



Description of Premarital Health Status In Pregnancy Preparation

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ABSTRACT

Backgrounds: The prospective bride are the right target in improving reproductive health, especially before pregnancy. Prospective brides need to prepare for reproductive health so that after marriage they are expected to have optimal health status. The period before pregnancy, giving birth to the first 1000 days of a baby's life is a golden period that needs attention. Good health status will produce quality generations and reduce mortality and morbidity rates. The purpose of this study was to describe the health status of the prospective bride in preparation for pregnancy.

Methods: The research type is descriptive quantitative. The sampling technique used was purposive sampling. The sample in this study amounted to 155 respondents, is secondary data from the health center in 2020. The data analysis uses univariate analysis.

Results: Description of the prospective brides health status are, 81.9% were aged 20-35 years, had no history of disease 100%, had normal blood pressure 85.2%, BMI was not normal 52.3%, hemoglobin levels were normal 96.8%, blood sugar was normal 98.06%, normal upper arm circumference 85.8%.

Conclusion: The majority of the health status of the bride-to-be is normal and the health status that requires the most attention is less BMI and more.

Keyword : Health Status, Premarital

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Backgrounds. Premarital are a strategic target group in an effort to improve health before pregnancy. Before marriage, many brides and grooms do not have enough knowledge and information about reproductive health in their families, so that after marriage, pregnancy is often not well planned and is not supported by optimal health status. This of course can have negative impacts such as the risk of disease transmission, pregnancy complications, disability and even maternal and infant mortality (Kemenkes, 2018).

One of the policy directions and action plans for public health programs for 2020-2024 is improving maternal and child health, family planning, and reproductive health. The Maternal Mortality Rate (MMR) in Yogyakarta increased by 4 cases to 40 cases in 2020. Bantul Regency has the highest MMR with 20

cases during 2020 and Banguntapan District has 12 cases. Apart from maternal mortality, stunting is still a problem in Yogyakarta. The stunting rate in Yogyakarta 2020 is 19.8 percent (Dinkes, 2020).

One of the interventions to reduce maternal and infant mortality is the health status of women as prospective mothers must be improved. Improving the health status of women is not only needed after pregnancy occurs, but also must be pulled further upstream, namely from adolescence, young adults/bride candidates, and women of childbearing age. One of the interventions that have been carried out is through reproductive health services for bride who are about to get married. Bride is one of the strategic life cycle stages as a health program target, such as efforts to improve nutrition, prepare family

health, and prevent and control infectious and non-communicable diseases. This is necessary in order to prepare the bride partner to become a partner with a healthy reproductive life so that it is hoped that the bride will be ready to undergo a healthy pregnancy, childbirth, postpartum and breastfeeding period and give birth to a quality next generation (Aprianti, 2019).

Preconception health is an important opportunity for the primary prevention of maternal and infant mortality and morbidity. The benefits of short-term preconception care include reducing pregnancies that are too early, pregnancies that are too close, and unplanned pregnancies. Preconception care can contribute to reduce the risk of genetic disorders and environmental exposures and to improve maternal and child health outcomes including improving women's health and well-being in other public health areas, such as nutrition, infertility and subfertility, mental health, intimate partner and sexual violence, and daily drug use (WHO, 2013).

Health checks before pregnancy are very important so that pregnancy can go well. The pre-wedding program is a health program between the Ministry of Religion and the Health Service, which is the health Center as the executor. Health workers in Public Health Center are the main facilitators in terms of the health of the prospective bride in preparation for pregnancy. The highest maternal mortality rate in Yogyakarta is in Bantul regency. Kasihan is one of the sub-districts in Bantul Regency. Kasihan 1 Public Health Center is one of the health centers that serves preconceptions and has held several meetings with premarital couples in collaboration with religious affairs office, but it has not been carried out routinely.

Methods. This type of research is quantitative descriptive. This research will be conducted at Kasihan Health Center, Bantul Yogyakarta. The sample in this study was the prospective bride who came to the Public Health Center. The data used is secondary data taken from the medical records of

prospective brides who come to the Public Health Center in 2020. The number of samples is 155 samples. The sampling strategy used is a purposive sampling strategy. Data analysis used univariate analysis.

Results and Discussion In this study, the characteristics of respondents were taken based on age, disease history, blood pressure, body mass index, hemoglobin levels, blood sugar results and upper arm circumference.

Table 1. Description of Premarital Health Status

Category	N	%
Age		
Normal Age (20-35 years old)	127	81.9
Age at risk	28	18.1
19 years: 23 (14.8%)		
>35 years: 5 (3.2%)		
Illness History		
No history of any disease	155	100
Blood Pressure		
Normal	132	85.2
Hypertension	23	14.8
Blood Sugar Results		
Normal	152	98.06
DM	3	1.94
Body mass index		
Normal	74	47.7
Abnormal	81	52.3
Very Thin: 5 (3.2%)		
Underweight: 11 (7.1%)		
Overweight: 22 (14.2%)		
Obesity: 43 (27.7%)		
Hemoglobin Level		
Normal	150	96.8
Anemia	5	3.2
Upper Arm Circumference		
Normal	133	85.8
chronic energy deficiency	22	14.2

The prospective bride who will marry is the forerunner to the formation of a family, so that before marriage the bride and groom need to prepare their health conditions in order to be able to carry out a healthy pregnancy so that they can give birth to a healthy next generation and create a healthy, prosperous, and quality family. Based on the results of the study, it was found that most of them were aged 20-35 years, namely 127 respondents, 81.9%. This age is the ideal age to decide on marriage. The

ideal marriage is a marriage if the age of the woman is above 20 years because reproductive health is ready to carry out its functions. BKKBN is Indonesia's National Population and Family Planning Agency. The BKKBN states that the ideal age for marriage for women is 20-35 years and 25-40 years for men (BKKBN, 2017).

The age of the bride-to-be is known to be 18.1% of the age at risk, with details of 14.8% getting married at a young age of 19 years and 3.2% married at an old age of >35 years. Marriages carried out under the age of 20 can increase the risk of cervical cancer, unprepared uterine cells, and the possibility of getting Human Papilloma Virus (HIV) (BKKBN, 2017).

Maternal age over 35 years will increase the risk of stunted fetal growth and neonatal death. It also increases the risk of gestational diabetes (Lean, 2017). Comorbid risk with age and the cumulative effect of possible exposure to adverse lifestyle factors such as obesity. Since advanced maternal age is associated with a longer time required to conceive, delaying parenthood may affect the desired family size of a partner (Schmidt, 2012; Habbema, 2015).

When viewed from the status of the history of the disease, all respondents did not have a history of any disease (100%). The history of the disease of the prospective bride affects reproductive health from before pregnancy, during pregnancy, and the results of conception (Komalasari T, 2015). There were 14.8% had hypertension. Hypertension experienced by the bride-to-be will affect her future pregnancy. Hypertension in pregnancy is one of the three main causes of maternal death in addition to bleeding and infection. Normal blood pressure in adults is above 90/60 mmHg to 120/80 mmHg (Wilkinson, 2011).

Normal blood pressure reduces the risk of complications for the bride-to-be in dealing with pregnancy and childbirth after marriage. Preconception blood pressure levels and gestational age are prospectively associated with the risk of miscarriage among healthy women (Nobles, 2018; Zhou, 2016). Each 10 mmHg increase in diastolic blood pressure and

preconception mean arterial pressure was associated with a 17% and 18% increased risk of miscarriage, respectively. Screening and lifestyle interventions that target the maintenance of healthy blood pressure levels among women of reproductive age have important short-term benefits for reproductive health (Nobles, 2018).

The results of the majority of blood sugar examinations were normal and only 1.94% had glucose levels more than normal. Women's blood glucose levels are associated with adverse perinatal outcomes (Pereda J, 2020). Diabetes mellitus in the preconception period can increase the risk of macrosomia, high birth weight, cesarean section, preeclampsia (Wahabi, 2014), and the risk of malformations (Asrani P, 2020). Women with a history of gestational diabetes appear to have an almost 10-fold higher risk of developing type 2 diabetes mellitus compared with normoglycemic pregnancies. The magnitude of this risk highlights the importance of interventions to prevent the onset of type 2 diabetes mellitus, especially in the early years after pregnancy (Vounzoulaki, 2020).

A woman's nutritional status before conception has profound implications for the growth, development and long-term health of the resulting offspring (Barker, 2018). A cohort study found that BMI before pregnancy will affect the baby's physical growth, so it is very important to control body weight before conception (Li, 2019; Zalbazar, 2016; Ningrum, 2018).

Based on the results of the research on the nutritional status of the prospective bride, it is known that less than 50% have normal nutritional status, 7.1% are underweight and 3.1% are very thin. Low pre-pregnancy weight BMI less than 18.5 kg per m² was associated with preterm delivery and low birth weight. Low body weight is also associated with nutritional deficiencies, osteoporosis, amenorrhea, infertility, and arrhythmias. Babies whose mothers had low pre-pregnancy weight are at higher risk for gastroschisis (Maas, 2021), have a risk of 2 times greater to have a miscarriage

compared to normal weight (Zhou, 2016). A study in Vietnam, women with pre-pregnancy weight <43kg or enhancement weighing <8kg are at greatest risk for poor birth outcomes (Young, 2015).

BMI results that fall into the fat category are 14.2% and obesity 27.7%. Obesity is a higher risk factor as a cause of complications compared to gestational diabetes, hypertension, preeclampsia, and cesarean delivery (Meenakshi, 2012) and improve adverse pregnancy outcome. A study shows obesity before pregnancy increases the risk of hypertension in pregnancy, preeclampsia, gestational diabetes, indications for preterm labor, cesarean delivery, macrosomia, stillbirth (Schummers, 2015; Maas, 2021; Reliever J, 2020), at risk of 2 times more likely to have a miscarriage compared to normal weight (Zhou, 2016).

The nutritional status of preconception mothers is positively related to gestational weight gain, child growth during the first 1000 days by reaching body size at the age of 6-7 years. Faster growth in the first 2 years is associated with a reduced risk of stunting and underweight but an increased risk of being overweight/obese at 6-7 years (Nguyen PH, 2021).

In this study, it was found that most of the respondents had normal hemoglobin levels (96.8%). Normal hemoglobin levels minimize the occurrence of anemia which causes complications during pregnancy and childbirth. Bride and groom are advised to take iron tablets. Preconception supplementation with Fe tablets increased linear growth and fine motor development at 2 years of age (Nguyen, 2017). In addition to taking iron supplements, there are some foods that are rich in iron such as beans, cereals, beef, turkey, liver, and shrimp. In addition, eat foods that help in the absorption of iron such as oranges, grapefruit, strawberries, broccoli, and bell peppers (ACOG's, 2020).

Most of the prospective brides had normal upper arm circumference (85.8%) and 14.2% had chronic energy deficiency. Upper arm circumference is one of the measurements of body composition. Measurement of upper arm circumference can provide an overview of the state of muscle tissue and skin fat layer. Measurement of upper arm circumference can also be an indicator of a person's nutritional status. The upper arm circumference threshold that is often used is 23.5 cm (Anggraeni O, 2012). Lack of certain nutrients in the bride-to-be will have an impact on the lack of certain nutrients needed during pregnancy later and can cause the fetus to not grow perfectly. The contribution and occurrence of chronic energy deficiency in pregnant women will affect fetal growth and development, among others, can increase the risk of low birth weight (LBW). Pregnant women with chronic energy deficiency have a greater risk of pain, especially in the third trimester of pregnancy so that it can lead to low birth weight. Therefore, prospective brides are expected to be able to fulfill their nutritional needs in order to prepare for the upcoming pregnancy period (Aminin F, 2014).

Conclusion and Suggestion. The characteristics of prospective brides in the Kasihan 1 Health Center area are 81.9% aged 20-35 years, have no history of disease 100%, have normal blood pressure 85.2%, abnormal BMI 52.3%, normal hemoglobin levels 96.8%, normal blood sugar 98.06 %, normal upper arm circumference 85.8%. The majority of the health status of the premarital the normal category, although it is still very necessary to pay attention to the health status of the prospective bride who is not normal. Of the umpteenth health status of the premarital really needs to be considered is the BMI status of the bride and groom womanless or more. There needs to be a health promotion strategy to encourage brides-to-be to improve their lifestyle so that their weight becomes ideal/normal.

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