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Characteristics Overview Mother with Incidence of Low Birth Weight Babies at dr. Hospital H. L. M Baharudin, M. Kes in 2023

Indra Farah Ni'sa[1], Wa Ode Ikrawati [2] , Wa Ode Siti Fidia Husuni [3*]
[1-3] Paramata Raha Polytechnic, Indonesia

Address: Jl. Kartika, Ex. Laiworu, Batalaiworu District, Indonesia
Corresponding author: fidyah.husuni@gmail.com *

Abstract*. Introduction: Low birth weight babies are babies whose birth weight is <2500 grams, which is caused by maternal, nutritional, age, parity and economic factors. Objective:To determine the characteristics of mothers with LBW incidents at RSUD dr. HLM Baharuddin, M.Kes 2023. Method: This research was quantitative descriptive, conducted at RSUD dr.Baharuddin, M.Kes on mothers who gave birth to low birth weight babies for the period January - June 2023 with a sample of 30 mothers determined by total sampling. Results: LBW occurred in mothers aged 20-35 years, namely 23 people (76.67%), mothers with multiparous parity, namely 18 mothers (60%), mothers with a birth interval of ≥2 years, namely 25 mothers (56.67%) , 18 mothers (60%) suffered from the disease, and the highest incidence of LBW was in mothers with ≥high school education as many as 19 mothers (63.33%).Conclusion: Mothers with LBW incidence at the age of 20-35 years were 23 mothers (76.67%), Age <20/>35 years 7 mothers (23.33%), Primiparous parity 8 mothers (26.67), Multiparous 18 mothers (60%), Grandemultiparous 4 mothers (13.33%), Birth interval <2 years 5(16.67%), ≥2 years 25(56.67%), 18 mothers with disease (60%) 12 mothers (40%) did not suffer, had ≤junior high school education 11(36.67%) and ≥high school education 19(63.33%)*

Keywords *: Age, Parity, Birth interval, Disease, LBW education*

1. BACKGROUND

In 2017, *the World Health Rankings* reported that out of 172 countries, Indonesia was in 72nd position which had an infant mortality rate caused by LBW of around 9.92% (World Health Rankings, 2017). The Ministry of Health's Strategic Plan for 2015-2019 shows that in five years Indonesia experienced The infant mortality rate due to LBW occurred in the perinatal group, namely 11.2%. This figure has not yet reached the target planned by the Indonesian Ministry of Health as an effort to resolve the problem of infant and toddler mortality caused by LBW, namely 8% (Ministry of Health-RI Strategic Plan, 2015). Temporary in HOSPITAL Dr. HLM Baharuddin, M.kes Pada Year year 2020 The incidence of LBW is 75 out of 739 total or approx 10%. In 2021, the incidence of LBW has decreased, amounting to 66 out of 794 births or around 8%. Then in 2022 there will be an increase in LBW babies, namely 151 out of 987 births or around 15%. (Medical Records, 2023). Therefore, based on this description, it is the reason for researchers to conduct research regarding the characteristics of mothers with low birth weight babies.

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2. THEORETICAL STUDY

The World Health Organization or WHO explains that LBW is a baby whose birth weight is <2500 grams. Until now, LBW has become a health problem that occurs in society worldwide, which is linked to several short-term or long-term problems or effects. According to WH, LBW can cause an infant mortality rate (IMR) of around 60-80%. LBW has a greater risk experience more death and morbidity than babies born with a normal birth weight, namely between 2500 and 4000 grams (WHO, 2014). Several factors can cause LBW namely chronic diseases in mothers such as hypertension, kidney disease, excessive sugar levels or what is called diabetes, then excessive maternal weight and pregnant women with a height < 145 cm, bleeding during pregnancy, high risk at age mothers (< 20 years or > 35 years), have a gestational age that is noisy like premature age (Ghahfarokhi, et al. 2018).

The risk for babies with LBW is that the baby will die at the beginning of birth. If the baby is born safely then the baby is at greater risk of problems with growth and development (Rahayu et al, 2020). Besides Therefore, babies with LBW are at risk of experiencing asphyxia, disorders of the respiratory system, hypothermia, infection, and pathological jaundice (Khoiriyah, 2018) **.** Research conducted by Mahdalena, et al. (2017), said that the experience of giving birth or the number of children could be the cause of LBW at Wonosaro Regional Hospital, Gunung Kidul. The results of the research showed that most of the mothers who gave birth to LBW were Primipara mothers or those experiencing childbirth for the first time.

3. RESEARCH METHODS

This study uses a descriptive analytical method to observe maternal characteristics related to the incidence of Low Birth Weight (LBW) at RSUD dr. H. L. M. Baharuddin, M.Kes. The approach applied is retrospective, where researchers evaluate maternal characteristics based on secondary data from the previous period. The study population consisted of all mothers who gave birth to babies with LBW in the perinatology room of RSUD dr. H. L. M. Baharuddin during the period January-June 2023, totaling 30 babies. The study sample included all mothers who gave birth to LBW babies at the hospital, with a sampling technique using total sampling, namely making the entire population a sample. The independent variables in this study include maternal age, parity, birth spacing, maternal illness, and maternal education, while the dependent variable is the incidence of LBW in babies born. Data were collected using secondary data taken from medical records regarding maternal age, parity, and the incidence of LBW at RSUD dr. H. L. M. Baharuddin during the specified period.

4. RESULTS AND DISCUSSION

Results

This study was conducted at L.M.H Baharuddin Regional Hospital in August 2023.

Univariate Analysis

a) Distribution of Respondents Based on mother's age

Table 1 Distribution of Respondents Based on Mother's Age

age	amount	presentation (%)
< 20 / > 35	7	23.33
20- 35	23	76.67
Total	30	100

Source: Data from the medical record room of dr. H.L.M, Baharudin M. Kes

Regional Hospital in 2023. Based on Table 1, the age of mothers aged <20 or >35 was 7 people or 23.33% and mothers aged 20-35 were 23 people or 76.67%.

b) Mother's Characteristics Based on Parity

Table 2 Characteristics Mother Based on Parity

Parity	**amount**	**presentation (%)**
Primipara	8	26.67
Muiltipara	18	60
Grandeimuiltipara Total	4	13.33
	30	100

Source: Data from the medical records room at RSUD dr. HLM, Baharuidin M. Kes 2023

Based on table 2, the data obtained in the Primipara category was 8 people or 26.67%, Multipara was 18 people or 60% and the lowest number was grandemultipara, 4 people or 13.33%.

c) Maternal Characteristics Based on Birth Distance

Table 3 Characteristics Mother Based on Distance Birth

birth spacing	**amount**	**presentation (%)**
< 2 Year	5	16.67
≥ 2 Year Total	25	56.67
	30	100

Source: Data from the medical records room at RSUD dr. HLM, Baharudin M. Kes 2023

Based on table 3, it can be concluded that there were 5 mothers with a birth interval of <2 years or 16.67% and mothers with a birth interval of ≥ 2 years were 25 or 56.67%.

Discussion

The research results obtained showed that 7 people (23.33%) of mothers aged less than 20 years or more than 35 years gave birth to LBW babies, while 23 mothers aged 20-35 years (76.6%). These results show that more mothers aged 20-35 years experience LBW than mothers aged less than 20 years or more than 35 years. The results of this study are not in accordance with the previous theory which states that mothers who are more than 35 years old or less than 20 years old have a higher risk of experiencing LBW because this age is a high risk during pregnancy because it can cause several complications during pregnancy and childbirth

due to not yet ready or decreased ability of the reproductive organs. Complications that can occur include LBW or several diseases such as gestational hypertension, pre-eclampsia, antepartum bleeding, obstructed labor and so on. However, this research needs to be developed further to determine the relationship and influence of maternal age on LBW births. In line with research conducted by Willy Lestiana Windarti (2015) which said that of 226 mothers who had babies with LBW, there were 166 people (73%) in the group of mothers who were not at high risk (aged 20-35 years). This number is greater than the high risk group of mothers (<20 or >35 years). The difference between this research and previous theory could be due to the small sample size or the larger number of mothers aged 20-35 years.

Meanwhile, the description of the parity of mothers and babies experiencing LBW at LM Regional Hospital. Baharuddin is a mother who gave birth to a LBW baby, in the primipara group there were 8 people (26.67%), multipara there were 18 people (60%) and grandemultipara there were 4 people (13.33%. These results show that mothers in the multipara group gave birth more often babies with LBW namely the number of births with fetuses that can survive outside the womb for 28 weeks. According to the 2011 BKKBN, parity is the number of children ever born. According to previous theories, mothers with primiparous or grandemultiparous parity have a higher risk of giving birth to LBW babies than mothers with parity of 2 to 4 children. This could be because primiparous mothers are giving birth for the first time, physically and mentally they are not yet able to adapt or have no previous experience (Erlina, 2015). The results obtained are not in line with research conducted by Gunawan et al. (2012), where the results were 141 mothers in the primiparous parity group out of 178 mothers who had LBW newborns. Different results can be caused by differences in sample size and research location, therefore it is necessary to develop further research.

The description of the characteristics of mothers who gave birth to LBW babies based on birth interval in this study was that there were 5 mothers (16.67%) with birth intervals of less than 2 years, while there were 25 mothers with birth intervals of more than or equal to 2 years (83.33%). %). So it can be concluded that the results found are not in line with the previous theory which stated that birth intervals of less than 2 years are at risk of having LBW babies because the results of this study show that more mothers have LBW babies with birth intervals of more than or equal to 2 years. Inconsistent differences can also be caused by differences in the number of samples and the place where the research was conducted.

5. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Characteristics of mothers with the incidence of low birth weight babies at the age of 20-35 years were 23 people (76.67%), Age <20/>35 years 7 people 23.33%, Parity primipara 8 people (26.67), Multipara 18 people (60%), Grandemultipara 4 people(13.33%), Birth interval <2 years 5(16.67%), ≥2 years 25(56.67%), 18(60%) mothers suffering from disease Not suffering 12(40%), education ≤junior high school 11(36.67%) and education ≥high school 19(63.33%)

Suggestion

For health workers at RSUD dr. HLM Baharuddin, M.Kes is expected to be able to provide information and improve health promotion efforts by conducting outreach and activities promotion health other.

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