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### THE EFFECT OF PROVIDING EDUCATION TO PARENTS (PROVIDING EDUCATION) IN EFFORTS TO OVERCOME THE ANXIETY OF PARENTS WITH HEAVY BABIES LOW BIRTH WEIGHT (LBW)

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#### ABSTRACT

LBW is a condition that requires babies or neonates to receive intensive care. Hospitalization of babies with LBW often has psychological effects in the form of anxiety on parents. The anxiety that arises is triggered by worry about the safety of the child and anxiety about the parents' ability to care for babies with LBW, therefore education is needed for parents as an effort to prevent anxiety. This study aims to determine influence of providing education to parents (providing education) in an effort to overcome the anxiety of parents with Low Birth Weight (LBW) Babies in Kerinci Regency in 2023. This type of research is a quasi experiment with a one group pre test post test design approach which has been carried out in October 2022 – October 2023. The population is all parents with LBW babies totaling 126 people. Sampling used quota sampling technique with a sample size of 30 respondents. Data collection uses an instrument in the form of the HRS-A questionnaire. Data analysis includes univariate analysis and bivariate analysis using the Wilcoxon-test. The research results showed that the average anxiety of respondents before the intervention was 49.03 and after the intervention it fell to 26.33. There is a difference of 22.7 and a p value = 0.000. It can be concluded that providing education has a significant effect on anxiety in parents of LBW babies. It is hoped that all parties, especially health service institutions, can always provide education using booklets to parents of LBW babies as an effort to deal with anxiety.

Keywords: Providing Education, Anxiety, LBW

#### INTRODUCTION

Low birth weight (LBW) is an indirect cause of neonatal death. LBW contributes to 60% to 80% of all neonatal deaths. The global prevalence of LBW is 15.5% of babies who experience LBW every year, around 20 million babies, 96.5% of them in developing countries. Experience from developed and low- and middle-income countries has clearly demonstrated that appropriate care of LBW infants. including feeding, temperature maintenance, hygiene straps and skin care, as well as early detection and treatment of infections and complications including respiratory distress syndrome can substantially reduce mortality (WHO, 2020).

Globally, the highest prevalence of LBW in the world is in the South Asia zone (22%), especially in India (30%). Meanwhile,

the prevalence of LBW in Indonesia is around 6-18%. Indonesia is included in the 10 countries with the highest number of small-forgestational-age babies (KMK). The highest causes of neonatal death in Indonesia are complications from intrapartum events (27.7%), respiratory and cardiovascular disorders (22.3%), LBW and preterm (20.8%) and congenital birth (12%)(RI Ministry of Health, 2022).

Jambi Province is in the lowest position for LBW cases among all provinces in Indonesia, however, based on data from the 2018 Maternal and Child Health Profile, the number of LBW cases in Jambi Province is quite high and unstable. In Jambi Province, it is known that the LBW figure in 2016 was 10.91%, in 2017 there was an increase reaching 13.05%, while in 2018 it decreased to 10.10%, but increased again in 2020 to 14.41% (Jambi Provincial Health Service, 2021)

Based on data from the Kerinci Regency Health Office for 2019-2021, the incidence of LBW in Kerinci Regency is unstable. It is known that in 2019 it reached 3.0%. In 2020 the incidence rate in Kerinci Regency increased to 3.47% and this figure places Kerinci Regency with the highest percentage of LBW cases in Jambi Province, however in 2021 LBW cases in Kerinci Regency have decreased slightly to 3.4% (Dinas Jambi District Health, 2021).

In Kerinci Regency there are 21 Community Health Centers where the number of LBW cases occurring in 2022 was recorded. 3 Community Health Centers had the highest cases, namely the Kersik Tuo Community Health Center with the highest cases, namely 22 LBW babies, the Kelompek Community Health Center with 15 LBW babies and the Gunung Labu Community Health Center with 8 LBW babies.

Of the 21 community health centers in Kerinci Regency, in 2022 the Kersik Tuo Community Health Center showed the highest number of LBW community health centers, namely 22 babies (Kerinci District Health Service, 2022).

Low Birth Weight (LBW) is a condition where a baby is born weighing less than 2500 grams. LBW contributes 60%-80% to neonatal deaths. LBW has quite a serious impact on the growth and development process of newborn babies. LBW people have a greater risk of experiencing cognitive development disorders such as mental retardation. Apart from that, in LBW babies caused by prematurity, the condition of the lungs which are not yet fully mature puts the LBW babies at risk of experiencing asphyxia. LBW babies also have a poorer immune system than normal weight babies, making them more susceptible to infections which can result in illness or even death.(Hartiningrum, 2016)

Low birth weight (LBW) babies are babies born with a body weight of less than 2500 grams regardless of the gestational period. The LBW condition and the baby's need for special care can cause psychological disturbances for the baby and the need for special care can cause psychological disturbances for the baby and its parents. This happens because psychologically the parents are not ready to face their baby's condition. The birth of LBW and virgin babies in the intensive care unit is an event that parents do not expect and can cause anxiety.(Aeni et al., 2019)

Hospitalization that occurs in babies will have an impact on the parents. Parents' work will be disrupted, one of them will have to wait for their child, so their role as parents will be disrupted. A very clear impact on parents is anxiety. Parents will feel anxious about their child's health development, treatment, hospital conditions and treatment costs. Long hospital stays will result in increased parental anxiety.(Alam Putra et al., 2021)

Caring for LBW babies in an intensive care unit will have a very significant impact on parents, such as fear, guilt, stress and anxiety about their baby's condition. Especially when the condition of a child in their care becomes critical, there will be a fear of losing the child. Anxiety is an experience and feeling of being unsure about oneself regarding threatening things which begins with ignorance about developments, changes and new experiences. Anxiety is a major cause of individual disability and psychiatric disorders which accounts for approximately 15% of global morbidity rates(Padila et al., 2018)

One way to overcome the anxiety of mothers who have LBW babies is by providing education. The aim of this education is for mothers to get information on how to care for LBW babies, to get emotional support from both family and health workers. If education is not carried out, parents' feelings of anxiety will make parents unable to care for their children well, such as stress and loss of focus in caring for children(Humaira & Rifdi, 2019).

In November 2022, an initial survey was carried out in the Kersik Tuo Community Health Center Working Area, Kerinci Regency, and it was found that of the 4 mothers who had babies, 2 of them were LBW babies and 2 of the babies were not LBW or normal babies. The results obtained from the initial survey interview with first mothers who had LBW babies said, "Parents of babies feel anxious when they find out that their first child is less than normal birth weight, namely LBW. For support, husbands and families always provide support to mothers of LBW babies during pregnancy. mother feels 5L. When I was pregnant, my mother said that my diet was sometimes 1 meal a day, and it was only rice with vegetable sauce, for blood supplement tablets, my mother didn't consume it at all. Also, during interviews with first-time mothers who had babies who were not LBW or normal babies, they also thought " "In fact, if they were in that position they would also feel excessive anxiety because it is fear for themselves, because they are worried about the condition and care of their child."

Based on the background description above, the researcher is interested in conducting research on the management of anxiety in mothers who have LBW babies in a study entitled "The Effect of Providing Education in Efforts to Overcome the Anxiety of Parents with Low Birth Weight (LBW) Babies." in Kerinci Regency in 2023".

#### **RESEARCH METHODS**

This research discusses "The Effect of Providing Education to Parents (Providing Education) in Efforts to Overcome the Anxiety of Parents with Low Birth Weight Babies in the Working Area of the Kerinci Regency Health Center in 2023". This type of research is Quasi Experimental with a one group pre-post test design approach. This research was carried out in October 2022 - August 2023 in Kerinci Regency covering the working areas of Kersik Tuo Health Center, Kelompek Health Center, Gunung Labu Health Center and M. H. Thalib RSU as facilities that reported the highest LBW rates in Kerinci Regency. The population in this study were all parents with LBW babies in Kerinci Regency, with an estimated number of 126 LBW cases or an average of 10 - 11 cases every month. Sampling used quota sampling technique with a sample size of 30 people. Data collection in this study uses an anxiety questionnaire (HARS/Hamilton Anxiety Rating Scale), data analysis includes univariate analysis and bivariate analysis which will be carried out computerized.

#### **RESULT AND DISCUSSIONS**

#### **General Description of Respondents**

Research on the effect of providing education to parents (providing education) in an effort to overcome the anxiety of parents with low birth weight (LBW) babies has been conducted on 30 respondents in Kerinci Regency with a description of the characteristics of the respondents as follows:

Table 1. Frequency Distribution of RespondentCharacteristics in Kerinci Regency Year 2023

	Characteristics	f	%		
Ag	je				
a.	High Risk (20 $>$	10	33.3		
	age >35)				
b.	Healthy	20	66.7		
	Reproduction (20				
	- 35)				
Pa	Parity				
a.	Primipara	8	26.7		
b.	Multiparous	22	73.3		
Ed	Education				
a.	Elementary	4	13.3		
	School/Equivalent	11	36.7		
b.	Middle	13	43.3		
	school/equivalent	2	6,7		
c.	High				
	school/equivalent				
d.	College				
We	Work				
a.	IRT/ not working	16	53.3		
b.	Farm workers	6	20		
c.	Self-employed	6	20		
d.	Civil servants	2	6,7		

Table 1 shows that of the 30 respondents, there are more than half, namely 20 (66.7%) respondents mothers are with healthy reproductive age, namely between 20 - 35 years, in terms of parity, there are more than half, namely 22 (73.3 %) respondents were mothers with LBW, including the category of multiparous mothers, while in terms of education level, some were found, namely 13 (43.3%) of the respondents were mothers with high school/equivalent education levels and in terms of employment, more than half were found, namely 16 (53 .3%) respondents are housewives.

# AnxietyMothers with LBW Babies Before Intervention

Table 2. Anxiety Frequency Distribution of
Mothers with LBW Babies Before Intervention
in Varinai Daganary Vaar 2002

Anxiety Before Intervention	f	%
Moderate Anxiety	28	93.3
Severe Anxiety	2	6,7
Amount	30	100

Table 2 shows that before the intervention it was found that the majority (93.3%) of respondents were mothers of LBW babies who experienced moderate anxiety.

#### AnxietyMothers with LBW Babies After Intervention

Table 3. Anxiety Frequency Distribution of Mothers with LBW Babies After Intervention in Kerinci Researcy Year 2023

Anxiety After Intervention	f	%
No anxiety	7	23.3
Mild Anxiety	21	70.0
Moderate Anxiety	2	6,7
Amount	30	100

Table 3 shows that after the intervention it was found that more than half (70%) of the respondents were mothers of LBW babies who experienced moderate anxiety.

#### The Effect of Providing Education in Efforts to Overcome Anxiety in Mothers with LBW Babies

Table 4. The Influence of Providing Education in Efforts to Overcome Anxiety in Mothers with LBW Rabies in Karinei Paganey in 2023

Anxiety Level	Mean	elementary school	Mean Rank	p- value
Pre Test	23.23	2,079		
Post Test	15.53	2,837	15	0,000

Table 4 shows that the average anxiety level score of respondents before the intervention was 23.23 (moderate anxiety) and the average anxiety level score after the intervention was 15.53 (mild anxiety). There is a difference in the average level of anxiety of respondents between before and after the intervention with an average difference of 7.7 and a mean rank of 15. Based on the results of statistical analysis using the Wilcoxon test, the value of p = 0.000. So it can be stated that providing education has a significant effect on reducing anxiety levels in mothers with LBW babies.

### DISCUSSION

# AnxietyMothers with LBW Babies Before Intervention

The results of the study showed that before the intervention it was found that the majority (93.3%) of respondents were mothers of LBW babies who experienced moderate anxiety and only a small portion (6.7%) had severe anxiety.

Hospitalization that occurs in babies with LBW will have an impact on the parents. Parents' work will be disrupted, one of them will have to wait for their child, so their role as parents will be disrupted. A very clear impact on parents is anxiety. Parents will feel anxious about their child's health development, treatment, hospital conditions and treatment costs. Long hospital stays will result in increased parental anxiety(Alam Putra et al., 2021).

In line with research conducted by Mutiara & Hastuti (2019) regarding factors related to the anxiety level of parents of LBW babies at HM Ryacudu Hospital and Handayani Hospital Kotabumi - North Lampung. The results of this study showed that 70% of respondents were mothers with moderate to severe levels of anxiety.

The researcher's assumption was that before the intervention providing education, the majority of respondents were mothers with LBW who experienced moderate levels of anxiety, namely with anxiety scores ranging between 21 - 27 on the HRS-A scale and before the intervention it was found that the majority (93.3%) of respondents were mothers with LBW who experiencing moderate levels of anxiety. The most common response to anxiety symptoms found in this study was that mothers felt tense, namely mothers felt tense, could not rest and cried easily. The next symptom is fear, namely the mother feels afraid and worried that something bad will happen to her baby and the mother is afraid of being left alone by family members, then somatic (muscle) symptoms, namely the mother feels pain and soreness in the muscles and this is thought to also be related to the condition. postpartum mother's physical condition. Meanwhile, the lowest anxiety symptoms were urogenital symptoms and autonomic symptoms.

The level of anxiety in parents of LBW babies is also influenced by maternal characteristics, including mother's experience and parity. Primiparous mothers or mothers who have given birth for the first time tend to show higher levels of anxiety when compared to the group of multipara mothers. This is related to the mother's experience in caring for the baby and changes in the role of being a parent. Family support, especially the husband and the support system from other family members will also influence the anxiety level of mothers with LBW babies.

# AnxietyMothers with LBW Babies After Intervention

The results of the study showed that after the intervention it was found that more than half (70%) of the respondents were mothers of LBW babies who experienced moderate anxiety, a small part (6.7%) had moderate anxiety and it was also found that a small proportion (23.3%) of respondents did not show anxiety symptoms.

One way to overcome the anxiety of mothers who have LBW babies is by providing education. The aim of this education is for mothers to get information on how to care for LBW babies, to get emotional support from both family and health workers. If education is not carried out, parents' feelings of anxiety will make parents unable to care for their children well, such as stress and loss of focus in caring for children(Humaira & Rifdi, 2019).

Health education or health education in the general sense of education is any planned effort to influence other people, whether individuals, groups or communities, so that they do what is expected by the perpetrators of health education or promotion. And this boundary implies the elements of input (goals and educators of education), process (planned efforts to influence others) and output (doing what is expected)(Notoadmojo, 2012).

In line with previous research conducted by Andarini, et al (2023) regardingThe influence of providing interpersonal communication on the anxiety of mothers of Low Birth Weight (LBW) babies in the NICU Room. The results of this study show that after the intervention the majority of respondents were mothers with moderate anxiety scale.

The researcher's assumption is that the level of parental anxiety after providing education is on average in the mild and very mild anxiety category or in the non-anxious category, namely anxiety that does not have a negative impact on the mother. After the intervention, it was found that the majority of respondents showed symptoms of mild levels of anxiety and only a small portion were still moderately anxious and it was also found that they did not show symptoms of anxiety

After providing education, it was seen that the symptoms of maternal tension were much lower than before the intervention. After the intervention, respondents also expressed a feeling of fear of being left alone. Meanwhile, somatic symptoms in the form of aches and pains in the body's muscles tend to still look the same as before the intervention and this is thought to be related to the physical condition of the mother who has just finished giving birth.

### The Effect of Providing Education in Efforts to Overcome Anxiety in Mothers with LBW Babies

The results showed that the average anxiety level score of respondents before the intervention was 49.03 (severe anxiety) and the average anxiety level score after the intervention was 26.33 (moderate anxiety). There is a difference in the average level of anxiety of respondents between before and after the intervention with an average difference of 22.7 and based on the results of the Wilcoxon test, the value of p = 0.000 (p<0.05) means that there is a difference in the anxiety level of mothers and LBW babies between before and after providing education where there was a significant reduction in anxiety levels after the intervention. So it can be stated that providing education has a significant effect on reducing anxiety levels in mothers with LBW babies.

*Providing education* is a form of parent empowerment program, especially in providing information related to LBW with educational techniques, namely discussion and counseling. Where the process discusses material about the basic concepts of LBW babies, problems with LBW babies as well as techniques for caring for LBW babies which include maintaining body temperature, preventing infection, breastfeeding, weighing and methods of caring for LBW babies at home so that providing education is expected to be able to increase knowledge and reduce anxiety level of mothers with LBW babies. Providing information and increasing knowledge about LBW babies and their care can have a positive effect in reducing the anxiety levels of mothers giving birth to LBW babies (Rustina, 2014).

In line with previous research conducted by Aeni, et al (2017) regarding Parental Empowerment in Efforts to Overcome the Anxiety of Parents with Low Birth Weight Babies. The results of this study stated that parental empowerment had a significant effect in overcoming the anxiety of parents with LBW babies, where there was a decrease in anxiety levels after parents with LBW babies (p = 0.016).

The researcher's assumption is that providing education has a significant effect on reducing anxiety levels in parents of LBW babies. This can be seen from the research results where there was a significant reduction in anxiety levels after providing education. Before providing education, it was known that the average level of parental anxiety was in the severe anxiety range, namely with the highest symptoms in the form of tension, fear and somatic muscle symptoms and after the intervention the average level of parental anxiety was on the scale of mild anxiety and partly moderate anxiety.

The relationship between providing education and reducing the anxiety level of parents with LBW babies is related to increasing parents' knowledge and understanding of the concept of LBW and its care at home. By providing education (providing education) parents will have a good understanding of the concept of LBW as well as care techniques for babies who experience LBW, this will certainly reduce the mother's anxiety level in carrying out her role as a mother in caring for babies with LBW. Apart from that, the process of providing education also applies counseling techniques, namely exploring the source of anxiety problems (stressors) experienced by parents and then providing solutions and solutions to these stressors using counseling techniques and this condition can certainly help reduce the level of anxiety in parents.

## CONCLUSION

Based on the results of research and discussion regarding the influence of providing education to parents (providing education) in an effort to overcome the anxiety of parents with low birth weight (LBW) babies in Kerinci Regency in 2023, it can be concluded that:

- 1. The majority (93.3%) of respondents were mothers with LBW babies who experienced moderate anxiety before the intervention providing education
- 2. More than half (70%) of the respondents were mothers with LBW babies who experienced mild anxiety after the intervention of providing education
- 3. Providing education has a significant effect on the level of anxiety in parents of LBW babies where there is a decrease in the average level of anxiety with an average difference of 7.7 and a p value = 0.000.

## REFERENCES

- [1]. Aeni, Q., Indrayati, N., & Haryanti, D. (2019). Parental Empowerment in Efforts to Overcome the Anxiety of Parents with Low Birth Weight Babies. Concepts and Communication, 23, 301–316. http://stikeswh.ac.id:8082/journal/index.ph p/psnwh/article/view/241/223
- [2]. Alam Putra, F., Indriyati, & Widayanti, I. (2021). Factors Causing Parental Anxiety Regarding Hospitalization of Babies in High Risk Nurseries. Indonesian Nursing Journal (JIKI), 14(2), 34–43.
- [3]. Kerinci District Health Department. 2022. Kerinci Regency Health Profile for 2022. Kerinci: Health Service.
- [4]. Jambi Provincial Health Service. (2019). Jambi Health Profile. Dk, 53(9), 1689– 1699.
- [5]. Jambi Provincial Health Service. (2021). Jambi Province Health Profile 2021. Jambi: Health Service.
- [6]. Hartiningrum, I. (2016). Low Birth Weight (LBW) Babies in East Java Province in 2012-. Journal of Biometrics and

Population.

[7]. Hastuti, Y. D., & Mulyani, E. D. (2019). Anxiety of Patients with Coronary Heart Disease After Percutaneous Coronary Intervention. Indonesian Nursing Journal, 3(3), 167. https://doi.org/10.32584/ipi.y3i3.427

https://doi.org/10.32584/jpi.v3i3.427

- [8]. Humaira, B., & Rifdi, F. (2019). Bblr at Dr Ahmad Muchtar Bukittinggi Hospital in 2018. 1(2), 76–84.
- [9]. Indonesian Ministry of Health. 2022. Indonesian Health Profile in 2022. Jakarta: Indonesian Ministry of Health.
- [10]. Notoatmojo. (2012). Health Research Methods. Rineka Cipta.
- [11]. Padila, P., Amin, M., & Rizki, R. (2018). Mother's Experience in Caring for Preterm

Babies Who Have Been Cared for in the Neonatal Intensive Care Unit in Bengkulu City. Silampari Nursing Journal, 1(2), 1– 16. https://doi.org/10.31539/jks.v1i2.82

- [12]. Rahmadani D, Noflidaputri R, Delvina V. Analysis of factors causing LBW incidents in the Solok City Health Service Working Area. Cerdika: Indonesian Scientific Journal. 2022 Jun 25;2(6):656-67.
- [13]. WHO (2020) recommendations on interventions to improve preterm birth outcomes. (n.d.).
  www.who.int/reproductivehealth