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AN OVERVIEW OF GENERAL CONDITION AND RISKY BEHAVIOR IN PROSPECTIVE BRIDES

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ABSTRACT

Risk factors for maternal mortality such as Chronic Energy Deficiency (CED), Anemia, and risky behavior should be detected before conception occurs. Preconception screening is one way to break up delays in the early detection of pregnancy risk factors, which has only just begun to be carried out at the time of Antenatal Care (ANC) examinations. Preconception screening is the key to planning a healthy pregnancy to avoid the threat of disease during pregnancy before organogenesis. This study aims to describe the results of general condition examinations and risky behavior in prospective brides at the KUA Kedungkandang. The research method used is descriptive quantitative with a systematic random sampling technique. Data collection was carried out by examining the general condition including age, BMI, MUAC, and hemoglobin levels. Meanwhile, risky behaviors which include smoking habits, consumption of alcohol and illegal drugs, sexual behavior, and tattoos are screened using a questionnaire. The data analysis used was descriptive analysis with the following conclusions: most respondents have good general condition examination results and most respondents (85%) do not have risky behavior. Based on the research results, preconception screening should be carried out on every prospective brides so that detection of general conditions and risky behavior positively impacts future pregnancies.

Keywords:

Preconception Screening, General Condition, Risky Behavior, Prospective Brides



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INTRODUCTION

The preconception period is the period before the meeting of the sperm cell with the ovum or before pregnancy (Dieny *et al.*, 2019). Preconception screening is carried out before fertilization occurs, before organogenesis. Preconception screening is one way to break the

delay in the early detection of risk factors in pregnancy during Antenatal Care (ANC). Assessment of general examination, complete physical examination, routine blood examination, and examination of several inherited diseases, are activities carried out during preconception screening (SDKI, 2017). Detection of risk factors causing maternal death such as Chronic Energy Deficiency (CED), Anemia, and risky behavior should be detected before conception. The results of Riskesdas (2018) stated that 48.9% of pregnant women had anemia, which as many as 84.6% of anemia in pregnant women occurred in the age group 15-24 years old. The prevalence of non-pregnant women with CED in East Java is 13.9%, while the average number in national is 14.5%. The data of smoking habit in East Java recorded as many as 27.1%, meanwhile this number is exceeds the average number of smoking habit in the national level, which is 24.3%. And the highest alcohol consumption was dominated by the age of 20-24 years old, which was 6.3%.

In 2020, the most common causes of maternal death are bleeding, specifically 1,330 cases, hypertension during pregnancy, 1,110 cases, and disorders of the circulatory system, 230 cases (Kemenkes RI, 2021). Other supporting data recorded that according to the 2020 East Java Health Profile, the number MMR is hypertension, followed by bleeding and infection. Meanwhile, the MMR in the Malang city was dominated by groups that were pregnant under 20 years old and over 35 years old. Of the total maternal mortality cases, the causes of MMR in Malang are infection (4 cases), bleeding (2 cases) and hypertension in pregnancy (1 case). Simbolon *et al.*, (2018), explained that the impact of chronic energy deficiency will contribute to anemia, bleeding, infection, and other complications that can increase maternal and neonatal mortality. Therefore, for mothers-to-be, an adequate and balanced nutrition has an impact on general health during conception and pregnancy. The detection of general conditions, including screening for anemia and nutrition, should be carried out before conception, to enhance pre-fertilization nutrition. Behavioral factors that contribute to increase the incidence of hypertension are smoking habits (Nurhaeni *et al.*, 2022), alcohol consumption in the past month (Taroreh G Grace *et al.*, 2018), caffeine consumption such as coffee (Sari *et al.*, 2022), and lack of physical activity (Helni, 2020).

Preconception screening is a preventive examination that is included in the health paradigm. Generally, Indonesian people check their health only when they are sick, so there is no initiative to maintain health. The results of research by Atrash and Jack, (2020) in "Preconception Care to Improve Pregnancy Outcomes: The Science" stated that there is a relation between preconception care and improving health during pregnancy and newborns. The

care before, during, and after delivery is known to save more lives for mothers and newborns.

The benefits obtained from preconception screening are reduce MMR and Infant Mortality Rate (IMR), prevent unwanted pregnancy (unintended pregnancy), prevent infection in neonates, prevent the incidence of Low Birth Weight (LBW) and stunting, reduce the risk of diabetes and cardiovascular disease in pregnancy, as well as preventing the transmission of Human Immunodeficiency Virus (HIV) from mother to fetus (World Health Organization, 2012). The preconception examination that is carried out is an examination of general conditions, including age, BMI, upper arm circumference (UAC), hemoglobin levels, and screening for risky behaviors. Therefore, preconception examination is the key to plan a healthy pregnancy to avoid the risks of pregnancy disease before organogenesis occurs, so that the process of fetal organ development is not exposed to risk factors. .

Currently, the Indonesian government has made mandatory preconception screening which has been stated in the Regulation of the Minister of Health (Permenkes) of the Republic Indonesia number 97 of 2014 concerning health services for the period before pregnancy, during pregnancy, childbirth, and the period after giving birth, the implementation of contraceptive services, and health services. sexual. However, at this time, preconception screening in Indonesia has not run optimally and is still not mandatory implemented by the government. The decision to require preconception screening is adjusted to the policies of each sub-district Kantor Urusan Agama (KUA) in Indonesia. The fact is, in KUA Kedungkandang, preconception screening has not yet been implemented. In addition, the Kedungkandang area is a vulnerable area for the spread of narcotics and alcohol. This is supported by data from the Malang City Health Profile in 2019 which stated that in Kedungkandang there were 19 cases of newborn death and 124 cases of LBW. Based on the explanation that has been mentioned above, the purpose of this research is to know the description of the general condition and risky behavior of prospective brides at the KUA Kedungkandang.

METHOD

This research was conducted at the Kedungkandang KUA. Data collection was carried out in March-April 2022. The research design used was quantitative descriptive. This study aims to describe the health phenomena that occur, namely the general condition and risky behavior of prospective brides at the KUA Kedungkandang. The research population was prospective brides who had registered at <https://simkah.kemenag.go.id/> in March-April 2022. The sample used in this study was calculated using the Slovin formula and a total of 72 female

prospective brides were obtained. The sampling technique used is systematic random sampling. Samples were taken based on predetermined interval distances, namely 2. So that the samples taken were respondents with serial numbers 2,4,6,8,...etc. The inclusion criteria in this study were prospective brides who registered their first marriage in March-April 2022. Exclusion criteria in this study were prospective brides who were not willing to have their hemoglobin levels checked.

Data collection used a questionnaire adapted from the Kescatin android application belonging to the Ministry of Health in the "Check Eligibility for Pregnancy" section. The researcher created a questionnaire that only examined 2 indicators from 12 indicators of cathartic health in the Kescatin application, namely general conditions and risky behavior. The contents of this questionnaire have been validated by the two thesis supervisors, and validity and reliability tests have been carried out on prospective brides at KUA Lowokwaru with as many as 30 people. Based on the results of the validity and reliability test of the questionnaire, the risky behavior variable obtained 6 valid items and 6 reliable items. In the smoking indicator, there is 1 valid and reliable item. There are 2 valid and reliable items for indicators of alcohol and drug use. In the sexual behavior indicator, there are 2 valid and reliable items. In the tattooed indicator, there is 1 valid and reliable item.

The data analysis used is quantitative descriptive analysis. This research has received approval from the ethics committee of the Health Polytechnic of the Ministry of Health of Malang with the number Reg.No: 368/KEPK-POLKESMA/2022.

RESULTS

The results of this study contain general data and specific data. The general data presenting general characteristics in prospective brides at KUA Kedungkandang.

General Data

Table 1. Characteristics in Prospective Brides at KUA Kedungkandang (n = 72)

Characteristics	f	%
Education:		
Elementary School	19	26,4
Junior High School/MTs/SLTP	13	18,1
High School/MA/SLTA	25	34,7
University	15	20,8
Total	72	100,0
Employment:		
Unemployed	25	34,7
Self-employed (Wiraswasta)	12	16,7
Farmer	6	8,3

Private sector employee (Swasta)	21	29,2
Private Civil Servants (PNS)	2	2,8
Others	6	8,3
Total	72	100,0

Based on table 1, it presents that as many as 34.7% of respondents have completed their education in Senior High School/MA, and as many as 34.7% of the respondents were unemployed.

Specific Data

Table 2. General Conditions in Prospective Brides at KUA Kedungkandang (n = 72)

General Conditions	f	%
Marriage Age		
Too young (< 20 years old)	4	5,6
Ideal (20-35 years old)	66	91,6
Too old (>35 years old)	2	2,8
Total	72	100,0
BMI		
Severe underweight	1	1,4
Underweight	3	4,2
Normal	44	61,1
Overweight	5	6,9
Obese	19	26,4
Total	72	100,0
MUAC		
CED	9	12,5
Non-CED	63	87,5
Total	72	100,0
Hemoglobin Levels		
Non-Anemia	56	77,8
Mild Anemia	8	11,1
Moderate Anemia	8	11,1
Total	72	100,0

Based on Table 2, there are still 5.2% who marry at an early age and 2.8% marry too old, 38,9% respondent have abnormal BMI, 12.5% respondents have CED, and 22% respondents have anemia.

Table 3. Risky Behavior in Prospective Brides at KUA Kedungkandang (n = 72)

Categories	f	%
At Risk	6	8,3
Not Risky	66	91,7
Total	72	100

Based on Table 3 it can be seen that as many as 91.7% of respondents have no risky behavior and as many as 8.3% of respondents have risky behavior.

Table 4. Risky Behavior Indicators Measured in Prospective Brides at KUA Kedungkandang (n = 72)

Categories	f	%
Smoking		
Yes	4	5,5
No	68	94,5
Total	72	100,0
Use of alcohol and illegal drugs		
Yes	4	5,5
No	68	94,5
Total	72	100,0
Risky Sexual Behavior		
Yes	5	6,9
No	67	93,1
Total	72	100,0
Tattooed		
No	72	100,0
Total	72	100,0

Based on Table 4 it is known that as much as 94.5%. Respondents do not smoke, but 5.5% of respondents smoke. In the indicators of alcohol and drug use, 94.5% of respondents did not consume alcohol and illegal drugs but as many as 5.5% of respondents consumed alcohol and illegal drugs. In the sexual behavior indicator, 93.1% of respondents did not have risky sexual behavior, but 6.9% of respondents had risky sexual behavior. On the tattooed indicator, 100% of respondents do not have tattoos.

DISCUSSION

General Conditions in Prospective Brides at KUA Kedungkandang

Marriage Age

Identification of age at marriage in brides-to-be is a form of early prevention of risky pregnancies and childbirths. From the results of research at KUA Kedungkandang, as many as 91.6% of respondents married at the ideal age (aged 20-35 years). Manuaba in Nufra & Yusnita (2021) classifies reproductive age as too young (<20 and >35 years old). Both of these ages fall into category 4 too in pregnancy causing risks in pregnancy and childbirth. Therefore, the ideal age to reproduce is in the age range of 20-35 years. Most of respondents' marriages occurred in their early 20s (20-24 years), this is because at that age most respondents have completed their education and have stable jobs. In line with the research conducted by Nwamadi (2022), some

socioeconomic factors that affect the quality and stability of marriage are the couple's income level, employment status, educational qualifications, and social status of the couple. The encouragement of parents and culture that says the term old virgin if a woman is unmarried at the age of more than 25 years is one of the strong factors for respondents to decide to marry in their early 20s.

On the other hand, as many as 5.6% of respondents married at too young an age (<20 years). Based on extracting information from respondents, the reason respondents get married early is because of religious beliefs to avoid adultery by marriage. Research conducted by Djubaedah (2019), that marrying young is a solution used to avoid the problem of adultery in society. In addition, respondents' lack of knowledge of reproductive health and marriage preparation is an inhibiting factor for marriage at an ideal age. In line with research conducted by Baigry et al., (2023) that social stigma and judgmental attitudes among family and community members, including health service providers, can hinder unmarried young individuals in Pacific Island Countries and Territories from accessing sexual health information and reproduction and contraception. The introduction of rational contraceptives should be given to the respondent so that the respondent already has a little idea of what contraceptives are used after marriage, mainly to delay pregnancy. IEC on the impact of pregnancy at a young age was also conveyed so that respondents were able to decide to postpone pregnancy rationally for the health of themselves and their prospective fetuses. Rahman *et al.*, (2018), stated that sexual activity at an early age can increase the occurrence of Sexually Transmitted Diseases (STDs), prematurity, complications of pregnancy and childbirth, and others. This is because the uterus is the most underdeveloped organ that requires progressive maturation before the onset of pregnancy. By the research of Yang & Chen (2021), adequate uterine development is a requirement for the formation of pregnancy. Adequate function of the placenta is essential for developmental progress during fetal intrauterine development.

As many as 2.8% of respondents married for the first time at too old age (>35 years). Based on extracting information on respondents, one of the reasons respondents get married at this age is that respondents have only found a potential partner who suits their wishes at this time. Mothers who are over 35 years old, the uterus and other parts of the body experience a decrease in function and the health of the mother's body is not as good as when she was between 20 and 35 years old. Pregnancy at the age of ≥ 35 years according to research conducted by Peteiro-Mahía *et al.*, (2022) has a risk of gestational diabetes, hypertension, prematurity,

Intrauterine Growth Restriction (IUGR), and cesarean delivery. Therefore, to minimize the increased risk, respondents are advised to check their pregnancies regularly and more frequently.

Body Mass Index (BMI)

Based on the results of the study, as much as 61.1% pregnant women have a normal BMI (18.5-25.0). Based on extracting information on respondents, the thing that supports respondents to have a normal BMI is to have a regular diet and a good diet. In line with the research of Sattar et al., (2018), BMI was found above 30 in respondents who ate more than 3 times/day compared to respondents who ate twice / day. This suggests that diet affects BMI outcomes. According to the research of Gul et al., (2020), shows that neonatal growth parameters are directly related to preconception BMI. Mothers with BMI <18.5 tend to give birth to low-birth-weight babies and mothers with overweight and obesity give birth to macrosomia babies. Maintaining a BMI in the normal category is a way for prospective brides to prepare for pregnancy and the birth of a physically healthy baby with sufficient weight.

On the other hand, as many as 4.2% of respondents have a thin BMI (17 to <18.5). The BMI of thin pregnant women requires more BB gain during pregnancy than normal women, which is at least 12-18 Kg during pregnancy (Institute of Medicine, 2015). For mothers with a preconception BMI that is lacking but experiencing inappropriate weight gain, it can be bad for both mother and baby. The mother may develop anemia, difficulty in childbirth, and bleeding at the time of delivery. Infants can develop anemia, babies with low birth weight, as well as newborns with low health status (ICSU & ISSC, 2015). In prospective bride with a thin BMI, it is recommended to increase food intake as in the 10 Balanced Nutrition Messages, namely consuming food diversity, eating a lot of vegetables and enough fruits, consuming side dishes that contain high protein, consuming diverse staple foods, limiting the consumption of sweet, salty and fatty foods, getting used to breakfast, drinking enough water, getting used to reading nutritional content labels on food packaging, Washing hands with soap with clean running water, doing enough physical activity and maintaining a normal weight.

As many as 6.9% of people have a fat/obese type 1 with BMI (>25.0 to 27.0), and as many as 26.4% of respondents have an obese/obese type 2 with BMI (>27). Respondents said that these days it is often not exercised even if it is just jogging in the morning. Food intakes remained, even more, but activity was reduced due to the demands of work in front of screens. In line with research conducted by Kazmi *et al.*, (2022) that as many as 66.6% of respondents who did not do moderate physical activities such as cycling, aerobics, and other light sports, were overweight or obese. According Yeşilçiçek Çalik *et al.*, (2018) said that being overweight

and obese in the preconception period causes gestational diabetes, hypertensive disease, premature labor, induction of birth, birth complications, increased cesarean delivery, postpartum hemorrhage, thromboembolism, breastfeeding problems, and depression. In addition to having an impact on the mother, obesity can cause large birth weight babies (> 4,000 g) or macrosomia.

Mid-Upper Arm Circumference (MUAC)

As many as 87.5% of respondents have a normal MUAC, which is in a size of ≥ 23.5 cm. This means that most respondents do not experience CED. Mothers who do not have CED have a lower risk of giving birth to babies with BBLR. Pregnant women with enough energy will gain weight according to their gestational age and the baby is born healthy (Fatimah and Yuliani, 2019). Meanwhile, as many as 12.5% of respondents have LiLA below 23.5 cm, meaning that respondents have insufficient nutritional status and are classified as CED.

CED can be experienced by women of childbearing age (WUS) aged 15-45 years since adolescence then continue during pregnancy and lactation due to low energy and nutrient reserves (Paramata and Sandalayuk, 2019). CED in pregnant women can cause risks and complications in mothers including anemia, bleeding, not gaining weight normally, and developing infectious diseases. The effect of CED on the delivery process can result in difficult and Prolonged labor, premature delivery, bleeding after childbirth, and cesarean delivery tend to increase. Therefore, prospective brides with MUAC below 23.5 cm are expected to have further check-ups at the Health Center or other health facilities to get nutritional counseling and delay pregnancy until MUAC examination categories as normal, so that the risk of pregnancy to both mother and fetus can be avoided.

Hemoglobin Levels

Based on the results of the study, as many as 77.8% of respondents had normal hemoglobin levels (≥ 12 g / dL) and did not experience anemia. From the results of extracting information on respondents, brides-to-be who have normal hemoglobin levels are known to have food intakes that contain a lot of iron, for example, sea fish and spinach. Many of the respondents were happy with guava juice which is known to contain vitamin C. In line with the research of Rista Andaruni and Nurbaety (2018), vitamin C can help reduce ferrous iron (Fe^{3+}) to ferrous (Fe^{2+}) in the small intestine so that it can facilitate the absorption of iron in the body. In addition, prospective brides take blood-added tablets during menstruation because

during school they once received socialization about taking blood-added tablets during menstruation to replace the lost blood.

From the research data, as many as 11.1% of respondents had mild anemia (11-11.9 g/dL), and 11.1% of respondents had moderate anemia (8-10.9 g/dL). Respondents with mild or moderate anemia said they did not into vegetables and only consumed blood-added tablets if they felt there were symptoms of anemia such as weakness, fatigue, and lethargy. This is known from several respondents with lower hemoglobin levels, often drinking tea and caffeinated drinks. The coffee shop phenomenon that is rife at this time triggers teenagers and adults to work and gather in cafes that provide various kinds of processed coffee. Data from the Indonesian Coffee Commodity Plantation Statistics (2020), shows that in 2019 domestic coffee consumption increased to 1.13 Kg/capita/year. In addition, the habit of drinking coffee among teenagers or adults is triggered by the addiction to caffeine contained in coffee. By Anwari (2018), the continuous consumption of coffee causes the body to experience caffeine addiction, so the physical state of the body will experience a decrease in performance if there is no intake of caffeine from coffee. Because already experiencing addiction, coffee consumption is a physiological need that cannot be abandoned. Preconception women rarely know the impact of coffee on anemia. In line with research conducted by Widya (2020), tea and coffee contain tannins which can bind minerals (including iron) and polyphenols as antioxidants that have undergone oxidation so that they can bind minerals such as Fe, Zn, and Ca which causes reduced absorption of nutrients. iron, so iron is not absorbed in the small intestine and is wasted in feces. Respondents who tend to consume caffeinated drinks should reduce their frequency. If this behavior is carried out continuously but not balanced with the intake of foods that contain iron or iron supplements, it will cause anemia.

Risky Behavior in Prospective Brides at KUA Kedungkandang

The risky behaviors studied in this study were smoking behavior, alcohol and drug use, sexual behavior, and tattooing. Overall, 91.7% did not have risky behaviors, and as many as 8.3% of respondents had risky behaviors spread across various research indicators which will be described as follows:

Smoking Behavior

Based on the results of the study, as many as 94.5% of respondents did not have smoking behavior. Based on extracting information on respondents, searching for health information about the impact of cigarettes is one of the causes of respondents not smoking. In line with the

research of Liang *et al.*, (2022), anti-smoking information can provide knowledge about the risks of smoking to reduce the possibility of smoking behavior. In addition, the respondent's statement said that in society there is labeling on women smokers, namely naughty women. This causes respondents to avoid smoking behavior. Even so, as many as 5.5% of respondents smoke. Smokers fall into the category of risky behaviors. Respondents said consciously that smoking is an unhealthy behavior, but they could not avoid cigarettes because of the notion that cigarettes are a form of releasing stress. Research conducted by Jahnel *et al.*, (2019) that smoking is a response in the face of problems or stressors of social and economic life. However, respondents said they had the intention to quit smoking if there were plans to get pregnant. Meanwhile, the health risks caused by cigarettes cannot disappear on the spot because cigarettes cause health problems in the long run. Pregnant women who smoke will increase the risk of spontaneous abortion, Low birth weight babies, SIDS (Sudden Infant Death Syndrome), placental abruption, and premature birth (McDonnell and Regan, 2019). Therefore, in addition to being given counseling to quit smoking immediately, health workers should assess how high the respondent's addiction to cigarettes is, how persistent they want to quit smoking, help get out of smoking behavior, and perform regular health follow-ups. Assistance may be in the form of offers of pharmacotherapy or additional counseling.

Alcohol and Drug Use Behavior

From the results of the study, as many as 94.5% of respondents did not have the behavior of consuming alcohol and illegal drugs. Based on extracting information on respondents, it is known that during school days, respondents get learning that explains the impact of alcohol and illegal drug use into additional science. This influences respondents to adopt a healthy lifestyle by avoiding alcohol and illegal drugs. In line with Notoatmodjo's statement (2012), one's knowledge has levels of knowledge, understanding, application, analysis, synthesis, and evaluation. So that there is an increase in good knowledge, one of which is about the adverse effects of alcohol and illegal drugs, triggering the ability of respondents to give a bad assessment of the use of alcohol and drugs. This assessment led respondents to avoidance and avoidance behavior because they did not want to experience the adverse effects of consuming alcohol and drugs.

Meanwhile, as many as 5.5% of respondents consumed types of illegal drugs, one of which was excessive caffeine consumption. Several respondents said that in a day can drink more than 4 cups of coffee and more than 8 cups of tea. Based on extracting information on respondents, so far respondents do not know that caffeine consumption that is more than normal

levels is a risky behavior. They consider that caffeine is not included in the class of substances and drugs that can harm the body. For respondents, drinking caffeine can improve their ability to think and improve their mood. In line with the research of Haskell-Ramsay *et al.*, (2018), caffeine and energy drinks have a positive effect in improving mood, relieving stress, increasing alertness, and improving work performance. The European Food Safety Authority (EFSA), also noted that caffeine consumption can improve attention and work performance. However, if caffeine consumption is done excessively, which is >400 mg per day, or more than 4 cups of coffee, and more than 8 cups of tea, it will cause a lot of losses. At doses of more than 300 mg of caffeine per day (equivalent to caffeine contained in 2-3 cups of coffee) it can cause spontaneous abortus or disturbances in the baby's heart rate rhythm.

Respondents with alcohol consumption habits said that in one week more than 3x drinking, even more if they are in a state of stress. Respondents thought that alcohol was a stimulant drink that could increase euphoria. Whereas ethanol is a depressant of the central nervous system that results in a decrease in behavior patterns and a spontaneous decrease in motility (Sofidiya *et al.*, 2022). In addition, the impact of alcohol on pregnant women is a miscarriage, stillbirth, and various physical, behavioral, and intellectual disabilities for life. All of these complications are known as the result of fetal alcohol spectrum disorders, or Fetal Alcohol Spectrum Disorders (FASDs) (Dejong, Olyaei, and Lo, 2019). The dose of alcohol consumption in pregnant women to date has not been ascertained.

Sexual Behavior

Based on the results of the study, as many as 93.1% of respondents did not have risky sexual behaviors, such as having premarital sexual intercourse and oral sex. Sexual behavior is a form of behavior based on sexual desire, both with the opposite sex and the same sex to obtain pleasure/pleasure in the sexual organs (Darmayanti.Y, 2018). Respondents said that premarital sexual behavior is behavior that is not allowed in religion. The function of religious attitudes in religion is as a system of regulating life following religious values. By research conducted by Sari (2019), that religious rules are given so that man remains in the way of his god.

Although most respondents did not have risky sexual behaviors, there were still 6.9% of respondents with risky sexual behaviors. Respondents said before marriage they had had several sexual relations with their partners. Based on extracting information on respondents, this is driven by the assumption that the partner will not leave the respondent if they have premarital sexual relations. The existence of dependence on the partner, and lack of understanding of self-worth in respondents became the basis for premarital sexual relations. Low self-esteem reflects

self-rejection, self-dissatisfaction, and self-contempt. As in the research conducted by Madjid (2020), women who have high self-esteem, value virginity more and tend to have good sexual behavior and vice versa. That is, individuals with low self-value tend to engage in risky sexual behaviors because there is no appreciation for themselves. The impact of risky sexual behavior is contracting STDs including HIV/AIDS due to unsafe sex, such as the habit of changing partners and having anal sex. So it is susceptible to contracting sexually transmitted diseases such as syphilis, gonorrhea, herpes, chlamydia, and AIDS. In line with the research conducted by Tang *et al.*, (2020), chlamydia infection has an impact on increasing preterm labor, perinatal death, stillbirth, IUFD, and LBW.

Tattooed

The results showed that all respondents (100%) did not have tattoos. Respondents said that society's view of people with tattoos is an unkind identity and is often associated with rebellious attitudes. In addition, the respondent also said that in religion it is forbidden to have tattoos, causing the respondents to have no tattoos. In line with the research of *et al.*, (2018), tattoo art is considered destructive because it hurts, tortures, and leads to the act of changing God's creation. In addition, as has been the study that has been carried out by Temiz and Özlü (2021), tattoos can have a complement of infectious, inflammatory, or carcinogenic conditions. The use of color pigments that are not skin-friendly, there is no aseptic action before tattoo application, and syringes that are long used cause bacteria to be better able to stick to the surface of the needles which can increase the risk of infection (Asztalos and Leveles, 2020).

CONCLUSION

Most of the prospective brides have non-risk behavior, but there are still prospective brides who marry at an early age, marry too old, have an abnormal BMI, experience KEK, and have mild and moderate anemia, although in smaller numbers. This is a challenge for health workers to continue to promote screening behavior to primary health services for at-risk prospective brides to get timely services before planning a pregnancy. For future researchers, it is hoped that they can research the prospective bride and groom so that the research is carried out more thoroughly and can identify the health risks experienced by both the bride and groom.

ABBREVIATIONS

AIDS (*Acquired Immunodeficiency Syndrome*), FASDs (*Fetal Alcohol Spectrum Disorders*), HIV (*Human Immunodeficiency Virus*), IUFD (*Intrauterine Fetal Death*), KUA (Kantor Urisan

Agama), CED (Chronic Energy Deficiency), WUS (Wanita Usia Subur), BMI (Body Mass Index).

COMPETING INTEREST

Researchers have the same interest in the general conditions and risks of prospective brides not only in the Kedungkandang area but in a wider coverage area.

AUTHORS' CONTRIBUTION

The first author made corrections to the results of this study and the correspondent writer was the research data collector.

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REFERENCES

- Anwari, S. R. (2018) 'Perilaku konsumsi kopi di kalangan mahasiswa di kafe sepanjang jalan kalpataru kota malang', *Jurnal Ilmiah Mahasiswa Fakultas Ekonomi dan Bisnis*, 6(2), pp. 1–14.
- Asztalos, L. and Leveles, B. (2020) 'Damage Analysis of Tattoo Needle Tips', *Acta Materialia Transylvanica*, 3(1), pp. 15–19. doi: 10.33924/amt-2020-01-03.
- Atrash, H. and Jack, B. (2020) 'Preconception Care to Improve Pregnancy Outcomes: The Science', *Journal of Human Growth and Development*, 30(3), pp. 355–362. doi: 10.7322/jhgd.v30.11064.
- Badan Penelitian dan Pengembangan Kesehatan (2018) 'RISKESDAS 2018_FINAL.pdf', *Badan Penelitian dan Pengembangan Kesehatan*, p. 198. Available at: http://labdata.litbang.kemkes.go.id/images/download/laporan/RKD/2018/Laporan_Nasional_RKD2018_FINAL.pdf.
- Darmayanti, Y., S. (2018) 'Faktor Penyebab Perilaku Laki-Laki Suka Berhubungan Seks Dengan Laki-Laki (LSL) Di Kota Bukittinggi', *Jurnal Endurance*, 3(2), pp. 213–225.
- Dejong, K., Olyaei, A. and Lo, J. O. (2019) 'Alcohol Use in Pregnancy', *Clinical Obstetrics and Gynecology*, 62(1), pp. 142–155. doi: 10.1097/GRF.0000000000000414.
- Dieny, Fillah Fithra; Rahadiyanti, Ayu; Kurniawati, D. M. (2019) *Gizi Prakonsepsi*. Jakarta: Bumi Medika.
- Fatimah, S. and Yuliani, N. T. (2019) 'Hubungan Kurang Energi Kronis (Kek) Pada Ibu Hamil Dengan Kejadian Berat Bayi Lahir Rendah (Bblr) Di Wilayah Kerja Puskesmas Rajadesa Tahun 2019', *Journal of Midwifery and Public Health*, 1(2). doi: 10.25157/jmph.v1i2.3029.

- Haskell-Ramsay, C. F. *et al.* (2018) 'The Acute Effects of Caffeinated Black Coffee on Cognition and Mood in Healthy Young and Older Adults', *Nutrients*, 10(10). doi: 10.3390/nu10101386.
- Helni, H. (2020) 'Faktor Yang Berhubungan dengan Kejadian Hipertensi di Provinsi Jambi', *Jurnal Kesehatan Masyarakat Indonesia*, 15(2), p. 34. doi: 10.26714/jkmi.15.2.2020.34-38.
- Jahnel, T. *et al.* (2019) 'Daily stress as link between disadvantage and smoking: An ecological momentary assessment study', *BMC Public Health*, 19(1), pp. 1–8. doi: 10.1186/s12889-019-7631-2.
- Kazmi, T. *et al.* (2022) 'Relationship Between Physical Inactivity and Obesity in the Urban Slums of Lahore.', *Cureus*, 14(4), p. e23719. doi: 10.7759/cureus.23719.
- KEMENKES RI (2021) *Profil Kesehatan Indonesia 2020*, Kementerian Kesehatan Republik Indonesia. Available at: <https://pusdatin.kemkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/Profil-Kesehatan-Indonesia-Tahun-2020.pdf>.
- KOMISI PENGAWAS PERSAINGAN USAHA (2020) 'Penelitian Pelaku Usaha dan Struktur Pasar Pada Komoditas Kopi', *Jurnal Pengawas Persaingan Usaha*, 10(02), pp. 1–12. Available at: <https://kppu.go.id/wp-content/uploads/2021/01/Kopi-Ringkasan-Eksekutif.pdf>.
- Liang, Y. C. *et al.* (2022) 'Influence of Personal, Environmental, and Community Factors on Cigarette Smoking in Adolescents: A Population-Based Study from Taiwan', *Healthcare (Switzerland)*, 10(3). doi: 10.3390/healthcare10030534.
- Madjid, M. A. (2020) 'Harga Diri Dan Virginity Value Dengan Perilaku Seksual Pra Nikah Pada Remaja Putri', *Psikoborneo: Jurnal Ilmiah Psikologi*, 8(4), p. 767. doi: 10.30872/psikoborneo.v8i4.5581.
- McDonnell, B. P. and Regan, C. (2019) 'Smoking in pregnancy: pathophysiology of harm and current evidence for monitoring and cessation', *The Obstetrician & Gynaecologist*, 21(3), pp. 169–175. doi: 10.1111/tog.12585.
- Notoatmodjo (2012) *Pendidikan dan Perilaku Kesehatan*. Jakarta: Rineka Cipta.
- Nurhaeni, A., Aimatun Nisa, N. and Marisa, D. E. (2022) 'Literature Review Hubungan Merokok Dengan Kejadian Hipertensi', *Jurnal Kesehatan Mahardika*, 9(2), pp. 46–51. doi: 10.54867/jkm.v9i2.110.
- Paramata, Y. and Sandalayuk, M. (2019) 'Kurang Energi Kronis pada Wanita Usia Subur di Wilayah Kecamatan Limboto Kabupaten Gorontalo', *Gorontalo Journal of Public Health*, 2(1), p. 120. doi: 10.32662/gjph.v2i1.390.
- Peteiro-Mahía, L. *et al.* (2022) 'Advanced Maternal Age as an Obstetric Risk Factor: Current Experience in a Hospital from Northwestern Spain', *Acta Medica Portuguesa*, 35(13), pp. 550–557. doi: 10.20344/amp.16550.
- Rahman, M. L. *et al.* (2018) 'Prenatal arsenic exposure, child marriage, and pregnancy weight gain: Associations with preterm birth in Bangladesh.', *Environment international*, 112, pp. 23–32. doi: 10.1016/j.envint.2017.12.004.

- Rista Andaruni, N. Q. and Nurbaety, B. (2018) 'Efektivitas Pemberian Tablet Zat Besi (Fe), Vitamin C Dan Jus Buah Jambu Biji Terhadap Peningkatan Kadar Hemoglobin (Hb) Remaja Putri Di Universitas Muhammadiyah Mataram', *Midwifery Journal: Jurnal Kebidanan UM. Mataram*, 3(2), p. 104. doi: 10.31764/mj.v3i2.509.
- Sari, D. A. (2019) 'Makna Agama dalam Kehidupan Modern', *Cakrawala: Jurnal Studi Islam*, 14(1), pp. 16–23. doi: 10.31603/cakrawala.v14i1.2483.
- Sari, F., Reni Zulfitri and Nopriadi (2022) 'Hubungan Kebiasaan Konsumsi Kopi dengan Tekanan Darah pada Lansia Riwayat Hipertensi', *Jurnal Vokasi Keperawatan (JVK)*, 5(2), pp. 138–147. doi: 10.33369/jvk.v5i2.24114.
- Satria, B., Matheosz, J. N. and Mamosey, W. E. (2018) 'Nilai Budaya Tattoo pada Kalangan Anak Muda Kota Manado', (22), pp. 1–17.
- SDKI (2017) 'Survei Demografi Dan Kesehatan : Kesehatan Reproduksi Remaja 2017', *Badan Kependudukan dan Keluarga Berencana Nasional*, pp. 1–606. Available at: <http://www.dhsprogram.com>.
- Simbolon D. (2018) *Modul Edukasi Gizi Pencegahan Dan Penanggulangan Kurang Energi Kronik (Kek) Dan Anemia Pada Ibu Hamil.*, Deepublish; Yogyakarta: CV. Budi Utama.
- Sofidiya, M. O. *et al.* (2022) 'Central nervous system depressant activity of ethanol extract of *Motandra guineensis* (Thonn) AD. aerial parts in mice', *Phytomedicine Plus*, 2(1), p. 100186. doi: 10.1016/j.phyplu.2021.100186.
- Tang, W. *et al.* (2020) 'Pregnancy and fertility-related adverse outcomes associated with *Chlamydia trachomatis* infection: a global systematic review and meta-analysis.', *Sexually transmitted infections*, 96(5), pp. 322–329. doi: 10.1136/sextrans-2019-053999.
- Taroreh G Grace, Angela F.C Kalesaran, W. P. . K. (2018) 'Hubungan Antara Konsumsi Alkohol Dengan Kejadian Hipertensi Pada Pasien Rawat Jalan Di Puskesmas Kolongan Kecamatan Kalawat Kabupaten Minahasa Utara', *Jurnal KESMAS*, 7(5), pp. 1–8.
- Temiz, S. A. and Özlü, E. (2021) 'Medical Complications of Tattoos', *Journal of the Turkish Academy of Dermatology*, 15(1), pp. 1–7. doi: 10.4274/jtad.galenos.2021.02486.
- Widya, Y. (2020) 'Hubungan Antars Konsumsi Teh dengan Kadar Hemoglobin pada Remaja Putri SMA Negeri 1 Banyudono', *Universitas Muhammadiyah Surakarta*, p. 13.
- World Health Organization (2012) 'Preconception Care to Reduce Maternal and Childhood Mortality and Morbidity', *WHO Headquarters, Geneva Meeting report*, p. 78. Available at: https://www.who.int/maternal_child_adolescent/en/.
- Yang, C. and Chen, S. (2021) 'Female Reproductive Failures in Mouse Adolescent Pregnancy'.
- Yeşilçiçek Çalik, K., Korkmaz Yildiz, N. and Erkaya, R. (2018) 'Effects of gestational weight gain and body mass index on obstetric outcome', *Saudi Journal of Biological Sciences*, 25(6), pp. 1085–1089. doi: <https://doi.org/10.1016/j.sjbs.2018.02.014>.