Risk Factors for Risky Pregnancy in Patas Village, the Working Area of Gerokgak I Health Center

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Abstract — Every pregnant woman needs to be monitored during her pregnancy. One observation that can be done is through screening and early detection during pregnancy. High and very high risk pregnancies increase maternal complications and death. This study revealed the risk factors for risky pregnancy in Patas Village in 2019. This study used a survey method with observation, survey and interview techniques. The sample of this study were pregnant women in Patas Village. The results obtained revealed 30 people experiencing high risk pregnancies and 5 people with very high risk pregnancy categories. This conclusion implies that pregnant women should undergo screening and receive counseling to minimize risks.

Keywords—Risk Factors; Risky Pregnancy, screening, detection.

I. INTRODUCTION

Pregnancy is a natural process and is always expected by every married couple because it is expected to produce offspring as a healthy future generation and extend the life of a family. During pregnancy until delivery can take place normally or with problems or complications that accompany such as Hyperemesis Gravidarum, Abortion, Hypertension in Pregnancy (HDK), Solusio Placenta, Placenta Previa and Anemia. [1] High and very high risk pregnancies can cause or increase complications during labor and the puerperium. Mothers with high risk factors experienced 2.72 times experiencing complications in childbirth compared to mothers with low risk factors. Mothers with very high risk pregnancies are 4.4 times more likely to experience complications during labor than women with low risk. The most common cause of death in mothers was found in the very high risk group of 55.2% followed by the high risk group 39.7% and the low risk group 5.2%. [2,3]

Buleleng Regency is the largest regency in Bali which has a target of more pregnant women than other districts and has the highest Maternal Mortality Rate (MMR) in the Province of Bali. Pu Based on a preliminary study conducted in December 2018, the working area of the Gerokgak I Public Health Center has the highest coverage of pregnant women each year with diverse population characteristics. The number of pregnant women in Patas Village, the working area of Gerokgak I Health Center with 97 pregnant women in 2018 with 32 high-risk pregnancies. Early detection of risk factors used by midwives as an effort in preventing complications during pregnancy, childbirth and the puerperium so that it is expected to be able to prevent and reduce maternal mortality. [4]

Based on this background, this research is considered necessary in Buleleng especially in the Gerokgak I Health Center in the Patas Village area because Patas Village is the highest contributor to risky pregnancies in Buleleng Regency. Various efforts have been made to reduce the incidence of high-risk and very high pregnancies in efforts to prevent maternal deaths, but in reality there are still many cases of high-risk and very high-risk pregnancies, so research is still needed to find out high-risk and very high-risk pregnancies and efforts that can be made to prevent and overcome it.

II. RESEARCH METHOD

This research is quantitative descriptive. The sampling technique is to use a total sampling technique which means that the entire population of pregnant women in Patas Village, the working area of Gerokgak I Health Center, totaling 76 people, is the sample of this study. Data collection techniques used were the method of observation, documentation study, and interviews. In the method of observation, researchers make observations and checks directly. The documentation study method was carried out based on written documents such as: Children's Maternal Health Book or Pregnancy check sheet at the Puskesmas. The interview method is used for interviewing pregnant women to get subjective data in accordance with those listed on the pudji rochjati score. After all data have been collected, the data will be analyzed using the pochji rochjati score. All data obtained will be given a score then each score will be added up then the final score will be obtained.
III. RESULT AND DISCUSSION

TABLE I. CHARACTERISTICS OF RESPONDENTS

| Characteristics of respondents | Category | Amount |
|-------------------------------|----------|--------|
| Age                           | < 16     | 1 1,3  |
|                               | 17-35    | 57 75  |
|                               | >35      | 18 23,7|
| Education                     | primary school | 5 6,6 |
|                               | Junior high school | 11 14,5 |
|                               | Senior High School | 55 72,4 |
|                               | Diploma 1 | 0 0    |
|                               | Diploma 2 | 1 1,3  |
|                               | Diploma 3 | 2 2,6  |
|                               | Bachelor  | 2 2,6  |
| Gravida                       | Gravida 1 | 16 21,1|
|                               | Gravida 2 | 24 31,6|
|                               | Gravida 3 | 25 32,9|
|                               | Gravida 4 | 6 7,9  |
|                               | Gravida 5 | 4 5,3  |
|                               | Gravida 6 | 0 0    |
|                               | Gravida 7 | 1 1,3  |
| Age of gravida                | Trimester 1 | 14 18,4|
|                               | Trimester 2 | 40 52,6|
|                               | Trimester 3 | 22 28,9|

The data in the table above can be seen that the most age group is aged 17-35 years (75%). The highest number of respondents was based on the characteristics of respondents, namely with high school education of 55 people (72.37%). The number of respondents based on the most gravida characteristics is Gravida 3 with 25 people (32.89%). Characteristics based on gestational age obtained by the highest number of respondents is in the second trimester of 40 (52.63%).

TABLE II. RISK OF PREGNANCY EVENTS

| Risky Pregnancy | Score | Amount |
|-----------------|-------|--------|
| low risk pregnancy | 2     | 41 53,9 |
| high risk pregnancy | 4 s.d 10 | 30 39,5 |
| pregnancy risk is very high | ≥ 12 | 5 6,6 |

Based on the table above obtained 41 people (53.95%) in the low risk pregnancy, 30 people (39.47%) in high risk pregnancy and 5 people (6.58%) in pregnancy risk is very high.

TABLE III. CHARACTERISTICS OF RESPONDENTS BASED ON RISK CATEGORIES

| Characteristics of Respondents | Category | low risk pregnancy | high risk pregnancy | pregnancy risk is very high |
|--------------------------------|----------|--------------------|---------------------|---------------------------|
| Age                            | ≤ 16     | 0 0 1 3,3 0 0      | 13 43,3 3 60       |                           |
|                               | 17-35    | 41 100 15 43,3 3 60|                    |                           |
|                               | >35      | 0 0 16 53,3 2 40   |                     |                           |
| Education                      | primary  | 0 0 3 100 2 40     |                     |                           |

Based on the table above, it can be seen that the characteristics based on the age of the highest number of respondents are the 17-35 year age group, namely 41 people (100%) in low risk pregnancies. Characteristics based on education the most number of respondents with high school education is 38 people (92.7%) in low risk pregnancies. Characteristics based on the amount of gravida obtained by the most number of respondents with gravida 2, namely 17 people (41.5%) at low risk. Characteristics based on gestational age obtained the same amount, namely in the second trimester a number of 19 people (46.3%) in each low and moderate risk pregnancy.

A. Description of the incidence of pregnancy with risk factors in the Patas Village Gerokgak I Puskesmas Work Area in 2019

The subjects in this study were 76 pregnant women. Respondent characteristics based on gestational age are categorized into three parts namely Low Risk Pregnancy, High Risk Pregnancy and Very High High Pregnancy in Patas village, Gerokgak Health Center working area. high risk category by 30 people and very high risk category by 5 people.

Low risk pregnancy in which all expectant mothers are at risk for pregnancy for pregnant women with low risk pregnancies with a score of 2, that is, without problems or risk factors. Labor with a low risk pregnancy is done...
High Risk Pregnancy with a total score of 6-10, there are one or more problems in pregnancy, both from the mother's side and the baby in the womb which gives a less favorable impact for the mother or prospective baby. The head of household category has an emergency risk but is not an emergency. Very high risk pregnancy (KRST) with a total score ≥ 12. Pregnant women with two or more risk factors increase and require timely delivery of referral measures and adequate delivery assistance in hospitals handled by specialist doctors.

B. Risk factors for risky pregnancy events in Patas Village Gerokgak I Puskesmas Work Area in 2019.

1) Age
Characteristics of respondents by age are categorized into three parts namely <16 years, 17-34 years and ≥ 35 years. According to high risk pregnancy, the most dominant was found in pregnant women in the age category ≥ 35 years as many as 16 people and in the very high risk pregnancy category, most found in pregnant women in the age category 17-34 years as many as 2 people. In this study all pregnant women said to be a risk but some are said to be high risk. Pregnant women who are at high risk can also be influenced by age, that is, too old, age ≥35 years.

Supported also by research conducted by experts that the complications that occur in pregnant women at the age of ≥35 years are often due to disruption of the vascular system, namely damage to blood vessel endothelium that can cause impaired blood flow to the uterus. As a result the risk of miscarriage will increase, complications in the form of bleeding in young pregnancy is a sign of a threat of miscarriage. In addition, at this age the function of the uterus and the quality of the egg has also declined due to the aging process. Dangers that occur in pregnant women aged ≥35 years include an increased risk of miscarriage, placenta previa, preeclampsia, gestational diabetes mellitus. [5,6]

2) Education
Characteristics of respondents based on education are categorized into six sections namely elementary, junior high, high school, D1, D3 and Bachelor. High-risk pregnancies, the most dominant found in pregnant women in the high school education category as many as 17 people and in the category of very high-risk pregnancies, found most pregnant women in the elementary education level category as many as 2 people. The higher the level of education, the more knowledge a person has. Conversely the less education will hamper the development of one's attitude towards newly introduced values. [7] The higher the level of one's education, the more information can be obtained so the higher the knowledge. [8]

3) Gravida
Characteristics of respondents based on gravida are categorized into seven parts namely Gravida 1, gravida 2, gravida 3, gravida 4, gravida 5, gravida 6 and gravida 7. high-risk pregnancies, the most dominant pregnant women found in the gravida 3 category were 12 people and in the category of pregnancy risk is very high, most pregnant women found in Gravida 5 as many as 2 people.

Primigravida is a condition in which a woman experiences pregnancy for the first time while multigravida is a mother who is pregnant more than 3 to 5 times. [9] The gravida status in this study is very important to know the risk of pregnancy according to the Pojji rochjati score card which includes such as too many children, 4 or more. Every childbirth, the mother will bleed in sufficient quantities so that the more often the mother gives birth the more blood loss and iron reserves will decrease. If the mother's diet is not enough iron then the mother will experience anemia. Multigravida (too many children) increases the risk of health problems that can include anemia and malnutrition, high blood pressure (preeclampsia), bleeding, and premature rupture of membranes. [5,10]

4) Age of Pregnancy
Characteristics of respondents based on gestational age are categorized into three parts namely Tri Mester 1 (TM 1), Tri Mester 2 (TM 2) and Tri Mester 3 (TM 3). According to high risk pregnancy, the most dominant was found in pregnant women in the TM 2 category as many as 19 people and in the very high risk pregnancy category, most found in pregnant women on TM 3 as many as 3 people.

Pregnancy lasts 9 months according to international dates, 10 months according to external dates, or about 40 weeks. Pregnancy is divided into three monthly or trimester periods. The first trimester is the period of the first week to the 13th week. The second trimester is the 14th to 26th week period, while the third trimester, 27th week until the pregnancy is 38-40 weeks. This first trimester is often referred to as the determination period. Determination to accept the fact that the mother is pregnant. Immediately after conception, the levels of the hormones progesterone and estrogen in the body will increase and this causes morning sickness and vomiting, weakness, fatigue and breast enlargement. Mother feels unwell and often hates pregnancy. [11,6] The second trimester is often referred to as the period of health exposure, when the mother feels well. The mother has accepted her pregnancy and has begun to be able to use her energy and thoughts constructively. [12] The third trimester is often called the waiting and alert period because at that time the mother feels impatient waiting for the birth of her baby. Discomfort due to pregnancy reappears in the third trimester and many mothers who feel themselves ugly. In addition, mothers begin to feel sad because they will be separated from their babies and lose the special attention received during pregnancy. During this
trimester, mothers need information and support from their husbands, families and midwives. [5,13]

IV. CONCLUSION

The results of research conducted on Risk Factors for Risky Pregnancy Events in Petas Village Working Area of Gerokgak I Health Center can be concluded that: Pregnancy events with a risk factor of 41 people (53.95%) in the KRR Category, 30 people (39.47%) KRT and 5 people (6.58%) in the KRST category. Characteristics of pregnancy with risk factors in the Patas Village Gerokgak I Puskesmas work area include: age, education, gravida, and gestational age.

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