Factors Influencing Interest In Using Contraception Implants Among Women At Seremuk Public Health Center, Sorong Selatan Regency

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Abstract

Family Planning improves the welfare of mothers and children and creates happy and prosperous small families through birth control and controlling population growth in Indonesia. The global prevalence of contraception in 2022 using any type of contraceptive method is estimated at 65% and modern methods at 58.7%. Users of contraceptive implants in Southwest Papua Province in 2021 were 1,440, in 2022 there were 1,431, in 2023 there were 1,242 implant users.

The aim of this study is to analyze the factors that influence the interest in using contraceptive implants in women of childbearing age in the Community Health Center of Seremuk work area.

The method used in this study is a quantitative method. The research design used in this study is observational using a cross-sectional study design. The location of this research will be carried out at Seremuk Community Health Center. The population in this study was the number of women of childbearing age in the last 6 months, amounting to 187 people. With sample 67 people.

The results of this study are that there is a relationship between attitudes and interest in using implant contraception, meaning that Ho is accepted and Ha is rejected. The results of the statistical analysis obtained a value of ρ = 0.004 <p standard 0.05. There is a relationship between subjective norms and interest in using implant contraception, meaning that Ho is accepted and Ha is rejected. The results of the statistical analysis obtained a value of ρ = 0.019 <p standard 0.05. There is a relationship between intentions and interest in using implant contraception, meaning that Ho is accepted and Ha is rejected. The results of the statistical analysis obtained a value of ρ = 0.026 <p standard 0.05

The conclusion of this study is that a person's interest is sometimes influenced by attitudes, thus giving rise to subjective norms that are good to do and have an impact on the intention to do it. It is recommended that future researchers examine other variables related to women's interest in using contraceptive implants.

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Introduction

A current global problem is population growth in developing countries. The three countries with the largest population growth are China, the United States, and India, followed by Indonesia, which has the fourth largest population. In 2020, census data showed that Indonesia had a population of 238,518,000, and this is projected to increase to 271,066,000 by 2025. The 2017 Indonesian Demographic and Health Survey (SDKI) showed progress in family planning over the past five years. Indonesia's Total Fertility Rate (TFR) decreased by 0.2 points, from 2.6 per woman of childbearing age in the 2012 SDKI to 2.4 per woman of childbearing age in the 2017 SDKI (Sugiana E, 2021)

The World Health Organization said that currently there has been a significant increase in the use of contraception worldwide, with the lowest increase in sub-Saharan Africa while the highest increase is mainly in Asia and Latin America. The use of modern contraception has increased globally but not significantly from 54% in 1990 to 57.4% in 2018. The proportion of couples of childbearing age regionally, namely ages 15-49 years, has seen an increase in the use of modern contraceptive methods in the last 6 years. In Asia it has increased from 60.9% to 61.6%, in Africa from 23.6% to 27.6%, while Latin

America and the Caribbean has increased slightly from 66.7% to 67.0%. In order to reduce maternal mortality, family planning is used as one of the strategies to deal with cases with 4T conditions, namely too young to give birth (under the age of 20 years), too close birth spacing, too frequent births, and Too old to give birth (over 35 years of age).

The global contraceptive prevalence in 2022 using any contraceptive method is estimated at 65%, and modern methods at 58.7% for married or cohabiting women. Contraceptive prevalence and unmet need for family planning are key indicators for measuring increased access to reproductive health, as outlined in the 2030 Agenda for Sustainable Development under target 3.7: "By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and integration of reproductive health into national strategies and programmes." (WHO, 2024). Based on 2023 data from the Central Statistics Agency (BPS), the percentage of family planning users in Indonesia was 55.36%. The 2023 National Socioeconomic Survey (Susenas) showed that the percentage of married women (15-49 years old) using family planning in Southwest Papua Province was 45.60%, while 54.4% of women who had not used family planning were not using any method. The percentage of women who used family planning was lower than the percentage of women who had not used any method.

Methods

This study employed a quantitative method. The research design used was observational, using a cross-sectional study design. This study utilizes a simultaneous measurement or observation using a questionnaire. The researchers aimed to analyze factors influencing interest in using the contraceptive implant Contraception among Women of Childbearing Age in the Seremuk Community Health Center Work Area Data Analysis Data collected in a study will be meaningless if not processed. Data will be useful if analyzed first, so that the data collection can be used as a basis for decision-making. The purpose of data analysis methods is to draw conclusions and interpret the data collected in a study. In quantitative research, data analysis is a crucial part after collecting data from respondents. Researchers use the following data analysis techniques:

Classical Assumption Test

    a.   Normality Test

According to Ghozali (2022), the purpose of the normality test is to determine whether the confounding variables or residuals in a regression model have a normal distribution. The formula used in this normality test is the Kolmogorov-Smirnov formula, with the following stipulations: data is normally distributed if the significance value is >0.05 and data is not normally distributed if the significance value is <0.05.

    b.   Multicollinearity Test

The purpose of the multicollinearity test is to determine whether a correlation exists between the independent variables in the regression model. A good regression model should not have any correlation between the independent variables. The multicollinearity test in this study uses the following decision-making basis: If the Variance Inflation Factor (VIF) value is <10 and the Tolerance 47 (TOL) value is >0.1, then the model is considered free of multicollinearity. (Ghozali 2022)

    c.   Heteroscedasticity Test

The purpose of the heteroscedasticity test is to determine whether there is unequal variance in the residuals from one observation to another in the regression model. If the variance of the residuals from one observation to another is different, If the variance from one observation to another remains constant, it is called homoscedasticity, and if it differs, it is called heteroscedasticity. A good regression model is one that exhibits homoscedasticity or does not exhibit heteroscedasticity (Ghozali 2022).

To detect the presence of heteroscedasticity, a statistical test is used. The chosen statistical test is the Glejser test. The basis for making decisions regarding heteroscedasticity testing using the Glejser test is as follows:

    1)   If the 2-tailed sig. <α = 0.05, then heteroscedasticity has occurred.

    2)   If the 2-tailed sig. >α = 0.05, then heteroscedasticity has not occurred

Multiple Linear Regression

According to Sugiyono (2019), multiple linear regression analysis is a regression analysis that has one dependent variable and two or more independent variables. The multiple regression analysis model is used to explain the relationship and influence of independent variables on the dependent variable. In this study, the independent variables used are attitudes, norms, and intentions, and the dependent variable is the use of contraceptive implants. The multiple regression equation can be formulated as follows:

$Y = a + \beta 1x1 + \beta 2x2 + \beta 3x3 + e$

Description:
a. Y = Employee performance
b. a = Constant
c. β = Regression coefficient
d. X1 = Work motivation
e. X2 = Work discipline
f. X3 = Non-physical work environment
g. e = Standard error

1. Hypothesis Testing

    a. t-Test (Partial Test)

The t-test essentially shows the extent to which an individual independent variable influences the variation in the dependent variable. Decision-making is done by examining the significance value in the coefficients table. Typically, regression testing is performed with a 95% confidence level or a 5% significance level (α = 0.05). (Ghozali 2022)

The criteria for the t-test statistic (Ghozali 2022):
1) If the t-test significance value is > 0.05, then H_0 is accepted and Ha is rejected. This means there is no influence between the independent variable and the dependent variable.
2) If the t-test significance value is < 0.05, then H_0 is rejected and Ha is accepted. This means there is an influence between the independent variables and the dependent variable.

    b. F-Test (Simultaneous Test)

The F-test aims to determine whether the independent variables simultaneously influence the dependent variable. The F test is conducted to see the influence of all independent variables together on the dependent variable.

The level used is 0.5 or 5%. If the F-value is <0.05, it means that the independent variables simultaneously influence the dependent variable, or vice versa (Ghozali 2022). The simultaneous F-test (Simultaneous Test) is used to determine whether or not there is a joint or simultaneous influence between independent variables on the dependent variable. The ANOVA statistical test is a form of hypothesis testing that can draw conclusions based on summarized data or statistical groups. Decision-making based on this test is carried out by examining the F-value in the ANOVA table, with a significance level of 0.05. The requirements for the F-test are as follows (Ghozali 2022):
1) If the F-value is <0.05, H0 is rejected and H1 is accepted. This means that all independent variables have a significant influence on the dependent variable.
2) If the F-value is >0.05, H0 is accepted and H1 is rejected. This means that all independent/free variables do not have a significant influence on the dependent/bound variable

    c. Dominance Test

    According to Ghozali (2022), a dominance test is conducted to determine which independent variable has the greatest dominant influence on the dependent variable. The criterion for a dominance test is that if the variable's regression coefficient has the largest value, then that variable has a dominant influence. The higher the beta value, the greater the influence on the dependent variable. To determine which independent variable has the dominant influence on the dependent variable, the highest standardized beta coefficient value is used.

Discussion

Attitudes

    Low public attitudes result in many women experiencing difficulty in choosing a contraceptive method and often lead to women switching to other methods, even leading to many women stopping contraceptive use, resulting in unwanted pregnancies (Anggriani et al., 2019).

    Knowledge is the most fundamental factor in shaping behavior, leading each individual to act based on their attitude. A person with sufficient knowledge is able to act based on that knowledge. Conversely, if someone lacks an attitude, no action will benefit them, for example, in treating a disease they are suffering from.

    The statistical analysis yielded a value of ρ=0.004 <α 0.05, indicating a relationship between attitude and implant contraceptive use. This also indicates that those with a lack of attitude are less likely to use implant contraceptives due to a lack of attitude about them.

The research results show a correlation between attitude and implant contraceptive use. The more a mother knows about contraceptives, the greater her desire to use them. This is undoubtedly because

mothers already know the benefits of using them and are more likely to understand and ultimately use them.

Researchers argue that when someone has an adequate attitude, they are able to make decisions that will positively impact them. For example, in this study, mothers who used implant contraceptives had The research results show a correlation between attitude and contraceptive implant use. The more a mother knows about contraceptives, the greater her desire to use them. This is undoubtedly because mothers already know the benefits of using them and are more likely to understand them and ultimately use them.

Researchers argue that when someone has a sufficient attitude, they are more likely to make decisions that will positively impact them. For example, in this study, mothers who used contraceptive implants had a positive attitude, making them feel confident about using this type of contraception. Mothers with less positive attitudes were less likely to use implants. They lacked understanding of the benefits of this type of contraception, making them reluctant to use it.

This study also found that respondents with positive attitudes did not use implants because their attitudes, the number of children they had, and several other factors could have prevented them from using this type of contraception.

A crucial domain in shaping an attitude, leading to a person's action, naturally involves several stages: knowledge, then the results of knowledge, then understanding, then the results of understanding, then applying those results, thus demonstrating a capability. This capability is then evaluated based on an assessment of an existing or self-determined attitude (Maramis et al., 2019).

The study's findings illustrate a lack of maternal attitudes toward implant contraception, leading to a tendency to use other contraceptive methods when deciding to use it. Through a government program promoting the use of implant contraception, which is considered effective, mothers should use implant contraception, which can suppress birth rates longer than other types of contraception. Researchers found that some women with healthy attitudes do not use contraception. Implants can be caused by a lack of motivation and other factors, which can lead to mothers not wanting contraceptive implants. Those with a low attitude toward using implants may also be due to their husband's support or the intention and motivation to use this type of contraception.

A study by Rahmawati Azis (2017) showed that only a small number of women in South Sulawesi use long-term modern contraception to delay pregnancy. Women want to conceive again soon after the birth of their first child, and the high childbearing rate in South Sulawesi is significant. Providing comprehensive and accurate information and counseling about the effectiveness, safety, and accessibility of long-term methods, especially IUDs and birth control implants, is crucial for subsequent fertility (Azis et al., 2021).

This is consistent with previous research by S.A. Made Sarpini, where respondents with positive attitudes did not use implants (91.7%). The p-value in this study was 0.001 <0.05, which assumes the hypothesis is accepted that there is a relationship between attitude and implant use in Sukawana Village. The main factors that cause a person to behave in a certain way are thoughts and feelings, which are expressed in the form of attitudes, perceptions, beliefs, and assessments of an object (health object) (Kustiyuwati et al., 2021).

Previous research by Sarpini also suggested that attitudes vary from one woman to another, and attitudes can influence contraceptive use. A woman's level of negative attitudes influences her mindset or understanding of implants. Women with negative attitudes tend to refrain from using implants due to misperceptions about implants, ranging from pain during and after insertion to their effectiveness and the time it takes for fertility to return (Sarpini et al., 2022). It can be concluded that, if this attitude is internalized and understood, it is optimal for implementing family planning. The use of any contraceptive is acceptable because any contraceptive used properly and continuously is much safer than not using it at all.

Subjective Norms

Subjective norms related to behavior consist of Normative beliefs, or beliefs in norms, namely individual beliefs in the opinions of others who are considered important, consisting of the operation process, its effectiveness, the benefits and risks of using contraceptive implants. Motivations to comply, or motivations to follow the opinions of others, consisting of the operation process, its effectiveness, the benefits and risks of using contraceptive implants.

From all respondents who are not Implant users, based on the results of the study shows that ...... In accordance with the findings that have been explained above, it states that contraception several factors between Normative beliefs or beliefs in norms, namely individual beliefs in the opinions of others who are considered important which consist of the use of this type of contraception. An individual has a belief that implant contraception can be trusted in terms of birth control, but also conflicts with beliefs. Individuals

will consider which is most important, birth control or ridicule from society. If other people who are considered important (parents, wife, friends, doctors, and religious leaders) agree (or advise) to participate in the implant contraception program and if the individual wants to follow the instructions, then there is a positive tendency to use implant contraception, while individuals have beliefs that implant contraception for birth control, but also can cause complications and conflicts with beliefs then individuals will consider which is most important, birth control or ridicule from society. If other people who are considered important (parents, wife, friends, and religious leaders) do not agree if using implant contraception then there is a negative tendency to use implant contraception

Intention

Intention is a desire in the heart followed by action to achieve one's desire. An action will not be carried out if someone does not have the intention to do something. A person will agree or disagree with the behavior of using contraception. Beliefs or beliefs that are part of subjective norms are also called normative beliefs. Individuals will intend to display certain behaviors or actions if others around them also support them (Camelia, 2022). The statistical analysis yielded a value of $\rho=0.026 <\alpha\ 0.05$, indicating a relationship between intention and use of contraceptive implants. A mother tends to have an intention before ultimately choosing the most appropriate contraceptive method.

Researchers assume that if a person lacks an intention to take action, their determination to use contraceptive implants will decrease, leading women of childbearing age to use other contraceptive methods. The study found that women with good intentions who did not use contraceptive implants could be due to the individual not wanting to use contraceptive implants but wanting to use other methods.

Researchers found that the intention for mothers who wanted to use contraceptive implants lies within themselves, and from this intention, the motivation to make a decision to do something good for themselves arises.

The study found that some women who did not have an intention but used contraceptives did so because they viewed the use of contraceptive implants as something they needed to reduce the birth rate, and because they were supported by their families, they were motivated to use contraceptive implants.

Researchers assume that with good intentions, a person's determination will naturally emerge, leading them to do something good for themselves. This is certainly based on several supporting factors, such as a strong attitude, sufficient motivation, and, of course, good behavior, which can foster good intentions.

Intention arises when a person has an understanding of something they have decided to use. Without intention, there is no motivation to do so. Good intentions will impact a person's actions, which are driven by motivation, which can inspire the user to take action.

Relevant to previous research by Santi Nur Safitri (2022), the reason respondents did not use implant contraception was because many were unfamiliar with implant contraception, thus lacking the intention to use it. Respondents preferred short-term contraceptive methods such as injections and pills, even though they had to remember to use them constantly (Safitri et al., 2022).

Of all the variables in this study, intention is the most influential variable in fertile couples using implantable contraceptives. A person with intention will certainly be motivated to use implantable contraceptives, which will impact the decision to use them. Good intentions in fertile couples will have a positive impact on the couple's ability to reduce birth rates. Couples with more than two children will certainly have the confidence to do what's best for them.

Conclussion

1. There is a relationship between attitude and interest in using implantable contraceptives, meaning Ho is accepted and Ha is rejected. The results of the statistical analysis showed a ρ value of 0.004 <p standard 0.05. If attitudes are lacking, fertile women are less likely to use implantable contraceptives due to a lack of attitude regarding interest in using implantable contraceptives.
2. There is a relationship between subjective norms and interest in using contraceptive implants, meaning Ho is accepted and Ha is rejected. The statistical analysis results show a ρ value of 0.019 <p standard of 0.05. The better a person's norms, the more likely they are to seek contraception that can effectively reduce the number of births.
3. There is a relationship between intention and interest in using contraceptive implants, meaning Ho is accepted and Ha is rejected. The statistical analysis results show a ρ value of 0.026 <p standard of 0.05. A mother tends to have an intention before finally using the type of contraception that is most appropriate for her.

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