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LOW BIRTH WEIGHT INCIDENCE IN BALUNG HOSPITAL JEMBER REGENCY

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ABSTRACT

Introduction: Low birth weight (LBW) is a condition in which the birth weight of a baby is less than 2500 gram during an hour after birth. In 2015, WHO recorded the incidence of LBW in Indonesia was on the ninth level with a percentage of 15.5%. East Java Central Bureau of Statistics also recorded the incidence of LBW in 2017 was 6.01%. Moreover, the incidence of LBW in Jember Regency was 6.11%. There is a relationship between the incidence of LBW with perinatal and neonatal mortality. Internal factors which might cause LBW are the age of the pregnant mother and parity. **Objective**: Identify the incidence of LBW and analyze the risk factors of LBW. **Methods:** This study used a descriptive-analytical method with a retrospective approach. The study population were 421 LBW babies treated at Balung Hospital from January until December 2019. **Results:** This study shows that the mother of 291 study participants was at reproductive age (69.1%) and the parity of 370 mothers of the study participants was a low-risk pregnancy. **Conclusion:** We concluded that there was no relationship between age and parity of mother with LBW incidence.

ABSTRAK

Latar belakang: *Berat bayi lahir rendah (BBLR) ialah bayi dengan berat lahir kurang dari 2500 gram yang ditimbang dalam 1 jam setelah lahir. Data WHO 2015 mencatat di Indonesia, kejadian BBLR berada di tingkat sembilan dengan presentase 15,5%. Berdasarkan Badan Pusat Statistik (BPS) di Jawa Timur kejadian BBLR pada tahun 2017 sejumlah 6,01%. Di Kabupaten Jember angka bayi yang mengalami BBLR terdapat 6,11%. Kejadian BBLR berkaitan dengan kematian perinatal dan neonatal. Faktor internal penyebab BBLR adalah usia ibu hamil dan paritas.* ***Tujuan****: Mengidentifikasi kejadian BBLR dan menganalisis faktor risiko BBLR.* ***Metode****: Penelitian ini menggunakan metode deskriptif analitik dengan pendekatan retrospektif. Populasi penelitian menggunakan data seluruh bayi yang dirawat di RSD Balung sejak Januari-Desember tahun 2019 didapatkan sampel 421 bayi dengan BBLR.* ***Hasil****: Pada penelitian didapat umur ibu terbanyak usia reproduksi 291 responden (69,1%). Paritas ibu terbanyak kehamilan dengan resiko rendah 370 responden (87,8%).* ***Kesimpulan****: Dapat disimpulkan bahwa tidak ada hubungan antara umur ibu dan paritas ibu dengan kejadian BBLR.*

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Kata Kunci *: usia, paritas, BBLR*

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Introduction:

The infant mortality rate in Indonesia is the highest when compared to other ASEAN countries. LBW was the highest contributor to the high number of infant mortalities (Setyo et al., 2014). Based on data WHO and UNICEF, in 2013 approx 22 million babies are born in the world, of which 16% of which 2 were born with a Birth Weight Baby Low. As for the percentage of LBW in the country thrive was 16.5% twice as large than developed countries (7%). Indonesia is one of the developing countries that occupy third as a country by prevalence Highest LBW (11.1%), after India (27.6%) and South Africa (13.2%). Other than that, Indonesia also became the second country with the highest prevalence of LBW among countries Other ASEAN, after the Philippines (21.2%) (Putri, 2019). Based on (Riskesdas, 2018) the incidence of LBW was in the range of 6.2%. Based on the (Hartiningrum & Fitriyah, 2019) incidence of low birth weight during 2012-2016 in Jember 3.8%. The purpose of this research is to identify the incidence of LBW and analyze the risk factors of LBW.

LBW occurs due to several factors, including age, maternal pregnancy distance and parity (Prawiroharjo, 2009). These factors also contribute to higher maternal morbidity and mortality and perinatal mortality. The health condition of a mother is very important because it will influence the condition of her foetus.

Methods:

This study used a descriptive-analytic method with a retrospective approach. A retrospective approach is used to investigate the problem using secondary data from hospital medical records, especially regarding maternal age, maternal parity, and the incidence of low birth weight in Balung Hospital, Jember Regency. The data about study population using the data of all babies treated at the Balung Hospital in January-December 2019. The study participant consists of 421 babies with LBW.

Results:

This research was conducted at Balung Hospital, Jember Regency in 2019

Table 1 Distribution of LBW Incidence

No	Age (years)	Total	Frequency (%)
1	Normal birth weight	2749	86,7
2	LBW	421	13,3
Total		3170	100

Table 1 shows that there were 3,170 births in January - December 2019 at Balung Hospital, Jember Regency. There were 86.7% of babies born with normal birth weight, and only 13.3% of babies born with LBW.

Table 2 Distribution of Maternal Age

No	Age (years)	Total	Frequency (%)
1	At-risk	130	30,9
2	Not at risk/reproductive age	291	69,1
Total		421	100

Table 2 shows 30.9% of LBW babies born from mothers who were at risk (<20 years and > 35 years) and 69.1% of LBW babies born from mothers who were on reproductive age (20-35 years).

Table 5.3 Distribution of Mother Parity

No	Parity	Total	Frequency (%)
1	1-3	370	87,8
2	> 3	51	12,2
Total		421	100

Table 5.3 shows that 87.8% of LBW babies born from mothers with low-risk pregnancies (first up to third pregnancy) and only 12.2% of LBW babies born from mothers with high-risk pregnancies (pregnant> 3).

Discussion:

This study shows that the incidence of LBW at Balung Hospital in 2019 was on 421 babies (13.3%). There were 130 study participants (30.9%) whose mothers were at risk and 51 study participants (12.2%) whose mother had maternal parity of more than 3.

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A study by (Mulyadi, 2015) revealed that several factors influenced the incidence of LBW. Some of them were from the mother, including maternal age, gestational age, parity, body weight and height, nutritional status (nutrition intake), alcohol consumption and smoking, diseases. Moreover, certain conditions during pregnancy also contributed to LBW incidence, i.e., anaemia, bleeding, pregnancy interval, multiple pregnancies, history of abortion. Other important factors from the foetus were multiple pregnancies and congenital abnormalities. Environmental factors might also contribute to LBW, namely mother's education and knowledge, occupation, socio-economic and tradition, and public health service. (Dewie & Shinta, 2012) and (Fajriana & Buanasita, 2018) also found that some factors presented in LBW incidence were maternal age <20 years or >35 years (age at risk in pregnancy). Furthermore, (Kesehatan & Masyarakat, 2017) and (Mahayana et al., 2015) found that parity 1 and 3 were categorized as safe parity for pregnancy and childbirth. Also, mothers with parity > 3 were not safe, and they were likely to give birth to LBW babies.

Secondary data in this study shows that only maternal age and parity of the mother influenced the incidence of LBW. The result of this study presented that only 30.9% of LBW babies had mothers who were at risk of pregnancy (<20 years old or >35 years old) and 12.2% of LBW babies had mothers with parity >3. These might be due to many factors involved in the incidence of LBW: some factors from the mother (maternal nutritional status, pregnancy distance, pregnancy complications) and some factors from the foetus (chromosomal abnormalities, foetal infection, foetal distress, amusement and environmental factors).

Conclusion:

We found a small proportion of incidence of LBW in Balung Hospital, Jember Regency. Almost half of the LBW babies were born from high-risk mothers (less than 20 years old and more than 35 years old). Moreover, a small proportion of LBW babies were born from mothers with parity of more than 3.

References:

Dewie, S., & Shinta, S. (2012). Analisis faktor-faktor yang mempengaruhi kejadian bblr di puskesmas perkotaan kabupaten banjarnegara. *Politeknik Banjarnegara*, 1–6.

Fajriana, A., & Buanasita, A. (2018). Faktor Risiko Yang Berhubungan Dengan Kejadian Bayi Berat Lahir Rendah Di Kecamatan Semampir Surabaya. *Media Gizi Indonesia*, *13*(1), 71. https://doi.org/10.20473/mgi.v13i1.71-80

Hartiningrum, I., & Fitriyah, N. (2019). Bayi Berat Lahir Rendah (BBLR) di Provinsi Jawa Timur Tahun 2012-2016. *Jurnal Biometrika Dan Kependudukan*, *7*(2), 97. https://doi.org/10.20473/jbk.v7i2.2018.97-104

Kesehatan, P., & Masyarakat, F. K. (2017). Faktor-Faktor Yang Berhubungan Dengan Kejadian Berat Badan Lahir Rendah Di Wilayah Kerja Puskesmas Bangetayu Kota Semarang Tahun 2016. *Jurnal Kesehatan Masyarakat (e-Journal)*, *5*(4), 812–822.

Mahayana, S. A. S., Chundrayetti, E., & Yulistini, Y. (2015). Faktor Risiko yang Berpengaruh terhadap Kejadian Berat Badan Lahir Rendah di RSUP Dr. M. Djamil Padang. *Jurnal Kesehatan Andalas*, *4*(3), 664–673. https://doi.org/10.25077/jka.v4i3.345

mulyadi. (2015). Jurnal Kesehatan Masyarakat Andalas. *Obesitas Sentral Dan Kadar Kolesterol Darah Total*, *11*(1), 87–95.

Putri, W. (2019). Faktor Ibu terhadap Kejadian Bayi Berat Lahir Rendah. *Higea Journal of Public Health Research and Development*, *3*(1), 55–62.

Riskesdas, K. (2018). Hasil Utama Riset Kesehata Dasar (RISKESDAS). *Journal of Physics A: Mathematical and Theoretical*, *44*(8), 1–200. https://doi.org/10.1088/1751-8113/44/8/085201

Setyo, D., Dan, R., Puspitasari, N., Biostatistika, D., Fakultas, K., Masyarakat, K., Airlangga, U., Mulyorejo Kampus, J., Surabaya, U., Korespondensi, A., Dwi, :, & Rini, S. (2014). *Hubungan Status Kesehatan Neonatal Dengan Kematian Bayi*. *60115*.