

## The Relationship between the Participation of the Bride and Groom in the Preconception Program with the Presence of Pure K1

Farida Mamik Asih<sup>1</sup>, Titik Suhartini<sup>1</sup>, lit Ermawati<sup>1</sup>

<sup>1</sup>Midwifery Study Program, Stikes Hafshawaty Zainul Hasan, Probolinggo, Indonesia

Correspondence should be addressed to:  
Farida Mamik Asih  
[faridamamik@gmail.com](mailto:faridamamik@gmail.com)

### Abstract:

Reproductive health is the starting point for developing maternal and child health, which can be prepared early on, even before a woman becomes pregnant and a mother. Periconceptional health is part of the overall health between women and men during their reproductive years. This study aims to analyze the relationship between the participation of prospective brides and grooms in the preconception program with the presence of pure K1 in the work area of the Kuripan Health Center, Probolinggo Regency. This quantitative research design uses a correlational design using a cross-sectional study approach with 30 respondents using an accidental sampling technique. Data collection included coding, editing, and tabulating, then analyzed manually and by computer with Uji Chi-Square. Based on data from 30 respondents, most of the bride and groom participated in the preconception program; 19 respondents (63.3%) with the presence of pure K1 18 respondents (60.0%) were present, while one respondent (3.3%) was absent. There was obtained  $p=0.000$ , so there is a relationship between the participation of the prospective bride and groom in the Preconception Program with the Presence of Pure K1 in the Work Area of the Kuripan Health Center, Probolinggo Regency. It is hoped that preconception health care is a treatment that refers to biomedical, behavioral, and social prevention interventions that can increase the chances of having a healthy baby. To be able to create preconceptions, health can be done through preconception screening.

### Article info:

Submitted:  
15-01-2023  
Revised:  
07-06-2023  
Accepted:  
08-06-2023

### Keywords:

bride and groom; preconception program; presence of pure k1

DOI: <https://doi.org/10.53713/htechj.v1i3.28>

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## INTRODUCTION

Reproductive health is a state of complete health, covering physical, mental, and social aspects and not merely the absence of disease or disturbances in all matters relating to the reproductive system, its functions, and the reproductive process itself (Agustin et al., 2022). Reproductive health is the starting point for developing maternal and child health, which can be prepared early on, even before a woman becomes pregnant and a mother. Preconceptional health is part of the overall health between women and men during their reproductive years. Preconceptional health care reduces risks and promotes healthy lifestyles to prepare for healthy pregnancies (World Health Organization, 2014). Besides that, it can also maximize the client's quality of life during the treatment process (Afandi & Kurniyawan, 2017).

Prospective brides who are about to get married are the forerunners of forming a family, so before getting married, the bride and groom need to prepare their health conditions so they can carry out healthy pregnancies they can, give birth to healthy next generations, and create healthy, prosperous, and quality families (Hasanah et al., 2022). The benefits of preconception screening

are reducing maternal and infant mortality, preventing unwanted pregnancies, preventing complications in pregnancy and childbirth, preventing stillbirth, premature and low birth weight babies, preventing birth defects, preventing neonatal infections, preventing underweight and stunting as a result of maternal nutritional problems, reduces the risk of diabetes and cardiovascular disease in pregnancy and prevents the transmission of the Human Immunodeficiency Virus from mother to fetus (Yulivantina et al., 2021). Stunting can be prevented early, even before the marriage occurs so you can prevent it (Ardiana et al., 2021a). This prevention can be the first step to preventing the occurrence of malnutrition, which impacts the incidence of stunting (Ardiana et al., 2019; Ardiana et al., 2021b).

Preconception health care refers to biomedical, behavioral, and social prevention interventions that can increase the chances of having a healthy baby. Creating preconception health can be done through screening preconceptions. Preconception screening is beneficial and positively affects the health of both mother and child. Promoting activities and preventive and curative health interventions greatly improve maternal and child health to benefit adolescents. Both women and men during their reproductive years are physically, psychologically, and socially healthy, regardless of their plans to become parents (World Health Organization, 2014). Preconception screening is an important thing to do before getting pregnant. However, the community does not yet view pre-conception screening as important, so the number of community participants in pre-conception screening is still small (Yulivantina et al., 2022).

Research (Dean et al., 2014) suggests that important topics suggested in preconception care include health education for women and their partners (health promotion), identification of risk factors (risk assessment), and care according to risk factors (interventions) in women and their partners to reduce risk factors that may affect future pregnancies. Preconception care is a program launched by World Health Organisation (WHO) in 2012 in Geneva that aims to reduce maternal, infant, and disability mortality. All countries in the world implement this program. Primarily low and middle-income countries are commonly called low and Middle-Income countries (LMICs), one of which is Indonesia. Countries that have successfully implemented this program are Italy, the Netherlands, and the United States for developed countries and Bangladesh, the Philippines, and Sri Lanka for low-middle-income countries (World Health Organization, 2014). Preconception care has the potential to have a positive impact on 208 million pregnancies worldwide every year (Dean et al., 2014). Preconception care is useful for identifying health problems, lifestyle habits, or unfavorable social problems that might affect pregnancy (Dean et al., 2014). The target of the preconception care program is the bridal couple. The period before conception for the couple is critical to pay attention to prepare for a healthy pregnancy. It also reduces anxiety in couples going to marry about unwanted events after marriage (Putri et al., 2022).

According to the Indonesian Ministry of Health (2015), Pre-pregnancy health services are carried out to prepare women for a healthy and safe pregnancy and childbirth and to have a healthy baby. The researchers conducted a study at each health center. They obtained information that the Kuripan Health Center was the health center with the highest number of women of childbearing age out of 33 health centers in Problinggo District, namely 7135 women of childbearing age (9.02%). Preconception screening services at the Kuripan Health Center consist of physical examinations, psychological examinations, provision of nutritional counseling, and administration of Tetanus immunization toxoid. For the implementation of preconception screening at the Kuripan Health Center from January to March 2022, out of 59 prospective brides, only 86.44% received complete preconception services at the Kuripan Health Center.

K1 visit is the mother's first visit during pregnancy. K1 is divided into pure K1 and access K1. Pure K1 is the first contact of pregnant women with health workers in the 1st trimester. K1 access

is the first contact of pregnant women with non-trimester one health workers (gestational age more than 12 weeks). Pregnancy checks should be done before 12 weeks of gestation (Humune, 2017). K1 coverage covers pregnant women receiving antenatal care in the first trimester. In contrast, K4 coverage is coverage of pregnant women according to standards, at least four times with time distribution, once in the 1st trimester, once in the 2nd trimester, and twice in the 3rd trimester in an area work for a certain period (Damayanti et al., 2022).

Based on a preliminary study in March of 10 newly pregnant women, six pregnant women checked their pregnancies at less than 12 weeks gestation, had attended a bride-to-be class, and had preconception screening before they became pregnant, two new pregnant women said they had never had a screening examination preconception before she became pregnant and, two new pregnant women who had just come for a checkup when the trimester was more than 12 weeks pregnant. The target of pre-pregnancy health services based on Permenkes No. 97 of 2014 is teenagers, prospective brides, and couples of childbearing ages. Based on the results of the study at the Kuripan Health Center, preconception screening services at the Kuripan Health Center were especially emphasized to prospective brides and grooms to prepare the health of the prospective bride and groom physically and mentally facing pregnancy as an effort to prepare healthy pregnant women, reduce maternal and infant mortality. This is in line with the results of research from Dean et al. (2014) that the function of preconception screening is to determine the physical and emotional health status of the mother and partner so that it can be the basis for providing interventions to prepare for optimal pregnancy. Most couples planning a pregnancy can benefit from preconception screening, both for those who only want to provide the best for their baby and to reduce conditions that can endanger pregnancy (Dean et al., 2014). So, this study aims to analyze the relationship between the participation of prospective brides and grooms in the Preconception Program with the Presence of Pure K1 in the Work Area of the Kuripan Health Center, Probolinggo Regency.

## METHOD

This research design is quantitative with a correlational design using a study approach cross-sectional. In a cross-sectional study, the subject is observed only once through measurement or observation simultaneously to see the independent variables and dependent. The independent variable in this study is the participation of the bride and groom. The dependent variable is the presence of K1. The population in this study were all 1st-trimester pregnant women in the working area of the Kuripan Health Center from July to August, with a total of 30 people—the sampling technique used in this study, namely total sampling. The samples were all trimester 1 pregnant women in the Kuripan Health Center Working Area from April to May. The sample has K1 inclusion and exclusion criteria. The primary data in this study were in the form of answers to a questionnaire about the relationship between the participation of the bride and groom in the preconception program with the presence of pure k1 in the working area of the Kuripan Health Center. The data collection method that the author uses is a questionnaire (Questioner). The data processing technique includes editing, scoring, coding, and tabulating. The data analysis technique was univariate analysis with frequency distribution and bivariate analysis with Chi-Square.

## RESULT

### Characteristics of Pregnant Women

Table 1. Characteristics of Respondents based on Age, Education, and Occupation (n=30)

Variable	Frequency (f)	Percentage (%)
Age (years old)		
≤ 20	23	76.7
21-35	7	23.3
≥ 36	0	0
Education		
Elementary school	13	43.3
Junior high school	15	50.0
Senior high school	2	6.7
College	0	0
Occupation		
Housewife	24	80.0
Farmer	4	13.3
Self-employed	2	6.7

Based on table 1. shows that the largest percentage of respondents is mostly aged <20 years, namely several 23 respondents (76.7%). The largest percentage of respondents is junior high school education, with 15 people (50%). The most significant percentage of respondents is housewives, with 24 respondents (80%).

### Participation of the Prospective Bride - Groom and the Presence of Pure K1

Table 2. Identification of Participation of the Prospective Bride - Groom and the Presence of Pure K1 (n=30)

Variable	Frequency (f)	Percentage (%)
Participation of the Bride and Groom		
Participate	19	63.3
Do Not Participate	11	36.7
Presence of Pure K1		
Present	22	73.3
Not present	8	26.7

Table 2 shows that most bride and groom participants were 19 respondents (63.3%). Most pure K1 present were 22 respondents (73.3%).

### The Relationship Between the Participation of the Prospective Bride and Groom in the Preconception Program with the Presence of K1 Pure

Table 3. The Relationship Between the Participation of the Prospective Bride and Groom in the Preconception Program with the Presence of K1 Pure (n=30)

Participation of the Bride and Groom	Presence of Pure K1				Total		p-value
	Present		Not present				
	f	%	f	%	f	%	
Participate	18	60.0	1	3.3	19	63.3	0.000
Do Not Participate	4	13.3	7	23.3	11	36.7	
Total	22	73.3	8	26.7	30	100	

From Table 3, of the 30 respondents, the majority of the participation of bride and groom in the Preconception program participated in several 19 respondents (63.3%) with the presence of Pure K1. There were 18 respondents (60.0%), while those who were absent were one respondent (3.3%).

Based on the analysis results of Chi-Square, there was obtained p-value 0.000, there is a relationship between the participation of the prospective bride and groom in the preconception program with the presence of pure K1 in the work area of the Kuripan Health Center, Probolinggo Regency in 2022.

## DISCUSSION

### Identifying the participation of prospective brides (bride and groom) in the Preconception Program in the Work Area of the Kuripan Health Center

Most of the bride and groom participants were 19 respondents (63.3%), while those who did not participate were 11 respondents (36.7%). Reproductive health is the starting point for developing maternal and child health, which can be prepared early on. even before a woman becomes pregnant and becomes a mother. Preconceptional health is part of the overall health between women and men during their reproductive years. Preconceptional health care reduces risks and promotes healthy lifestyles to prepare for healthy pregnancies (World Health Organization, 2014).

Preconception health care refers to biomedical, behavioral, and social prevention interventions that can increase the chances of having a healthy baby. To be able to create preconceptions, health can be done through preconception screening. Preconception screening is beneficial and positively affects maternal and child health. Implementation of promotive activities and preventive and curative health interventions are very effective in improving maternal and child health to bring health benefits to adolescents. Both women and men during their reproductive years are physically, psychologically, and socially healthy, regardless of their plans to become parents (World Health Organization, 2014).

Efforts to reduce maternal and infant mortality are carried out through curative and rehabilitative efforts and preventive and promotive efforts that can become spearheads to eliminate the causes of maternal and infant mortality. One effort can be made to identify risk factors before pregnancy (pre-conception) to prepare appropriate care according to the mother's condition. In the study of midwifery care, premarital health is part of preconception care. Preconception care has many advantages and variations, including identifying medical illnesses, assessing psychological readiness, finances, and achieving life goals.

### Identifying the Presence of Pure K1 in the Work Area of the Kuripan Health Center

The majority of pure K1 present were 22 respondents (73.3%), while those who were not present were eight respondents (26.7%). This aligns with the research results from Lassi et al. (2014) that maternal mental health problems are often undiagnosed and do not receive health care. the results of the study show a link between poor adolescent mental health and poor pregnancy on the fetus's health. Preconceptional treatment for psychiatric conditions should always be provided for women of childbearing age. To identify mental disorders so that further treatment can be given before pregnancy. For example, counseling for women with depression and anxiety disorders and assistance so that depression and anxiety do not continue into pregnancy and impact the mother and fetus, such as wanting to end a pregnancy, suicide, and others (Lassi et al. 2014).



Anxiety is the feeling of suspicion and ambiguity that arises when a person is under stress and cannot resolve their feelings (Maharani et al., 2022). Anxiety experienced by someone is an anxiety symptom that occurs when a person is faced with a particular situation (Kurniyawan et al., 2023). Maternal fear is caused by high demands on the future fate of the child, which do not coincide with knowledge and understanding of the child's capabilities. In this case, the mother is very worried about education and about the future job that the child will receive. The mother felt hopeless and suffered from depression (Intiyaskanti et al., 2021).

Another national standard for preconception screening services is nutritional supplementation for brides-to-be. Nutritional supplementation at the Kuripan Health Center is folic acid for brides who are not delaying pregnancy and those who are anemic. This aligns with the research results from Opon et al. (2017) that pregnant women usually do not realize they are pregnant early in pregnancy. so folic acid supplementation is better given than before pregnancy. A proper supply of folic acid from preconception, pregnancy, and lactation is crucial for the proper development and growth of the fetus. Folic acid is the most important substance in the elements of dividing cells because it plays an important role in synthesizing deoxyribonucleic acid (DNA). In early pregnancy, the demand for folic acid that is not synthesized in the human body increases. Folic acid that can be met through the supply of foods rich in folic acid is only about 150-250 µg.

### **Analyzing the Relationship between the Participation of the Bride and Groom in the Preconception Program with the Presence of Pure K1 in the Work Area of the Kuripan Health Center**

Most of the participation of bride and groom in the Preconception program participated in several 19 respondents (63.3%) with the presence of pure K1. 18 respondents (60.0%) were present. In contrast, one respondent was absent (3.3%). Preconception care is useful for identifying health problems, lifestyle habits, or unfavorable social problems that might affect pregnancy (Dean et al., 2014). The target of the preconception care program is the bridal couple. The period before conception for the couple is critical to pay attention to prepare for a healthy pregnancy. According to the Indonesian Ministry of Health (2015), Pre-pregnancy health services are carried out to prepare women for a healthy and safe pregnancy and childbirth and to have a healthy baby.

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### **CONCLUSION**

The conclusion of this study is the result of identifying the participation of the prospective bride and groom who participated in several 19 respondents (63.3%). The results of identifying the presence of Pure K1 Present were 22 respondents (73.3%). The results of the analysis show that

there is a relationship between the participation of the prospective bride and groom in the preconception program with the presence of pure K1 in the working area of the Kuripan Health Center, Probolinggo ( $p=0.000$ ). It is hoped that preconception health care is a treatment that refers to biomedical, behavioral, and social prevention interventions that can increase the chances of having a healthy baby. To be able to create preconceptions, health can be done through preconception screening.

## ACKNOWLEDGEMENT

Researchers are fully aware of the completion of the preparation of this thesis. Therefore, on this occasion, allow the researcher to express his gratitude to all parties who have assisted in completing this thesis, especially to: KH. Moh Hasan Mutawakkil Allalah, SH., MM As Chairman of the Hafshawaty Zainul Hasan Genggong Probolinggo STIKES Foundation. Dr. H. Nur Hamim., S.K.M., S.Kep., Ns., M.Kes as Head of STIKES Hafshawaty Zainul Hasan Genggong Probolinggo. Nova Hikmawati, S.ST., M.Kes as the Head of the SI Midwifery Study Program STIKES Hafshawaty Zainul Hasan Genggong Probolinggo. Titik Suhartini, S.Kep.,Ns.,M.Kep, as Advisor, I took the time to guide me. lit Ermawati, Amd.Keb., S.Kep.Ns, M.Kes as Advisor II who is willing to take the time to guide. All my comrades in the ups and downs who helped to finish this thesis.

## CONFLICT OF INTEREST

There isn't any conflict of interest.

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