period	2.36±1.14
Six hours postpartum	63 (29.6)
One day postpartum	59 (27.7)
Two days postpartum	42 (19.7)
One week postpartum	49 (23)
Types of Childbirth	1.45±0.50
Normal	118 (55.4)
Sectio Caesarea	95 (44.6)
Work	1.45±0.77
Housewife	150 (70.4)
Businessman	34 (16)
Private employee	25 (11.7)
Civil servants	4 (1.9)
Experience with lactation education	1.75±0.62
When pregnant	74 (34.7)
After giving birth	118 (55.4)
Never	21 (9.9)
Lactation education provider	1.96±1.62
Midwife	148 (69.5)
Doctor	5 (2.3)
There isn't any	21 (9.9)
Social media	15 (7)
Family	8 (3.8)
Friend	16 (7.5)
Families that support breastfeeding	1.93±1.45
Husband	133 (62.4)
Biological mother	30 (14.1)
Mother-in-law	8 (3.8)
Another family member	15 (7)
There isn't any	27 (12.7)

Before being given lactation psychoeducation, 18.3% experienced severe anxiety, which then decreased to

0.9% after being given lactation psychoeducation. Moderate anxiety level before being given psychoeducation was 35.7 to 20.7%. The level of mild anxiety before being given psychoeducation was 18.3% to 0.9% after being given psychoeducation (p<0.0001).

Discussion

This study aimed to evaluate the effect of lactation psychoeducation using a comprehensive video-based model on anxiety levels in breastfeeding mothers.

Anxiety levels decreased significantly after being given lactation psychoeducation. Severe anxiety decreased to 0.9% after being given lactation psychoeducation. The age category of respondents who experienced the most anxiety was 20-30 years old, namely 71.4%. The severe anxiety category is experienced most by mothers aged 20-30 years, namely 13.1%. Research in China [19] found that severe anxiety often occurs in younger breastfeeding mothers. Sun *et al.* This age is included in the category of young adulthood based on the stages of social-psychological development [20,21].

In young adulthood, individuals begin to apply and use their knowledge and analytical skills [22]. Analytical capabilities can make it easier for respondents to absorb the information presented through lactation psychoeducation videos. 62.4% of families involved in providing lactation education are husbands. Mild anxiety was often experienced by respondents whose husbands were involved in providing lactation education, namely 62.2%. The role of the family in providing lactation education supports the success of lactation because the family is the closest person, so most of the mother's interactions are with her family [23, 24].

Families also need to receive lactation education to support breastfeeding mothers positively. 69.5% of respondents received lactation education from midwives. The right providers of lactation education are those who know the concept of lactation properly and correctly so they can provide good knowledge for mothers. More than 55.4% of respondents received lactation education after giving birth. The level of severe anxiety experienced by all respondents who had never received lactation education was 9.9%. This finding is supported by other research results that providing education since pregnancy will increase the mother's motivation and attitude toward breastfeeding [25]. Lactation education needs to be given since pregnancy [26-28] so the mother is more prepared to provide breast milk to her baby immediately after birth.

A nursing mother needs physical and psychological preparation in giving breast milk since pregnancy. Nursing mothers must monitor the condition of their breasts since pregnancy and need to know when breast care should begin and how to do it. Breastfeeding mothers need to know how breast milk

is produced, when breast milk production is high and low, and how to increase breast milk production so that they don't decide to give formula milk too quickly because they think that breast milk production is small [29-31].

Respondents who use social media as an educational medium are still very few, namely 7%. Mothers and families with limited time to visit lactation clinics can freely use social media as an educational medium [32, 33]. Video-based lactation education media can make it easier to understand the information conveyed [34-35]

Lactation consultation facilities provided online can also make consultations more effective and efficient. Mothers and families can get information and lactation counseling without leaving the house. Thus, lactation education and counseling can take place comfortably and flexibly. These findings are expected to become a recommendation for stakeholders to implement lactation psychoeducation for breastfeeding mothers by involving their families to support breastfeeding success. Family involvement in breastfeeding is the biggest support for a breastfeeding mother.

Conclusion

Lactation psychoeducation using a video-based comprehensive model affects mothers' anxiety level in breastfeeding.

Acknowledgments: Thank you to Directorate General of Higher Education, Research and Technology, Ministry of Education, Culture, Research and Technology.

Ethical Permissions: This research has received a certificate of ethical merit from the Health Research Ethics Committee (KEPK) of Universitas Nahdlatul Ulama Surabaya (Certificate number: 0254/EC/KEPK/UNUSA/2023).

Conflict of Interests: There is no conflict of interest to declare.

Author's Contribution: Dewi UM (First Author), Methodologist/Assistant Researcher/Discussion Writer (60%); Windarti Y (Second author), Introduction Writer/Main Researcher (20%); Hayani (Third author), Assistant Researcher/Statistical Analyst (20%)

Funding/Support: This research received funding from Directorate General of Higher Education, Research and Technology, Ministry of Education, Culture, Research and Technology.

References

- 1- Kemenkes RI. Government Agency Performance Accountability Report (LAKIP) 2022. Ministry of Health of the Republic of Indonesia; 2022 Jun. 89 p. [Indonesian]
- 2- Supratiknya A. Design educational psychology programs and modules. Yogyakarta: Universitas Sanata Dharma; 2011. 197 p. [Indonesian]
- 3- Levene I, Bell JL, Cole C, Stanbury K, O'Brien F, Fewtrell M, et al. Comparing the effect of a lactation-specific relaxation and visualization intervention versus standard care on lactation and mental health outcomes in mothers of very premature infants (the EXPRESS trial): Study protocol

- for a multi-center, unmasked, randomized, parallel-group trial. Trials. 2022;23(1):611.
- 4- Yu J, Wells J, Wei Z, Fewtrell M. Effects of relaxation therapy on maternal psychological state, infant growth, and gut microbiome: Protocol for a randomized controlled trial investigating mother-infant signaling during lactation following late preterm and early term delivery. Int Breastfeed J. 2019;14:50.
- 5- Agrawal J, Chakole S, Sachdev C. The role of fathers in promoting exclusive breastfeeding. Cureus. 2022;14(10):e30363.
- 6- Safitri VA, Pangestuti DR, Kartini A. Pengaruh Video Edukasi Terhadap Pengetahuan dan Sikap Ibu dalam Pemberian ASI Eksklusif di Puskesmas Bulu Lor 2021. Media Kesehat Masy Indones. 2021;20(5):342-8. [Indonesian]
- 7- Gómez L, Verd S, de-la-Banda G, Cardo E, Servera M, Filgueira A, et al. Perinatal psychological interventions to promote breastfeeding: A narrative review. Int Breastfeed J. 2021;16:8.
- 8- Fotiou C, Siahanidou T, Vlastarakos PV, Tavoulari EF, Chrousos G. The effect of body and mind stress-releasing techniques on the breastfeeding of full-term babies; a critical analysis of published interventional studies. J Matern Neonatal Med. 2018;31(1):98-105.
- 9- Amin SM, Mahrous ES, Alrimawi I, Elbialy AA. The effectiveness of an interactive digital-based educational program in improving breastfeeding knowledge, attitudes, and self-efficacy among primiparous women in Egypt. Afr J Reprod Health. 2022;26(11s):79-91.
- 10- Hindriati T, Nurmisih N, Diniyati D, Indriani M. Effectiveness of education using video media and leaflets on adolescents' knowledge abaout the impact of mistimed pregnancy. Heal Educ Heal Promot. 2023;11(2):183-7.
- 11- Utami RB, Sari US, Yulianti E, Wardoyo S. Education for working mothers uses leaflet and electronic media to increase exclusive breastfeeding. J Educ Health Promot. 2019;8:229.
- 12- Perry CPB, da Cunha ACB, de Albuquerque KA, Martins AL, Lima DB, de Moura Burgarelli PC, et al. Motherhood and COVID-19: A digital psychoeducational booklet for the coping with the pandemic stressors. Trends Psychol. 2021;29(3):436-55.
- 13- Tielman ML, Neerincx MA, Van Meggelen M, Franken I, Brinkman WP. How should a virtual agent present psychoeducation? Influence of verbal and textual presentation on adherence. Technol Heal Care. 2017;25(6):1081-96.
- 14- Tluczek A, Henriques JB, Brown RL. Support for the reliability and validity of a six-item state anxiety scale derived from the state-trait anxiety inventory. J Nurs Meas. 2009;17(1):19-28.
- 15- Adedinsewo DA, Fleming AS, Steiner M, Meaney MJ, Girard AW. Maternal anxiety and breastfeeding: Findings from the MAVAN (Maternal adversity, vulnerability and neurodevelopment) study. J Hum Lact. 2014;30(1):102-9.
- 16- Hoff CE, Movva N, Rosen Vollmar AK, Pérez-Escamilla R. Impact of maternal anxiety on breastfeeding outcomes: A systematic review. Adv Nutr. 2019;10(5):816-26.
- 17- Melo LC de O, Bonelli MCP, Lima RVA, Gomes-Sponholz FA, Monteiro JCDS. Anxiety and its influence on maternal breastfeeding self-efficacy. Rev Lat Am Enfermagem. 2021;29:e3485.
- 18- Thomas CL, Cassady JC. Validation of the State Version of the State-Trait Anxiety Inventory in a University Sample. SAGE Open. 2021;11(3).

- 19- Sun J, Zhu Y, Li Y, Li N, Liu T, Su X, et al. Maternal postpartum feeding anxiety was associated with infant feeding practices: Results from the mother-infant cohort study of China. BMC Pregnancy Childbirth. 2020;20(1).
- 20- Orenstein G, Lewis L. Erikson's stages of psychosocial development. Treasure Island: Stat Pearls Publishing. 2023;179-84.
- 21- Hakim LN. The urgency of the elderly welfare law revision. Aspir J Masal Sos. 2020;11(1):43-55.
- 22- Santrock JW. Life Span Development. New York: McGraw-Hill Education; 2012.
- 23- Hadi H, Fatimatasari F, Irwanti W, Kusuma C, Alfiana RD, Asshiddiqi MIN, et al. Exclusive breastfeeding protects young children from stunting in a low-income population: A study from eastern Indonesia. Nutrients. 2021;13(12):4264.
- 24- Radzyminski S, Callister LC. Mother's beliefs, attitudes, and decision making related to infant feeding choices. J Perinat Educ. 2016;25(1):18-28.
- 25-Baransel E, Ucar T, Guney E. Effects of prenatal breast-feeding education on postnatal breast-feeding fear in pregnant women in the COVID-19 pandemic: A randomized clinical trial. Int J Nurs Prakt. 2022:13105.
- 26- Nubbaumer-streit B, Gartlehner G. WHO-Leitlinie: Beratung von müttern zur verbesserung von stillpraktiken WHO guideline: Counselling of women to improve breastfeeding practices zweck der leitlinie methodik der leitlinienentwicklung. Gesundheitswesen. 2020;82(1):274-9. [German]
- 27- WHO. Guideline: Counselling of Women to Improve Breastfeeding Practices [Internet]. Geneva: World Health

- Organiation; 2018 Jan- [cited 2023 September 4]. Available from:https://www.who.int/publications/i/item/9789241 550468
- 28- McFadden A, Siebelt L, Marshall JL, Gavine A, Girard LC, Symon A, et al. Counselling interventions to enable women to initiate and continue breastfeeding: A systematic review and meta-analysis. Int Breastfeed J. 2019;14(1):1-19.
- 29- Primo CC, Nunes B de O, Lima E, Leite F. Which factors influence women in the decision to breastfeed? Invest Educ Enferm. 2016;34(1):198-217.
- 30- Keloglan S, Yilmaz A, Gumus K. Factors affecting mother's breastfeeding. Int J Caring Sci. 2018;11(1).
- 31- Maharlouei N, Pourhaghighi A, Raeisi H, Zohoori D, Lankarani KB. Factors affecting exclusive breastfeeding, original article. Int J Community Based Nurs Midwifery. 2018;6(3):260-71.
- 32- Seyyedi N, Rahmatnezhad L, Mesgarzadeh M, Khalkhali H, Seyyedi N. Effectiveness of a smartphone-based educational intervention to improve breastfeeding. Int Breastfeeding J. 2021;70.
- 33- Skelton KR, Evans R, Lachenaye J, Amsbary J. Exploring social media group use among breastfeeding mothers: Qualitative analysis corresponding author. JMIR Pediatr Parent. 2018;1(2):e11344.
- 34- Ii JDH, Brucker J, Seul L, Adler M, Joyce AH. Utilizing a video-based learning platform for teaching breastfeeding medicine. Cureus. 2022;14(11):e31327.
- 35- Fitri A, Rizkia M, Azzahra S, Helfiva S. The impact of breastfeeding education using audio-visual media on increasing knowledge and motivation of breastfeeding in pregnant mother. J Perawat Indones. 2023;7(1):1272-82.