

A DESCRIPTIVE STUDY ON PREGNANCY AND CHILDBIRTH OF ONE STUDENT ONE CLIENT (OSOC) PATIENTS OF MIDWIFERY STUDENTS OF POLYTECHNIC BANJARNEGARA

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Abstract

Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) are indicators of a country's welfare. In 2018 there were 421 maternal mortality cases in central java. This number was a decrease compared to the mortality case in 2017, as many as 475 cases. This study aimed to identify health conditions during pregnancy and the childbirth period of the patients of One Student One Client (OSOC) in Polytechnic Banjarnegara. A descriptive study conducted at Basic Emergency Neonatal Obstetric Services (PONED) in Banjarnegara District in March - April 2019 to 26 pregnant women. The results showed that most of the respondents classified the low-risk age group as 21 respondents (81%). There are 15 respondents (58%) classified to low-risk pregnancy distance category, 24 respondents (92%) are classified to normal gestational age category, and average birth weight category. It is recommended to ensure maternal health during pregnancy and childbirth is always well monitored. Ensuring mothers can access quality services in health services. It is necessary to have continuous assistance from students in OSOC activities as an extended arm of health workers.

Keywords: *Pregnancy, Childbirth, Health Client.*

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1. Introduction

Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) are indicators of a country's welfare. In 2018 there were 421 maternal mortality cases in central java. This number was a decrease compared to the mortality case in 2017, as many as 475 cases.^[1] The Maternal Mortality Rate (MMR) in Banjarnegara Regency in 2018 was 58.8 per

100,000 live births, which counted from the number of maternal deaths in nine cases with 15,317 live births. This number is lower compared to 2017, which was 137.7 per 100,000 live births, with 21 maternal mortality cases from 15,255 live births. Maternal mortality in 2018 occur during pregnancy was 3 cases (3.33%), during childbirth was 3 cases

(3.33%), and during postnatal was 3 cases (3.33%).^[2]

Maternal Mortality occurs because most pregnant women had difficulty accessing quality health services, especially when there was an emergency due to "three delays" in identifying danger signs, making decisions, and reaching an appropriate health facility. The factors surrounding the death also come from the mother itself, known as 4 "too" criteria, there are "too old" (> 35 years) or "too young" (<20 years) at the time of delivery, "too many" children (> 4 children), "too close" for birth spacing/parity (<2 years).^[3]

"Three delays" and "Four Too" cause maternal mortality in Central Java until now. Various attempts have been made like improving midwife skills, optimizing early detection of the high risk on pregnant women/infants and their interventions, optimizing the implementation of P4K, optimizing the functions of Basic Emergency Neonatal Obstetric Services (PONED) at Primary Health Center and Hospital, also strengthening the perinatal maternal referral system. However, the efforts had not been able to reduce the maternal mortality rate. So assistance was needed during maternal and maternity care using One Student One Client (OSOC) approach by assisting every pregnant woman by a midwife student, midwife, and even medical comprehensively (Continuity of Care / COC model). Students ensure patients to get standard services starting from promotive and preventive services as a whole (holistic care) and educating an ongoing relationship (ongoing partnership) by building understanding, support, and trust.^[4]

Central Java Province launched the OSOC program to reduce MMR. This

program carried out in 10 districts in Central Java Province, which is part of the red zone area because of the high mortality rate.^[5]

Apriliani (2017) in the previous study stated that after OSOC assistance there was a significant increase, especially in the indicators of assistance or monitoring using the MCH handbook, more than 95% pregnant women took iron tablets routinely since early pregnancy, 85%-100% pregnant women and families signed the delivery mandate. [6] Another study conducted by Lia (2019) showed that pregnant women accompanied by students in OSOC activities, 75% were had a healthy pregnancy at third-trimester, 25% were pregnant with a risk like anemia and breech.^[7]

A previous study conducted by Lia (2019) showed that most mothers accompanied by students were in a normal category as many as 40 respondents (83.33%) and eight respondents (16.6%) had referral services. Most patients had to refer to the cause of maternal conditions such as prolonged second stage, placenta retention, and premature rupture of membranes.^[7] Ani (2018) stated that most maternal labors were normal, whereas section cesarean conducted to mothers with premature rupture of membranes, breech, severe preeclampsia, severe heart disease, and diabetes mellitus.^[8]

Based on these data, the authors are interested in researching the health condition of One Student One Client (OSOC) patients in their pregnancy and childbirth. The student was asked to assist a woman continuously from pregnancy to delivery and to detect early on risk factors and complications during pregnancy and childbirth.

2. Method

A descriptive study used conducted to describe a situation of the health condition of OSOC patients from their pregnancy to childbirth. This research was conducted from March to April 2019 at Basic Emergency Neonatal Obstetric Services (PONED) to 26 pregnant women. Sampling-based on Total Sampling. The data source used primary data obtained from the history and examination results and secondary data obtained from the Mother and Child Health book data. Collected data analyzed using Univariate.^{[9],[10]}

3. Results and Discussion

Table 1. Distribution of Characteristics in Respondents by Age

Age	f	%
High-risk	5	19
Low-risk	21	81
Total	26	100

The table above showed that most respondents are in the low-risk group (age 20-35 years), as many as 21 respondents (81%). Moreover, there are five respondents (19%) at the high-risk group, namely age <20 years and > 35 years.

Biologically, a woman has mature organ reproductive and ready to get pregnant and childbirth is at the age of 20-30 years, and by getting older, they will become riskier to have complications. Women who are pregnant before 20 years old the reproductive organ have not developed ideally. While women more than 35 years old, their pelvic and the muscles surrounding the organ reproductive become more elastic, this condition can cause complications during pregnancy or childbirth, and also it can cause death

to the mother and the baby. That is why, at the age of 20-35, it is the ideal age to have pregnant and had a lower chance of complications during pregnancy and childbirth.^{[11],[12],[13]}

Muliatul's previous study (2019) showed that most respondents are at the age of 20-35 years. This finding showed the tangible manifestation of Indonesia's population pyramid, mostly young people with a high birth rate.^[14]

Table 2. Distribution of Characteristics in Respondents by Birth Spacing

Birth Spacing	f	%
First born	11	42
High-risk	0	0
Low-risk	15	58
Total	26	100

Table 2 showed that based on birth spacing, 58% of respondents (15 people) are in the Low-Risk group (> 2 years), and 42% (11 people) are having their first pregnancy. Subiyanto (2012) stated that 20-35 years is the ideal age to have a safe pregnancy and childbirth, but not all women can get pregnant every year. To have a safe pregnancy and childbirth, women need to spacing their pregnancy between 2-4 years. Some studies state that the morbidity rate of mothers and children with birth spacing less than two years is higher than with birth spacing for more than two years.^[15] A birth interval of fewer than two years lead to abortion, low birth weight, malnutrition, and also influence breastfeeding duration for the previous children.^[16] Shandra (2013) also stated that pregnancy with a high risk of birth distance has more at risk of abortus.^[17]

Table 3. Distribution of Characteristics in Respondents by Maternal Age at Birth

Maternal Age at Birth	frequency	
	n	%
Premature	2	8
Mature	24	92
Total	26	100

Table 3 shows that most respondents were giving birth at full-term gestational age, i.e., more than 37 weeks. It is the ideal gestational age for childbirth. This finding is consistent with Sari (2014), she stated that normal childbirth defines as the process of expulsion from the conception from the uterus through the vagina to the outside world that occurs in full-term pregnancies (37-42 weeks) with marked uterine contractions that cause thinning, dilate the cervix and push the fetus out through the birth canal with a head presentation without tools or help (spontaneous birth). Normal childbirth also defines as without complications for the mother and fetus.^[18]

The finding showed that there were two respondents (8%) in the premature group (<37 weeks)," and both of them are having their first pregnancy. Giving birth prematurely (<37 weeks) affects suboptimal growth and development of the fetus. Premature babies' fat accumulation system in subcutaneous is not fully formed so that they could have low birth weight (< 2,500 grams). The respiratory function also not function optimally and can cause death.^[19] Hidayatush (2015) stated in her previous study that most low birth weight occurs in <37 weeks' gestation.^[20]

Table 4. Distribution of Characteristics in Respondents by Birth Weight

Birth Weight	f	%
LBW	2	8
Average	24	92
Total	26	100

Table 4 shows that most respondents were giving birth with average baby weight, which is 2500-4000 grams. Yeyeh (2010) explained in her previous study that babies categorized as born normal are the babies who born with head presentation and without tools to assists, born at 37-42 weeks and a weight of 2500-4000 grams and without congenital defects.^[21] Ani (2018) stated that most newborns, born in average weight (75%).^[8]

There were two respondents (8%) who gave birth to newborns with LBW, and the mothers are high-risk by age. This finding is consistent with Manuaba (2012) stated that LBW cases are related to maternal age; it influences the readiness of the reproductive organs to become pregnant. The optimal age for a woman to get pregnant is 20-35 years^[19]

4. Conclusion

Based on the finding of this study can be concluded that most respondents are at low-risk by age (81%), Pregnancy spacing (58%), full-term gestational age (92%) and have average birth weight (92%). The author recommended continuing the OSOC program to help monitor maternal health during pregnancy and childbirth and ensure mothers can access quality services in health services

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