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The Influence of Maternal Mental Health Education Using Psychological Adaptation Theory Approach on Breastfeeding Self-Efficacy (BSE) and Postpartum Mother Stress

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ABSTRACT

The effectiveness of Maternal Mental Health Education with the Psychological Adaptation Theory approach to Breastfeeding Self Efficacy (BSE) and Postpartum Mother Stress. This research method is intervention research using a quasi-experimental design through a pretest and post-test design with a control group. The sample in this study were pregnant women in their third trimester who checked themselves at the Community Health Center, met the inclusion criteria, were willing, and had signed informed consent 82 samples. The analysis results using the chi-square test for self-efficacy variables before treatment obtained a value of p = 0.021, and after the intervention, the value of p = 0.001. Before treatment, the value of p = 0.185 > 0.05 was obtained for stress which showed no significant difference. Maternal mental health education that has been developed is proven to increase pregnant women's self-efficacy and reduce stress in postpartum mothers. Therefore, the need for education to be applied in midwifery services, especially for postpartum mothers.

1. Introduction

Stress is a condition of psychological reaction to a stressor. Chronic stress conditions that continue continuously will result in pressure on the body, which can cause various kinds of diseases or disorders, including postpartum mothers who will find it challenging to adapt physiologically and psychologically in accepting their new role as mothers [1].

Postpartum stress during the puerperium in Asia varies with a percentage of 26% -85%, while in Indonesia is in the range of 50% -70% and even up to the incidence of postpartum depression at 11% -30%. In Indonesia, the incidence of postpartum stress has not received serious attention because it is only considered a side effect of fatigue and fatigue after childbirth [2].

Stress or baby blues syndrome after giving birth is experienced by 70% of postpartum mothers. Most of them can recover, but the remaining 13% will experience postpartum depression. Mothers who cannot control psychological stress are very vulnerable to experiencing disturbances in the breastfeeding process. Psychological factors strongly influence milk production. Stress will inhibit milk production; the higher the stress level, the less stimulation of the hormone prolactin will be, so less milk will be produced [3]. Several studies have stated that increased stress in postpartum can cause the cessation of breastfeeding in postpartum mothers [4].

Anxiety, fatigue, and emotional stress after childbirth also inhibit breast milk production because psychological factors are essential to successful breastfeeding [5]. Several studies have stated that high stress in postpartum mothers can cause the cessation of breastfeeding in the first months postpartum due to the disruption of the mother's confidence in breastfeeding. A mother's mental health will foster strong breastfeeding self-efficacy, which is very important in the breastfeeding process and must be formed from the gestation period. Several studies have shown that breastfeeding education can improve the outcome of exclusive breastfeeding with re-education and technology that is considered effective in providing breastfeeding information and guidance conducted in America to groups of pregnant women for 32 weeks [6].

Based on Edmon K's research in Ghana, which was published in the Scientific Journal of Pediatrics on 10,947 babies, there was 22% of newborns died in the first month of birth, whereas babies who were breastfed early on their mothers in the first 1 hour of birth could reduce mortality by up to 16%. in this study it is estimated that the early initiation of breastfeeding (IMD) program can save around 30,000 babies in Indonesia in the first month [7].

Mental health-based educational programs and training are commonly known to reduce fear and stress and improve cognitive function. Because of this, research has shown that mental awareness programs can improve interpersonal relationships and the effectiveness of coping with stress, anxiety, and fear of breastfeeding [8], [9].

With a Psychological Adaptation theory approach that emphasizes achieving the role of mother, a woman needs a learning process through a series of activities or exercises to achieve this role. Thus, a woman, especially a prospective mother, can learn the position she will experience in the future to adapt to the changes that occur, especially psychological changes during pregnancy and after childbirth. Therefore, it is necessary to provide education to support mothers' mental health in the breastfeeding process. Family involvement, including the husband in it. Family support significantly impacts the delivery process and increases confidence in the mother [10]. Although not every meeting requires the mother to be accompanied by her family, this is due to several factors, including the husband's job or the availability of time from the family to attend educational classes [11]

2. Methods

This research uses a quasi-experimental design through a pretest and post-test design with a control group. The research group was divided into two groups: Group 1: Received Maternal Mental Health education, and Group 2: Received routine education through the MCH Handbook.

This research was carried out in the work area of the Community Health Center in Makassar City (from March 2021 to January 2022). The sample was third-trimester pregnant women who checked themselves at the Community Health Center, met the inclusion criteria, was willing, and had signed informed consent,

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namely 82 samples.

The inclusion and exclusion criteria are as follows:
Inclusion Criteria:
a. Primigravida mother
b. Ordinary pregnant women are pregnant in the third trimester UK ≥ 36 weeks of gestation, willing to sign informed consent three times during educational activities for the intervention group, one time during pregnancy during the third-trimester visit or UK 36 weeks and education on days 3 and 5 postpartum.
Exclusion criteria:
a. Depressed pregnant woman
b. Pregnant women who have pregnancy complications or severe illness
c. Changing domicile from the research location.

3. Results

The research results are described in the following table:

Table 1 Distribution of Respondents' demographic data in the control group and the intervention group

Variable	Intervention (n=41)	Control (n=41)
	n(%) / Mean±SD	**n(%) / Mean±SD**
Mother's age (years)		
≥20	34 (52.3)	31 (47.7)
<20	7 (41.2)	10 (58.8)
Husband's age (years)		
≥20	40 (50,6)	39 (49.4)
<20	1 (33.3)	2 (66.7)
Length of Marriage (Year)	1.7 ±1.47	2.48±2.94
Level of education		
elementary school	5 (50)	5 (50)
Junior high school	5 (35,7)	9 (64.3)
Senior High School	27(54)	23 (46)
Bachelor	4 (50)	4 (50)
Income (IDR/) month	2.217.000± 1.074.000	3.545.000± 2.486.000
According to UMR	8 (57.1)	6 (42.9)
Under UMR	33 (48.5)	35 (51.5)
Mother's job		
housewife	35 (50)	35 (50)
Not housewife	6 (50)	6 (50)
resident status		
Own	9 (47.4)	10 (52.6)
With family	32 (50.8)	31 (49.2)
Lila		
≥23.5	33 (55)	27 (45)
<23.5	8 (36.4)	14 (63.6)

Table 1 shows that the age of the mother in the intervention and control group was at most > 20 years old, namely 34 mothers (52.3%) and 31 mothers (47.7%). For the husband's age, most were>20 years, namely 40 people (50.6%). The highest number of respondents' education was in the high school category, namely 27 mothers (54%). The highest income was in the control group below the UMP, namely 35 respondents (48.5%). Most respondents work were homemakers in both the intervention and control groups, namely 35 respondents (50%) each. Pregnancy status in both groups was mostly planned pregnancies, namely 32 respondents (50.8%). Meanwhile, most of the living status was in the intervention group with family, namely 31 respondents (79.5%).

Nutritional status, as measured by LILA was found to be the most in the ≥23.5 cm category, namely in the intervention group of 33 mothers (55%). Most self-efficacy before treatment was in the high class, namely 25 mothers (56.8%). Meanwhile, there was an increase after the intervention, namely 38 mothers (56.7%). The most stress status in postpartum mothers was in the mild class (intervention group), namely 33 mothers (66%). Breastfeeding in the intervention group was mainly exclusive, namely 30 mothers (83.3%). In contrast, in the control group in mixed-status, there were 20 mothers (64.5%) for the most breast milk production in the optimal category in the intervention group, namely optimal as many as 29 mothers (82.9%).

Table 2. The Relationship between Maternal Mental Health Education and Postpartum Mother's Self-Efficacy and Postpartum Mother's Stress

Variable	Intervention (n=41)	Control (n=41)	*P*
Self-efficacy			
Pretest			
High	25 (56.8)	19 (43.2)	
Low	16 (42.1)	22 (57.9)	0.021
Postest			
High	38 (56.7)	29 (43.3)	
Low	3 (20)	12 (80)	0.001*
Stressed			
Pretest			
light	12 (35.3)	22 (64.7)	
currently	29 (60.4)	19 (39.6)	0.184
heavy	0 (0)	0 (0)	
Postest			
light	33 (66)	17 (34)	
currently	7 (29.2)	17 (70.8)	0.010
heavy	1 (12.5)	7 (87.5)	

Table 2 shows the differences between the control and intervention groups. In pregnancy self-efficacy before treatment in the intervention group, the highest number of respondents with high self-efficacy was 25 respondents (56.8%). Meanwhile, 22 respondents (57.9%) had low self-efficacy in the control group. After treatment, there was an increase in respondents who had high self-efficacy, as many as 38 respondents (56.7%). While in the control group, it only increased by 29 respondents (43.3%).

Stress before treatment in the intervention group was mainly in the moderate category, namely 29 respondents (60.4%). Likewise, in the control group, most were in the mild category, namely 22 respondents (64.7%). After the intervention in the treatment group, most were in the soft stress category, namely 33 respondents (66%). Meanwhile, in the control group, most were in the moderate category, namely 17 respondents (70.8%).

The results of the analysis using the chi-square test obtained the value of the efficacy variable p = 0.021 <0.05, this indicates a significant difference. Before treatment, the value of p = 0.185> 0.05 was obtained in stress, which showed no significant difference. However, after treatment, the p = 0.010 <0.05 was obtained, which showed the difference between the two groups.

4. Discussion

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4.1 The effect of Maternal Mental Health (MMH) Education on increasing the self-efficacy of postpartum mothers

The analysis results used the chi-square test; the self-efficacy variable before treatment obtained a p = 0.021 <0.05, indicating a significant difference. Before treatment, the value of p = 0.185> 0.05 was obtained in stress, which showed no significant difference. However, after treatment, the p = 0.010 <0.05 was obtained, which showed the difference between the two groups. For breastfeeding status, the value of p = 0.000 <0.05 was obtained, and the value of breast milk production was obtained by value p = 0.000 <0.05, which means that there are differences in breastfeeding and milk production in the two groups.

Confidence in breastfeeding (breastfeeding self-efficacy) is a mother's belief about her ability to decide whether to breastfeed her baby according to her abilities and can overcome difficulties in the breastfeeding process [12]. Breastfeeding mothers need confidence in giving breast milk to their babies until a predetermined time. Self-efficacy in breastfeeding mothers can support breastfeeding success. The higher the self-efficacy of breastfeeding in mothers, the higher the success rate in breastfeeding. The lower self-efficacy of breastfeeding in the mother when experiencing difficulties in breastfeeding can cause the mother to be unable to give breast milk or replace it with formula milk [13].

Four factors affect a mother's self-efficacy in breastfeeding (namely previous breastfeeding experience, seeing other people breastfeeding), support from others such as friends, family, and physiological responses (fatigue, worry and stress) [12].

A mother with good self-confidence is more likely to succeed in giving her baby exclusive breastfeeding than a mother with less self-confidence. The higher the confidence of breastfeeding mothers, the more appropriate the way of breastfeeding [14- 16].

High self-confidence will increase mothers' success in providing breast milk to their babies (Rahayu, 2018). Conversely, low self-confidence can cause primiparous/multiparous mothers not to breastfeed or to breastfeed in a short time [13]. Previous studies stated that 56 (69%) of 81 mothers breastfed their babies <60 days [17].

Increasing breastfeeding self-efficacy can increase the mother's knowledge about breastfeeding. Increased knowledge can be done by providing education. Education can be given prenatally or postnatally. Health education (education) is an activity carried out to influence a person, family, group, and community to behave following health values [18].

Health education in research that has been carried out uses the lecture method effectively by the research conducted [19]. The education delivery is carried out individually with the aim that respondents are more focused on paying attention to the information conveyed so that the reception of information by respondents will be better. The media used by researchers were flipcharts, leaflets, and practising correct breastfeeding techniques and positions in breastfeeding. Education is a learning process to improve specific abilities so that educational goals can be independent. The level of education can determine whether or not someone quickly understands and accepts the information obtained. Education is a way to teach lessons that aim to change other people towards a specific goal.

A psychological condition known as self-efficacy is associated with uncertainty about being able to provide exclusive breastfeeding. The Cognitive Theory put forward by Bandura says that self-efficacy is a person's beliefs/beliefs about his ability to carry out certain tasks successfully. Self-efficacy that is developed

continuously will slowly help in achieving long-term goals, namely facing obstacles, failures, and obstacles from the environment. In other words, the mother's self-efficacy is her awareness to provide breast milk to her baby at least until the age of 6 months.

Based on the research results obtained by the mother's confidence in the ability to breastfeed her baby, which is called Breastfeeding Self Efficacy (BSE). More specifically, BSE is associated with the mother's belief in her ability to breastfeed her baby, being able to control the environment both physically and psychologically for the mother after going through the birthing and breastfeeding phases which ultimately affects the smooth delivery of exclusive breastfeeding. Interventions can be given to overcome low self-efficacy in mothers giving exclusive breastfeeding by providing the correct information about exclusive breastfeeding [20].

4.2 Effect of Maternal Mental Health (MMH) Education on Postpartum Mother's Stress

Stress before treatment in the intervention group was mainly in the moderate category, namely 29 respondents (60.4%). Likewise, in the control group, most were in the mild category, namely 22 respondents (64.7%). After the intervention in the treatment group, most were in the soft stress category, namely 33 respondents (66%). Meanwhile, in the control group, most were in the moderate category, namely 17 respondents (70.8%).

The process of breastfeeding is not merely a process between mother and baby. A father and the environment surrounding the mother determine breastfeeding success. Even breastfeeding has psychological and spiritual aspects between mother, baby, and father, not just sticking and letting the baby breastfeed.

Several types of stress are commonly experienced by breastfeeding mothers. Starting from worrying about little milk production, or feeling that the quality of breast milk is not good for the baby, fear of changes in body or breast shape (aesthetic factors), stress due to changes in pattern/lifestyle, especially when breastfeeding the first child, fear of contracting a disease while breastfeeding six months exclusive, stress because they feel breastfeeding is not practical for working mothers, and stress due to lack of husband/father support for breastfeeding activities as the best food for babies.

Stress will automatically affect the production of the hormone oxytocin, which should not be underestimated because of its role in producing quality breast milk. Unfortunately, so far, not everyone understands the importance of managing stress.

A person's level of knowledge can be influenced by several factors, such as his educational status, which in this study generally had junior high school education, his job, place of residence (rural-urban) and his ability to access more information from both print, offline and online electronic media.

Knowledge of pregnant women, especially primigravida mothers, is crucial because they have no previous experience with pregnancy and childbirth. This is different from a mother who has had a previous pregnancy and childbirth experiences, which will certainly know what she needs to prepare, including mentally, so that her anxiety about childbirth will decrease.

Mothers with high knowledge and work in the formal sector will be more independent in determining attitudes and treatment actions because they get health information. The common understanding of the mother has an impact on the health of the mother's pregnancy. The less knowledge the mother has the less

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desire to use health services. There are still other factors that can affect anxiety besides knowledge. Related to research about the anxiety level of primigravida mothers facing childbirth regarding maternal age and socio-economic factors. When mothers aged 20-35 experience pregnancy, this is considered safe, and in dealing with anxiety, the mother can also control it [21].

Socio-economic factors also affect anxiety in pregnant women, where a good economy can meet all the necessary needs to guarantee pregnant women's physical and psychological health. Having a good social economy can have access to health services, facilities, and all about preparation for childbirth. Therefore, it is easier for pregnant women to prevent anxiety during pregnancy and prevent anxiety in facing the delivery process. In this study, all respondents have good socio-economic status to prevent and overcome anxiety. Farida Aryani's research at Yogyakarta University concluded that the factors associated with third-semester primigravida anxiety were physical exercise in the form of pregnancy training. At the same time, the mother's age, occupation, education level, and husband's support did not affect primigravida anxiety. Based on this research helps researchers in making conclusions that the level of knowledge does not always affect the level of anxiety [22].

5. Conclusion

The developed mAternal mental health education is proven to be able to increase the self-efficacy of pregnant women (p-value = 0.001 <0.05) and shows a decrease in stress in postpartum mothers (p-value = 0.010 <0.05). Therefore, education must be applied in midwifery services, especially for postpartum mothers.

6. References

[1] D. Zartika, “Pengaruh stres terhadap kadar kortisol dan perkembangan kelenjarmammae tikus rattus novergicus hamil,” Uniiversitas Andalas, 2017.

[2] L. W. Susanti and A. Sulistiyanti, “Analisis Faktor-Faktor Penyebab Terjadinya Baby Blues Syndrom Pada Ibu Nifas,” J. Ilm. Rekam Medis Dan Inform. Kesehat., vol. 7, no. 2, pp. 12–20, 2017.

[3] D. S. Prasetyono, Buku Pintar ASI Ekslusif. Pengenalan Praktek dan Kemanfaatannya. Yogyakarta: Diva Press, 2009.

[4] C.-L. Dennis and K. McQueen, "The relationship between infant-feeding outcomes and postpartum depression: a qualitative systematic review.," Pediatrics, vol. 123, no. 4, pp. e736-51, Apr. 2009, doi: 10.1542/peds.2008-1629.

[5] IDAI, Kumpulan Tips Pediatrik, 3rd ed. Badan Penerbit Ikatan Dokter Anak Indonesia, 2019.

[6] M. Chan, DN, and Yi, "The Effect of a self-efficacy-based educational Programme on maternal breast feeding self-efficasy, breast feeding duration and exclusive breast feeding rates: A longitudinal study," Elsevier Sci., vol. 36, pp. 92–98, 2016.

[7] K. M. Edmond, C. Zandoh, M. A. Quigley, S. Amenga-Etego, S. Owusu-Agyei, and B. R. Kirkwood, "Delayed breastfeeding initiation increases risk of neonatal mortality.," Pediatrics, vol. 117, no. 3, pp. e380-6, Mar. 2006, doi: 10.1542/peds.2005-1496.

[8] S. F. M, M. Sh, and A. Moradi, "Effect of mindfulness-based childbirth and parenting program

education on pregnancy anxiety and marital satisfaction in pregnant women," Journal of Behavioral Sciences, vol. 8, no. 4. pp. 375–381, 2014.

[9] J. Byrne, Y. Hauck, C. Fisher, S. Bayes, and R. Schutze, "Effectiveness of a mindfulness-based childbirth education pilot study on maternal self-efficacy and fear of childbirth," J. Midwifery Women's Heal., vol. 59, no. 2, pp. 192–197, 2014, doi: 10.1111/jmwh.12075.

[10] K. Curtis, K. Foster, R. Mitchell, and C. Van, "Models of Care Delivery for Families of Critically Ill Children: An Integrative Review of International Literature," J. Pediatr. Nurs., vol. 31, no. 3, pp. 330–341, 2016, doi: 10.1016/j.pedn.2015.11.009.

[11] N. Jaqin, M. Syafar, Arsunan, Nasruddin, Budu, and M. Hatta, "Increasing of Pregnancy on the self efficasy of pregnant women in groups Accompained by their Husband and Groups Unaccompained Husband in Gowa Regency," IJSBAR, vol. 44 No.1, pp. 33–42, 2019.

[12] M. Aluş Tokat, H. Okumuş, and C.-L. Dennis, "Translation and psychometric assessment of the Breastfeeding Self-Efficacy Scale-Short Form among pregnant and postnatal women in Turkey.," Midwifery, vol. 26, no. 1, pp. 101–108, Feb. 2010, doi: 10.1016/j.midw.2008.04.002.

[13] M. A. Wardani, "Gambaran Tingkat Self-Efficacy untuk Menyusui pada Ibu Primigravida," FIK Univ. Indones., vol. 075, 2012.

[14] A. P. Rahayu, "Hubungan Pengetahuan Tentang Personal Hygiene Dengan Penyembuhan Luka Perineum Di Klinik Bersalin Sahara Kota Padangsidimpuan," Institut Kesehtan Helvetia Medan, 2018.

[15] U. N. Njakatara, L. Lusmilasari, and A. Rustiyaningsih, "Pengaruh Edukasi Kesehatan Paket Cerdas Ibu Menyusui (PCIM) terhadap Efikasi Diri Ibu Primipara dalam Merawat Bayi Baru Lahir di Haharu, Sumba Timur The Influence of PCIM Health Education Module on The Self-Efficacy of Primiparous in Taking Care of New," J. Keperawatan Klin. dan Komunitas, vol. 5, no. 2, pp. 61–72, 2021.

[16] Isti'aroh and S. Rofiqah, "Breastfeeding Self Efficacy dan Hubungannya dengan Perilaku Ibu Menyusui," Pena Media, vol. 7 No.2, 2017.

[17] A. Zakiah, Rasyad and Sujatno, "Hubungan Dukungan Suami dan Dukungan Orang Tua dengan Efikasi Diri Ibu Menyusui Di Wilayah Kerja Puskesmas Pagaden barat Kab. Subang," J. Gizi, vol. vol 1.No.1, 2012.

[18] U. H. Fata and A. Rahmawati, "Edukasi Prenatal dalam Upaya Peningkatan Breastfeeding Self Efficacy," J. Ners dan Kebidanan, vol. Vol.3 No.2, 2016.

[19] A. Sa'diyah and I. Agustina, "Pengaruh Pendidikan kesehatan Terhadap Sikap Ibu Menyusui dalam Pemberian MP-ASI Pada Bayi Usia 0-6 Bulan," Ners dan Kebidanan, vol. Vol.1 No.2, 2014.

[20] S. Faux and C.-L. Dennis, "Development and Psychometric Testing of the Breastfeeding Self-Efficacy Scale," Res. Nurs. Heal., vol. 22, 1999.

[21] U. Aniroh and F. Fatimah, "Tingkat Kecemasan Ibu Primigravida dalam Menghadapi Persalinan

ISSN: 0005-2523
Volume 62, Issue 10, December, 2022

Ditinjau dari Faktor Usia dan Sosial Ekonomi," Ilm. Bid. Ilmu Keperawatan Matern., vol. Vol.2 No.2, 2019.

[22] F. Aryani, A. Raden, and Ismarwati, "Senam Hamil Berpengaruh t erhadap Tingkat Kecemasan pada Primigravida Trimester III di RSIA Sakina Idaman Sleman," J. Ners Midwifery Indones., vol. 04, no. 3, pp. 129–134, 2016, [Online]. Available: https://core.ac.uk/download/pdf/193319246.pdf.