

THE RELATIONSHIP OF KNOWLEDGE WITH THE INCIDENCE OF ANEMIA IN PREMARITAL WOMEN

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ABSTRAK : HUBUNGAN PENGETAHUAN DENGAN KEJADIAN ANEMIA PADA WANITA PRANIKAH

Latar Belakang: Pembangunan suatu bangsa ditentukan oleh keberlanjutan dan kualitas generasi muda sebagai subjek maupun objek pembangunan. Berdasarkan data Kementerian Kesehatan Republik Indonesia, prevalensi anemia pada perempuan usia pranikah sebesar 26,50%, perempuan usia subur 26,9%, ibu hamil 40,1%, dan balita 47,0%. Di wilayah kerja Puskesmas Pugung Raharjo, kasus anemia pada perempuan usia pranikah periode Januari–April 2022 tercatat sebanyak 105 kasus. Tujuan: Penelitian ini bertujuan untuk mengetahui hubungan antara tingkat pengetahuan dengan kejadian anemia pada perempuan usia pranikah di wilayah kerja Puskesmas Pugung Raharjo tahun 2021/2022.

Metode: Penelitian kuantitatif dengan desain cross sectional dan pendekatan survei analitik. Populasi penelitian sebanyak 105 responden, seluruhnya dijadikan sampel dengan teknik total sampling. Analisis data menggunakan uji univariat dan bivariat.

Hasil: Responden dengan pengetahuan cukup sebanyak 45 (42,9%). Responden yang tidak mengalami anemia sebanyak 58 (55,2%), sedangkan yang mengalami anemia 47 (44,8%). Pada kategori pengetahuan baik, tidak anemia 14 (13,3%) dan anemia 18 (17,1%). Pengetahuan cukup, tidak anemia 32 (30,5%) dan anemia 13 (45,0%). Pengetahuan kurang, tidak anemia 12 (11,4%) dan anemia 16 (15,2%). Hasil uji bivariat menunjukkan nilai $p = 0,017 < \alpha (0,05)$, artinya terdapat hubungan signifikan antara pengetahuan dengan kejadian anemia.

Kesimpulan: Terdapat hubungan antara tingkat pengetahuan dengan kejadian anemia pada perempuan usia pranikah.

Saran: Diharapkan perempuan usia pranikah lebih memperhatikan kesehatan melalui pemeriksaan rutin, khususnya terkait anemia, serta menjaga pola konsumsi makanan bergizi seimbang.

Kata kunci: Anemia, pengetahuan, pranikah

ABSTRACT

Background: The development of a nation is determined by the sustainability and quality of the younger generation as both subjects and objects of development. According to data from the Ministry of Health of the Republic of Indonesia, the prevalence of anemia among premarital women is 26.50%, women of reproductive age 26.9%, pregnant women 40.1%, and children under five 47.0%. In the working area of Pugung Raharjo Public Health Center, there were 105 cases of anemia among premarital women during the period of January–April 2022. Objective: This study aimed to determine the relationship between the level of knowledge and the incidence of anemia among premarital women in the working area of Pugung Raharjo Public Health Center in 2021/2022.

Methods: This was a quantitative study with a cross-sectional design and an analytical survey approach. The study population consisted of 105 respondents, all of whom were included as the sample using a total sampling technique. Data analysis was conducted using univariate and bivariate tests.

Results: Respondents with sufficient knowledge totaled 45 (42.9%). A total of 58 respondents (55.2%) did not experience anemia, while 47 respondents (44.8%) experienced anemia. In the good knowledge category, 14 (13.3%) had no anemia and 18 (17.1%) had anemia. In the sufficient knowledge category, 32 (30.5%) had no anemia and 13 (45.0%) had anemia. In the poor knowledge category, 12 (11.4%) had no anemia and 16 (15.2%) had anemia. The bivariate test showed a p -value of $0.017 < \alpha (0.05)$, indicating a significant relationship between knowledge and the incidence of anemia.

Conclusion: There is a significant relationship between the level of knowledge and the incidence of anemia among premarital women.

Suggestion: Premarital women are encouraged to pay more attention to their health through regular check-ups, particularly concerning anemia, and to maintain a balanced and nutritious diet.

Keywords: Anemia, knowledge, premarital women

INTRODUCTION

The development of human quality is one of the national development targets in a country. The number of young people in a nation is a population bonus phenomenon that can be both a strength and a challenge. The development of a nation is determined by the sustainability and quality of the younger generation as the subject and object of development. The challenges of advancing times, science, freedom of information are challenges in fostering and building the nation's generation. Technological advances are the gateway to ease of communication and information that has a major influence on the cultural, moral and social order of the younger generation (Mery et al., 2021)

Bride and groom need adequate information about various aspects of reproductive health early in married life. Information about high-risk pregnancies, the importance of family planning methods and the selection of appropriate methods to prevent pregnancy in the early years of married life, the use of genetic counseling to prevent genetic diseases is a major health problem in the early years of married life. (AN Laili, 2022) Therefore, organizing premarital counseling classes by experts is one of the important health services. The counseling program helps brides-to-be to get information about reproductive health issues and to get their marriage done on the right basis (Hasanah et al., 2022)

Anemia in premarital women is a major nutritional problem. The incidence of anemia in premarital women is increasing, this has an impact on increasing problems in pregnancy which leads to an increase in the incidence of stunting in children. The results of the study stated that the prevalence of stunting increased in children born to mothers who experienced nutritional problems only anemia during pregnancy (FF Dieny, 2019)

The prevalence of anemia in adolescents in the world ranges from 40-88% according to *World Health Organization* (WHO), the incidence of anemia in adolescent girls in developing countries is around 53.7% of all adolescent girls (WHO, 2018). Based on data from the Basic Health Research (Riskesdas) in 2021, the prevalence of anemia in Indonesia is still quite high. Anemia in pre-married women is 26.50%, women of reproductive age are 26.9%, pregnant women are 40.1% and children under five are 47.0%. One of the indicators that determine anemia,

especially iron deficiency anemia, is indicated by hemoglobin levels.¹¹ The formation of hemoglobin is related to the interaction of several nutrients, including energy, protein, vitamin A, vitamin C, vitamin B2, vitamin B6, vitamin B12, iron, zinc. and folic acid (Hamzah, 2020)

These nutritional problems can actually be determined based on the health and nutritional status of the mother who was monitored long before pregnancy, namely during the period of preparing for pregnancy. Nutritional needs at this time are important because the prospective bride is a group of women who will prepare for pregnancy and breastfeeding. Prospective brides are susceptible to nutritional anemia, especially iron and folic acid due to problems experienced by women of childbearing age, such as having menstruation every month which loses blood around 0-48 mg per day (depending on menstrual flow), lack of nutrient intake, parasitic infections. such as malaria, helminthiasis and the majority of WUS become the workforce (Syarafina & Probosari, 2014)

According to Soemantri, high anemia will have an impact on decreasing the quality of human, social and economic resources. Anemia in prospective brides can cause fatigue, decreased physical capacity, weak body, and decreased productivity, and the condition will be even more severe if the prospective bride is pregnant. Pregnancy requires a greater amount of iron for fetal growth and development, it will have an impact on abortion, premature labor, inhibition of fetal growth and development in the uterus, easy infection, at the time of delivery can occur His disorder, the first stage is long, the second stage lasts a long time, and postpartum hemorrhage can occur, and during the puerperium there can also be uterine sub involution causing bleeding, puerperal infection, reduced milk production, postpartum anemia and easy mammary infection (Hendriani et al., 2020)

One of the efforts to increase knowledge and change the attitude of the bride and groom regarding reproductive health is to provide counseling about reproductive health before the wedding takes place. Counseling on reproductive health can create shared perceptions and information so that it can improve behavior in reproductive health (Ortinasih et al., 2021)

The incidence of anemia in adolescents or in couples before marriage in the working area of the Pugung Raharjo Health Center in 2021 is 203 with 103 events of pregnancy anemia, 67 cases of anemia in adolescents and 33 cases of anemia in the elderly. Whereas in 2022 starting from January to April 2022 the incidence of anemia in adolescents is 102 events and anemia in pregnancy is 132 events with the most anemia classification being mild and moderate anemia. The problem of anemia that occurs is usually due to a lack of nutrition and vitamin intake during adolescence and the lack of understanding and understanding of adolescents about how to maintain health before marriage.

The number of pre-marital women in 2021 who were recorded in the health check-up in the Pugung Raharjo Health Center working area was 105 and of this total, 43 pre-wedding women had anemia with a classification of mild anemia as many as 31 cases and 12 cases with moderate anemia. Meanwhile, in 2022 the number of pre-wedding women who had a health check before marriage was 50 with the results of the examination there were 32 respondents experiencing moderate and mild anemia. When interviewed some pre-marital women stated that they did not understand and understand the problem of anemia at pre-marital age, they knew that anemia could only occur in pregnant women. It is stated that nutrition during adolescence has no effect on future pregnancies.

While the number of women of pre-marital age in the Sukaraja Tiga Health Center Working Area in 2021, there are 45 women of pre-marital age who carry out health checks before their marriage, of which 20 women have mild anemia. In 2022 there are 15 women who check their health before their marriage and it is registered that 5 women are anemic

The working area of the Pugung Raharjo Health Center is the area with the highest marriage rate and the problem that often occurs is the lack of knowledge of couples before marriage about possible health problems, cases that are often found in the Pugung Raharjo Health Center work area, namely marriage at a young age where the womb is not ready to accept it. fertilization so that it will cause complications such as low birth weight, stunting, prematurity, and anemia of pregnancy. Economic status is also often the background of problems that often occur so that

many couples do not pay attention to food consumption and habit patterns that improve the quality of health between couples or individuals. The lack of knowledge in pre-marital couples is influenced by several factors, including the lack of seeking or digging up information about the problem of anemia in pre-marriage and a history of eating food that has not paid attention to nutritional intake during adolescence so that anemia problems in pre-wedding can still occur. Some of the problems are also caused by premarital couples who do not know the dangers and complications of anemia.

RESEARCH METHODS

This study employs a quantitative research approach. The research design used is cross-sectional, with a total sampling technique, in which the sample is taken from the entire population, consisting of 105 premarital respondents. The study will be conducted in the working area of Pugung Raharjo Health Center in 2022. In this study, the independent variable is knowledge, while the dependent variable is anemia. The data collection instrument is a questionnaire, Data analysis will be carried out using the SPSS program, with bivariate analysis performed using the Chi-Square test. (Siregar, M. H., Susanti, R., Indriawati, R., Panma, Y., Hanaruddin, D. Y., Adhiwijaya, A., ... & Renaldi, 2022), (Roflin, 2022)

RESEARCH RESULT

Characteristics of Respondents

Based on table 1, it can be seen from 105 research respondents based on the Characteristics of Respondents in the Pugung Raharjo Health Center Working Area in 2022 based on the age category 23-26 as many as 49 (46.7%) respondents, aged 27-31 as many as 56 (53.3%) respondents. Characteristics based on education based on elementary education category as many as 17 (16.2%) respondents, high school education as many as 48 (45.7%) respondents, junior high school education as many as 29 (27.6%) respondents, undergraduate education as many as 11 (10.5%) respondents.

Meanwhile, the characteristics based on the respondent's occupation are 7 (6.7%). 4.8%) of respondents, 55 (52.4%). Characteristics based on religion with the category of Hinduism as many as 6 (5.7%), Islam as many as 86 (81.9%), Christianity as many as 13 (12.4%) respondents.

Table 1
Characteristics of Respondents

Characteristics of Respondents	Frequency	Percentage (%)
Respondent Age		
23-26 years old	49	46.7%
27-31 years old	56	53.3%
Respondent's education		
SD	17	16.2%
SENIOR HIGH SCHOOL	48	45.7%
JUNIOR HIGH SCHOOL	29	27.6%
Bachelor	11	10.5%
Respondent's occupation		
Honorary	7	6.7%
Trader	18	17.1%
Employee	20	19.0%
civil servant	5	4.8%
Doesn't work	55	52.4%
Respondent's religion		
Hindu	6	5.7%
Islam	86	81.9%
Christian	13	12.4%

Univariate Analysis

Distribution of Knowledge of Pre-Married Women About Anemia

Table 2
Distribution of Knowledge of Pre-Married Women About Anemia

Knowledge	Amount	Presentation
Good knowledge level	32	30.5%
Sufficient level of knowledge	45	42.9%
Low level of knowledge	28	26.7%

Based on table.2, it can be seen that from 105 research respondents conducted in the Pugung Raharjo Health Center Work Area in 2022 on pre-marital age women with good knowledge categories as many as 32 (30.5%) respondents, 45 (42.9%) adequate knowledge levels.), the level of knowledge is less as many as 28 (26.7%) respondents

It is known that the distribution of anemia in pre-marital women

Based on table 3, it can be seen that from 105 research respondents conducted in the Pugung Raharjo Health Center Work Area in 2022, there were 58 (55.2%) respondents who had anemia of pre-marital age in the category of not experiencing anemia. %) respondents.

Table 3
It is known that the distribution of anemia in pre-marital women

The incidence of anemia	Amount	Presentation
No, if the hemoglobin level is >12mg/dl	58	55.2%
Yes, if the hemoglobin level is <12mg/dl	47	44.5%

Bivariate Analysis

Bivariate analysis used the person Chi-square test to determineThe relationship between knowledge and the incidence of anemia in pre-

marital women in the Pugung Raharjo Health Center Working Area in 2022. The results of the bivariate analysis are presented in the form of a table as follows:

Table 4
Relationship between Knowledge and the Incidence of Anemia in Pre-Married Women

Knowledge	ANEMIA				Total		p-value
	No, if Hb > 12gr/dl		Yes, if Bb<12gr/dl				
	Total	%	Total	%	Total	%	
Good knowledge level	14	13.3	18	17.1	32	30.5	0.017
Sufficient level of knowledge	32	30.3	13	12.4	45	42.9	
Lack of knowledge level	12	11.4	16	15.2	20	26.7	

Based on the results of table 4 Above, it shows that of the 105 research respondents based on the relationship of knowledge with the incidence of anemia in pre-married women in the Pugung Raharjo Health Center Work Area in 2022 with a good knowledge level category who did not experience anemia as many as 14 (13.3%), which experienced anemia as many as 18 (17.1%), while the category of sufficient knowledge level who did not experience anemia was 32 (30.5%), who experienced anemia were 13 (45.0%), the category of poor knowledge level did not experience anemia as much as 12 (11.4%) respondents and 16 (15.2%) respondents experienced anemia

The results of data analysis carried out using the Chi-square test showed that the p-value was $0.017 < \alpha (0.05)$ meaning H_a accepted and H_o was rejected, which means there is The relationship between knowledge and the incidence of anemia in pre-marital women in the Pugung Raharjo Health Center Working Area in 2022.

DISCUSSION

Characteristics of Respondents

Of the 105 research respondents based on the Characteristics of Respondents in the Pugung Raharjo Community Health Center in 2022 based on the age category 23-26, 49 (46.7%) respondents, aged 27-31, 56 (53.3%) respondents. Characteristics based on education based on elementary education category as many as 17 (16.2%) respondents, high school education as many as 48 (45.7%) respondents, junior high school education as many as 29 (27.6%) respondents, undergraduate education as many as 11 (10.5%) respondents.

Meanwhile, the characteristics based on the respondent's occupation are 7 (6.7%). 4.8%) of respondents, 55 (52.4%). Characteristics based on religion with the category of Hinduism as many as 6 (5.7%), Islam as many as 86 (81.9%), Christianity as many as 13 (12.4%) respondents

The more mature the level of maturity and power of a person will be more mature in thinking and working. Age in adolescents also affects

cognitive development. In mid-teens aged 14-16 years, growth is still going on, at this time there are often conflicts and they still follow friends in finding their identity. Meanwhile, in older adolescents aged 17-19 years, biological growth has slowed, emotions, concentration and way of thinking of adolescents have begun to stabilize. Older adolescents tend to have stable thinking and are more exposed to information about nutrition so that they have paid attention to the intake of nutritious food so as to reduce the risk of iron deficiency anemia compared to middle adolescents.

Age affects a person's perception and mindset. The older they get, the more their grasping power and mindset will develop so that the knowledge they gain is getting better. At middle age, individuals will play a more active role in society and social life, and make more preparations for the success of efforts to adapt to old age. In addition, middle age people will spend more time reading (Notoadmodjo, 2018)

According to the researcher, the respondent's characteristics can be used as a reference or an assessment of how in the future the respondent will be able to accept or adjust the research.

Univariate Analysis

Distribution of Knowledge of Pre-Married Women About Anemia

Of the 105 research respondents conducted in the Pugung Raharjo Health Center Work Area in 2022 on women of pre-married age with good knowledge categories as many as 32 (30.5%) respondents, the level of knowledge is sufficient as much as 45 (42.9%), the level of knowledge is less than 28 (26.7%) respondents

Bride and groom need adequate information about various aspects of reproductive health early in married life. Information about high-risk pregnancies, the importance of family planning methods and the selection of appropriate methods to prevent pregnancy in the early years of married life, the use of genetic counseling to prevent genetic diseases is a major health problem in the early years of married

life. Therefore, organizing premarital counseling classes by experts is one of the important health services. The counseling program helps the bride and groom to get information about reproductive health issues and to carry out their marriage on the right basis (Moodi et al., 2013)

Anemia in adolescents is a major nutritional problem. The incidence of anemia in adolescents is increasing, this has an impact on increasing problems in pregnancy which leads to an increase in the incidence of stunting in children. The results of the study stated that the prevalence of stunting increased in children born to mothers who experienced nutritional problems only anemia during pregnancy (Ida Bagus Eka Utama Wija et al., 2023)

Anemia is a condition where the hemoglobin level and the number of red blood cells are reduced below the normal value set for individuals (Arisman, 2014). Anemia as a condition that the hemoglobin level is low due to a pathological condition. Fe deficiency is one of the causes of anemia, but it is not the only cause of anemia (Munir et al., 2022)

These nutritional problems can actually be determined based on the health and nutritional status of the mother who was monitored long before pregnancy, namely during the period of preparing for pregnancy. One of the people who play a role in that period is the prospective bride (CPW) or the pre-conception period. Nutritional needs at this time are important because the prospective bride is a group of women who will prepare for pregnancy and breastfeeding. Prospective brides are susceptible to nutritional anemia, especially iron and folic acid due to problems experienced by women of childbearing age, such as having menstruation every month which loses blood around 0-48 mg per day (depending on menstrual flow), lack of nutrient intake, parasitic infections. such as malaria, worms and the majority of WUS become the workforce (Bintang et al., 2019)

One of the efforts to increase knowledge and change the attitude of the bride and groom regarding reproductive health is to provide counseling about reproductive health before the wedding takes place. Counseling on reproductive health can create shared perceptions and information so as to improve behavior in reproductive health (Supatmi, I., & Hirawati Pranoto, 2021)

Knowledge is something that is known to be related to the learning process. This learning process is influenced by various internal factors, such as motivation and external factors in the form

of available information facilities, as well as socio-cultural conditions (Samsudin, 2020)

In line with research conducted with the title "factors causing anemia in women of reproductive age" This study aims to determine the factors that cause anemia in women of reproductive age. The research method uses descriptive research with a total population of 56 and a sample of 49 women of reproductive age who suffer from anemia. The results showed that 42.8% of respondents who suffered from anemia had basic or low education, 51% of respondents with low levels of knowledge suffered from anemia, 55.1% of those who suffered from anemia had poor nutritional status and 85.7% of respondents who suffered from anemia. Anemia has an unhealthy diet. So it can be concluded that the factors that cause anemia in women of reproductive age are education level, level of knowledge, nutritional status and diet (Diana & Hikmah, 2021)

According to researchers, knowledge is a foundation that is owned by every individual because by having good knowledge, individuals will have a good life. Knowledge is very closely related to education where it is hoped that someone with higher education will have more extensive knowledge. However, it should be emphasized that a person with low education does not mean absolutely low knowledge. A person's knowledge of an object also contains two aspects, namely positive and negative aspects.

It is known that the distribution of anemia in pre-marital women

Of the 105 research respondents conducted in the Pugung Raharjo Public Health Center Working Area in 2022, there were 58 (55.2%) respondents who had anemia of pre-marital age in the category of not experiencing anemia, with 47 (44.8%) respondents experiencing anemia. anemia problems as many as 43 (43.0%) respondents.

Anemia is reduced levels of erythrocytes (red blood cells) and hemoglobin (Hb) levels in every cubic millimeter of blood in the human body. Almost all disorders of the circulatory system are accompanied by anemia which is characterized by a pale color in the body, decreased physical work and decreased endurance. The causes of anemia vary, including iron deficiency anemia

Anemia is caused by a lack of iron in the body so that the need for iron for erythropoiesis is not enough, which is characterized by a microcytic hypochromic red blood cell picture, decreased serum iron levels and transferrin saturation (saturation), which will play an important role in

binding total iron (TIBC) and iron reserves. in the bone marrow and elsewhere is very less or not at all (Rumpiati et al., 2010). The adolescent phase which is marked by physiological maturity such as tissue enlargement to body organs makes adolescents need special nutritional needs

In line with research conducted with the title "relationship of knowledge about anemia, iron, and folic acid consumption with anemia status in premarital women." The purpose of this study was to determine the correlation between knowledge, iron intake, and folate intake with anemia status in among women of reproductive age in Bantul Regency. This research uses cross sectional method. Samples were selected using probability sampling method with simple random sampling technique by lottery and determine inclusion and exclusion criteria. Data were analyzed by Chi-square test using SPSS. The results show that there is no correlation between the level of knowledge and anemia status. Anemia status was significantly correlated with iron intake, but not with folate intake (HARDIANTI et al., 2020)

According to researchers, the incidence of anemia at pre-marital age can affect the mother's condition and can affect the period of her conception. Continued anemia will cause complications during pregnancy and childbirth later. To prevent anemia, it is expected to consume vitamin C. Vitamin C is also involved in the mobilization of iron stores, especially hemosiderin in the spleen. Vitamin C and other organic acids are boosters of non-heme iron absorption. Iron absorption will decrease if the consumption of vitamin C is low. Vitamin C has properties as a reducing agent which can reduce iron making it easier for absorption.

Bivariate Analysis

Bivariate analysis used the person Chi-square test to determine The relationship between knowledge and the incidence of anemia in pre-marital women in the Pugung Raharjo Health Center Working Area in 2022. The results of the bivariate analysis are presented in the form of a table as follows:

Of the 105 research respondents based on the relationship between knowledge and the incidence of anemia in pre-marital women in the Pugung Raharjo Health Center Work Area in 2022 with a good level of knowledge category who did not experience anemia as many as 14 (13.3%), who experienced anemia as many as 18 (17.1%), while the category of sufficient level of knowledge that does not experience anemia is 32 (30.5%), who has

anemia as many as 13 (45.0%), the category of poor knowledge level does not experience anemia as many as 12 (11.4%) respondents and who experienced anemia as many as 16 (15.2%) respondents

The results of data analysis carried out using the person chi square test analysis obtained the results of a p-value of $0.017 < \alpha$ (0.05) meaning H_a accepted and H_o was rejected, which means there is The relationship between knowledge and the incidence of anemia in pre-marital women in the Pugung Raharjo Health Center Working Area in 2022.

Iron nutritional anemia is a condition of decreased iron stores in the liver, so that the amount of hemoglobin in the blood decreases below normal. Before iron deficiency anemia occurs, it begins with iron deficiency (KGB). If the iron stores in the liver decrease but are not severe and the amount of hemoglobin is still normal, then a person is said to have iron deficiency only (not accompanied by iron nutritional anemia). The state of iron deficiency that continues and gets worse will result in iron deficiency anemia, the body will no longer be able to do so (Arisman, 2014)

Anemia can be grouped into three categories, namely, mild anemia if the hemoglobin level in the blood is around 9-10 g%, moderate anemia if the hemoglobin level in the blood is around 7-8 g%, and severe anemia if the hemoglobin level in the blood is less than 7 g % (Who & Chan, 2011)

Nutrition knowledge plays a role in providing ways to choose food properly so that it can achieve an adequate nutritional state. The level of knowledge that determines food consumption behavior is obtained through nutrition education which is generally considered better given as early as possible to increase knowledge and improve food consumption habits.

Nutrition knowledge plays a role in providing ways to choose food properly so that it can achieve an adequate nutritional state. The level of knowledge that determines food consumption behavior is obtained through nutrition education which is generally considered better given as early as possible to increase knowledge and improve food consumption habits (Pantaleon, 2019).

Lack of knowledge about anemia has an influence on health behavior in adolescents, lack of knowledge will result in less optimal adolescent health behavior to prevent anemia. Adolescents who have less knowledge about anemia can result in a lack of consumption of foods containing iron (Budiman & Riyanto, 2013)

One of the factors that trigger anemia is the condition of an abnormal menstrual cycle. Losing a lot of blood during menstruation is thought to cause anemia. Almost all women have experienced excessive bleeding during menstruation, even some women have to experience this every month. Each woman has a different menstrual cycle, normally in one cycle approximately every 28 days, can fluctuate 7 days and total blood loss between 60 to 250 mm. Menstruation is said to be abnormal when a woman experiences menstruation for a long period of time. In general, women only experience menstruation once a month, but in some cases, there are those who experience up to two periods each month. This condition is called abnormal menstruation which causes anemia (Astuti & Kulsum, 2020)

The bride-to-be is a couple who will get married. The prospective bride and groom can be said to be a couple who do not have a bond, either by religion or state law and the couple is in the process of getting married and the process of fulfilling the requirements in completing the data needed for marriage (Balitbangkes, 2018)

In line with research conducted by (Almuna Kusuma, 2016) This study used the observational method with a cross-sectional research design. The research subjects are prospective brides in Sedayu District, Bantul. The number of samples used is 77 respondents. The sampling technique uses Quota Sampling. The measuring instrument used is HB digital. The results of the study obtained that the most anemia age was at risk age < 20 and > 35 years with a percentage of 71.4%, while the lowest anemia was at the age not at risk of 20-35 years with a percentage of 58.7%. The results of the analysis using Chi-square show a p-value of 0.378, so H_0 is accepted, which means there is no significant relationship.

According to researchers, lack of knowledge of anemia can affect the quality of health in premarital women. Lack of knowledge will result in less optimal adolescent health behavior to prevent anemia. The level of knowledge that determines food consumption behavior is obtained through nutrition education which is generally considered better given as early as possible to increase knowledge and improve food consumption habits.

The results of the research conducted can be seen that respondents with good knowledge but still experience anemia at pre-marital age is caused because respondents say they already know the problem about anemia but experience a lack of appetite and always stay up late, and are restless before their wedding. While the knowledge is

sufficient but many who do not experience anemia always pay attention to the consumption of foods that are high in nutrition because of the availability of food at home, and parents always pay attention to the food patterns and rest patterns of the respondents.

CONCLUSION

The most knowledge category is sufficient knowledge as many as 45 (42.9%) respondents. The highest frequency of anemia in pre-married women did not experience anemia as many as 58 (55.2%) respondents. The category of good knowledge level that does not experience anemia is 14 (13.3%), who has anemia as many as 18 (17.1%), while the category of sufficient level of knowledge that does not experience anemia is 32 (30.5%), who has anemia as many as 13 (45.0%), the category of poor knowledge level does not experience anemia as many as 12 (11.4%) respondents and 16 (15.2%) respondents who experience anemia, np-value 0.017 < α (0.05) means that H_a accepts and H_0 is rejected.

SUGGESTION

Respondents are expected to consistently pay attention to their health by undergoing premarital health examinations, particularly related to anemia, and by maintaining a healthy dietary pattern. Premarital women are also encouraged to actively seek information through social media regarding anemia and the complications that may arise if anemia is not properly managed.

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