

ORIGINAL ARTICLE



# Analysis Of Factors Associated with The Use of IUD in Women of Childbearing Age

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## Abstract

The Intra-Uterine Device (IUD) stands out as one of the safest long-term contraceptives, boasting a remarkable user effectiveness rate of 99.4%. Despite this, recent data from the 2021 Indonesian health profile in South Kalimantan Province reveals suboptimal coverage of IUD usage. Specifically, the coverage stands at 1.95% with 12,011 users in the region, 1.02% (477 users) in Kotabaru District, and 1.79% (82 users) in the Serongga Health Center. These figures fall short of the targeted coverage of 12.9%. This study aims to identify factors influencing IUD usage among women of childbearing age. Employing an analytical observational method with a Case-Control design, the research was conducted within the Serongga Health Center's jurisdiction. The investigation sought to establish correlations between education, knowledge, occupation, age, parity, and husband support with the utilization of IUDs among women of childbearing age. Utilizing a cluster proportional random sampling technique, the study comprised a sample population of 110 individuals. Statistical analysis involved the application of the Chi-Square test and Logistic Regression test for multivariate analysis. The findings of the study indicate that education ( $p=0.554$ ), knowledge ( $p=0.308$ ), age ( $p=0.566$ ), and parity ( $p=0.835$ ) demonstrate no significant association with IUD usage among women of childbearing age. Conversely, occupational factors ( $p=0.022$ , Exp (B)=2.667) and husband support ( $p=0.035$ , Exp (B)=2.813) exhibit a notable association. Notably, occupation emerges as the dominant factor influencing IUD usage.

## Introduction

The Intra-Uterine Device (IUD) is an inert synthetic material (with or without added elements for synergistic effects) inserted into the uterus to produce a contraceptive effect [1]. The IUD is one of the most effective and safe long-term contraceptives compared to other contraceptives such as the pill. To control the population growth rate, IUD contraception is very effective because the user effectiveness rate reaches 99.4%; hormonal type IUDs can be used for 3 to 5 years, and non-hormonal types for 5 to 10 years. High population growth causes a population explosion and will lead to environmental conditions with high population density. Population density greatly affects people's quality of life because high population density will cause many problems. In general, a population that is too dense will put considerable pressure on the environment, along with the emergence of problems of residential expansion and increasing needs for employment, education, food, and health services [2].

The Total Fertility Rate (TFR) is the average number of children born to a woman during her childbearing age (15-49 years). Based on data from 200 countries, Indonesia is in the 94th position with the highest TFR of 2.32 children per woman of childbearing age. Indonesia's TFR achievement is still relatively far from the target growth rate of below 1% and the TFR of 2.1

children per woman of childbearing age in 2015. Based on Indonesian health profile data in 2021, there was a decrease in the achievements of active family planning participants by 10.2%, which in the previous year was 67.6% to 57.4%. Likewise, IUD users previously reached 8.5%; in 2021, it was 8.0%; this achievement rate is low, with the expected IUD use target of 12.9% [3].

In South Kalimantan Province in 2019, IUD users were still low when compared to Injection users of 293,150 participants (46.1%) and Pills of 253,410 participants (41.3 %) [4]. Based on data from the Kotabaru Health Office's reproductive age sub-directorate report in 2021, active family planning participants in Kotabaru Regency for IUD users, there were 477 participants (0.9%) with an achievement target of 12.9% [5]. Serongga Health Center, based on data in the Participant Register Book in 2021, active family planning participants numbered 3061 with 37 IUD users (1.22%). In 2022, busy family planning acceptors will increase to 4581 participants with 82 IUD users (1.70%). Even though there was an increase in active family planning acceptors and the number of IUD users, they still did not meet the expected target of 12.9% [6].

Based on the 2021 profile data of the Serongga Health Center, it's apparent that 18.78% of the population has only completed elementary school education, a factor influencing decision-making, such as the choice to use IUDs. Homemakers constitute the majority occupation, totaling 5049 individuals, reflecting mothers' employment status, pivotal in household decision-making. Economic constraints, particularly among low-income families, hinder access to contraceptives, exacerbating larger family sizes. Limited income also reduces participation in family planning initiatives among couples of childbearing age, ultimately lowering family resilience. Improving economic status can enhance the efficacy of family planning efforts among women or married couples within the Serongga Health Center's jurisdiction.

Parity is one of the determinants of use. Multiparous women of childbearing age have a better chance of using contraception than primiparous women of childbearing age. This information indicates the possibility that primiparous women still want children, so they do not want to use contraception [7]. This is in line with the condition of the community in the Serongga Health Center working area; most of them are mothers with primiparous parity status (43.21%), so the level of IUD use is still low.

Data from previous research shows a relationship between several factors and IUD use. Based on the results of Tulle's research state that there is a relationship between knowledge ( $p = 0.000$ ) and the use of IUDs with a positive relationship meaning that the higher the ability, the more likely they will choose to use the IUD. and the level of closeness (C) indicates a moderate level of similarity between the two variables [8].

Occupation is one of the factors that influences a person to take action, including the decision to use an IUD. This is supported by Agustina's research, which states a significant relationship between work (P value = 0.025) and contraceptive use. Women who work, especially jobs that involve high levels of physical activity such as cycling, walking, going up and down stairs, or the like, may have the wrong perception of using the IUD method because they are afraid of removing it, afraid of interfering with work, or causing pain while working [9].

Likewise, education is one factor influencing a person's decision to become an IUD user. Based on the results of Nurhidayah's research, it is known that there is a significant relationship between education and the choice of IUD contraceptives at the Nanggung District Health Center [10]. Women with low education are five times more likely to choose an IUD than those with higher education. A person with a higher level of education will be more knowledgeable, more receptive to ideas, and more independent and rational in making decisions and actions. Furthermore, the parity factor is also one of the factors that influences women in using an IUD. This is in line with research based on Nurhidayah, which states that there is a significant relationship between parity and the choice of IUD contraception at the Nanggung District Health

Center. Parities of more than two children have ten times the odds of choosing an IUD compared to parities of more than two children. For primiparous women, the contraceptive used is to regulate fertility and space pregnancies, has high reversibility and high effectiveness, can be used for 2 to 4 years, and does not inhibit breast milk production. Meanwhile, mothers who have more than two children usually use long-term contraception to end fertility, choosing IUD and implant contraception. Apart from that, the husband's support is also an influencing factor in a woman's decision to choose an IUD. This is in line with Tulle's research results, which state that there is a relationship between husband's support and IUD use [8].

The objective of this study is to comprehensively investigate the various factors that influence individuals' decisions to utilize IUDs, with a specific focus on the demographic served by the Serongga Community Health Center. Through this examination, we aim to gain a deeper understanding of the complex interplay between factors such as education, occupation, parity, and spousal support in shaping contraceptive choices, particularly the adoption of IUDs. By elucidating these factors, we seek to provide insights to inform targeted interventions and strategies to improve IUD uptake and family planning outcomes within the Serongga Health Center's catchment area.

## Materials and Methods

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### *Study Design*

This study adopted a quantitative research design employing the Case Control method [11]. This method is particularly suitable for investigating associations between variables, making it an appropriate choice for examining the relationship between contraceptive usage and various demographic and socio-economic factors.

### *Sample Selection*

The study focused on women of childbearing age utilizing contraception within the Serongga Health Center's jurisdiction in Kotabaru District, South Kalimantan, from 2021 to 2022. The sample selection employed probability sampling via the cluster proportional random sampling technique. This technique ensures that each potential participant has an equal chance of being selected, thus enhancing the sample's representativeness. The sample size, determined through hypothesis tests of different proportions with two-sided testing, comprised 110 individuals. This sample size was chosen to provide sufficient statistical power to detect meaningful associations between variables.

### *Instruments*

The study employed a combination of instruments for data collection, including questionnaires and form sheets [12]. The questionnaires were designed to evaluate variables related to the husband's knowledge and support regarding contraception. They encompassed a comprehensive array of questions aimed at probing various facets of knowledge and support, ensuring a thorough assessment of these pivotal factors. Concurrently, form sheets were utilized to gather demographic and socio-economic data concerning IUD usage, such as age, parity, and occupation. These forms facilitated the systematic collection of essential contextual information, enabling the identification of potential confounding variables that could impact the relationship between contraceptive usage and other factors.

### *Validity and Reliability*

Validity and reliability tests were conducted on respondents possessing characteristics akin to those of the research subjects. This process involved assessing the accuracy and consistency of the questionnaire and form sheet items. The validity tests ensured that the instruments were measuring what they intended to measure, while reliability tests assessed the consistency of responses over time and across different groups of respondents. All questions concerning the husband's knowledge and support demonstrated validity and reliability, comprising 16

knowledge questions and 16 questions about husband support. This rigorous validation process enhances the credibility of the study findings and ensures that the data collected accurately reflects the underlying phenomena of interest.

### Statistical Analysis

In this study, a bivariate analysis was conducted using the Chi-Square test. This statistical method examined the relationship between categorical variables, such as contraceptive usage and demographic characteristics. The Chi-Square test identified significant associations between variables by comparing observed frequencies with expected frequencies. For multivariate analysis, multiple logistic regression was employed utilizing statistical software. This advanced statistical technique allowed for the simultaneous examination of multiple independent variables while controlling for potential confounding factors. By using multiple logistic regression, the study aimed to identify the independent predictors of contraceptive usage among women of childbearing age, thereby providing valuable insights into the factors influencing contraceptive decision-making.

## Results and Discussion

According to Table 1, most respondents fall within the senior high school to Higher Education category. Additionally, most respondents demonstrate a strong understanding of the knowledge factor. Furthermore, a significant portion of respondents are classified as unemployed. In terms of age, the majority of respondents are categorized as high-risk. Moreover, a considerable number of respondents are multipara. Regarding husband's support, it is noteworthy that the majority of respondents' husbands endorse the use of IUD contraception.

**Table 1.** Univariate analysis results.

Variable		Use of IUDs	
		Case N (%)	Control N (%)
<b>Education</b>	Elementary-Junior High School	22 (53.7)	19 (46.3)
	Senior High School-Higher Education	33 (47.8)	36 (52.2)
<b>Knowledge</b>	Not Enough	1 (25)	3 (75)
	Good	54 (50.9)	52 (49.1)
<b>Work</b>	Doesn't work	33 (42.9)	44 (57.1)
	Work	22 (66.7)	11 (33.3)
<b>Age</b>	Not Risky	27 (52.9)	24 (47.1)
	Risky	28 (47.5)	31 (53.5)
<b>Parity</b>	Primipara	16 (48.5)	17 (51.5)
	Multipara	39 (50.6)	38 (49.4)
<b>Husband support</b>	Does not support	7 (30.4)	16 (69.6)
	Support	48 (55.2)	39 (44.8)
<b>TOTAL</b>		55 (50)	55 (50)

Table 2 shows that 46.3% of women with elementary-middle school education do not use IUDs, and based on statistical test results, the p-value is 0.554. This means that there is no relationship between educational factors and the use of IUDs among women of childbearing age in the work area of the Serongga Community Health Center, Kotabaru Regency, in 2022. For the knowledge factor, 75% of women of childbearing age who are less knowledgeable do not use IUDs, and based on the results of statistical tests, the p-value is 0.308. This means that there is no relationship between the knowledge factor and the use of IUDs among women of childbearing age in the working area of the Serongga Community Health Center, Kotabaru Regency, in 2022. For employment factors, 57.1% of women of childbearing age who do not work do not use IUDs, and based on the results of statistical tests, it was found that the p-

value was 0.022. This means that there is a relationship between work factors and the use of IUDs in women of childbearing age in the work area of the Serongga Community Health Center, Kotabaru Regency, in 2022. For the age factor, 53.5% of women of childbearing age who are classified as high risk do not use IUDs, and based on the results of statistical tests, it was found that the p-value is 0.566. This means there is no relationship between age of employment and the use of IUDs among women of childbearing age in the working area of the Serongga Community Health Center, Kotabaru Regency, in 2022. For the parity variable, 51.5% of fertile women with primiparous status do not use IUDs, and based on the results of statistical tests, the p-value is obtained. 0.835. This means there is no relationship between the parity factor and the use of IUDs among women of childbearing age in the working area of the Serongga Community Health Center, Kotabaru Regency, in 2022. For the husband's support factor, 69.6% of women of childbearing age who do not receive support from their husbands do not use IUDs and, based on the results of statistical tests, obtained a p-value of 0.035. This means that there is a relationship between the husband's support factor and the use of IUDs in women of childbearing age in the work area of the Serongga Community Health Center, Kotabaru Regency, in 2022.

**Table 2.** The relationship between education, knowledge, occupation, age, and parity factors and husband support with IUD use.

Variable		Use of IUDs				Total		p-value	OR
		Case		Control		N	%		
		n	%	n	%				
Education	Elementary-Junior High School	22	53.7	19	46.3	41	100	0.554	-
	SMA-Higher Education	33	47.8	36	52.2	69	100		
Knowledge	Not enough	1	25	3	75	4	100	0.308	-
	Good	54	50.9	52	49.1	106	100		
Work	Doesn't work	33	42.9	44	57.1	77	100	0.022	2.667
	Work	22	66.7	11	33.3	33	100		
Age	High Risk	28	47.5	31	53.5	59	100	0.566	-
	Low Risk	27	52.9	24	47.1	51	100		
Parity	Primipara	16	48.5	17	51.5	33	100	0.835	-
	Multipara	39	50.6	38	49.4	77	100		
Husband Support	Does not support	7	30.4	16	69.6	23	100	0.035	2.813
	Support	48	55.2	39	44.8	87	100		
<b>Total</b>		55	50	55	50	110	100		

*Relationship between Educational Factors with the Use of IUDs*

Based on the statistical test results, the p-value was 0.554. Means no relationship between educational factors and the use of IUDs in women of childbearing age in the working area of the Serongga Health Center, Kotabaru Regency, in 2022. This study does not factor in the relationship between education and IUD use because most women of childbearing age with elementary-junior high school education use IUDs instead. This research is not in line with Rahmi's research results, which stated that education has an impact on the use of long-acting contraception [13].

Women who had a higher level of education in this study did not even use IUDs more. On the other hand, those with low education but who actively participate in counseling about the IUD family planning program will understand the ins and outs of the family planning program, especially the IUD. Education does not determine a person's health behavior, especially regarding using IUDs. Even though a person's education is high, they are in an environment that still does not support using IUDs. This means that external factors from individuals can cause someone highly educated not to use an IUD. Midwives have a role in increasing the use of family planning as a preventive measure, especially for women at risk. A higher level of education does

not necessarily or does not guarantee a family will choose a more accessible and safer type of contraception [14].

This study's results align with Ruhanah's research, which stated that there was no relationship between education and postpartum family planning [14]. Meanwhile, higher-educated women do not use IUDs because they already use other contraceptive methods suitable for their conditions or circumstances, such as injections, tubectomy, and other contraceptive methods.

#### *Relationship between knowledge factors with the use of IUDs*

Based on the statistical test results, the p-value was 0.308. This means there is no relationship between factors of knowledge and the use of IUDs in women of childbearing age in the working area of the Serongga Health Center, Kotabaru Regency, in 2022. Results of this study show that there are still women of childbearing age who lack knowledge and still use IUDs, but women of childbearing age who have good knowledge also do not use IUDs. This research is not in line with Gusmani's research results, which stated that knowledge has an impact on the use of long-acting contraception [15].

The behavior of women of childbearing age (WUS) to use the IUD will be facilitated if WUS knows what the benefits of the IUD are and knows who and where to do the IUD installation. This behavior will be facilitated if the WUS has a positive attitude toward using the IUD. The WUS knowledge factor in this study was good, but some still did not use IUDs. This was caused by other factors that could influence a person's behavior, namely enabling factors. Enabling factors are in the form of facilities, infrastructure, or facilities that support or facilitate the behavior of a person or society.

Based on the research results, the respondents' knowledge was good, but some of these respondents still did not use IUDs. Even though someone already knows various things about the types of contraceptives, both the positive and negative sides, most of them, before choosing a contraceptive method, first conduct counseling with midwives or other health workers to get advice and instructions regarding which type of contraceptive is most suitable for them. She can decide what birth control she trusts. So, knowledge has no relationship with the choice of IUD contraceptives because knowledgeable people are comparable to people with less knowledge. In other words, there is no tendency to expertise in choosing IUD contraceptives. This study's results align with Sarpini's research, which states no significant relationship exists between knowledge and interest in choosing Implant contraception in the Desa Sukawana Village, Bangli District [16].

#### *Relationship between Work Factors with the Use of IUDs*

Based on the statistical test results, the p-value was 0.023. This means there is a relationship with the use of IUDs in women of childbearing age in the working area of the Serongga Health Center, Kotabaru Regency, in 2022. The Odds Ratio value obtained is 2.667. This means that women of childbearing age who find work have a 2.667 times greater chance of using an IUD than women of childbearing age who do not work. The use of IUDs in working women has increased compared to non-working women.

The family planning program is managed by the BKKBN as a provider of contraceptives and drugs, in partnership with the Ministry of Health as a manager in terms of services with community mobilization activities, which include family planning promotions, providing information, motivation, giving preparedness of health service facilities and health workers as well as health insurance. The Ministry of Health, as the organizer of the National Health Insurance Program, namely the Health Social Assistance Agency (BPJS), expects all people to become BPJS Health participants. Workers, including women who work as wage earners, must participate as BPJS health participants. For people who can't afford it, the government will

provide contribution assistance as Contribution Assistance Recipients [17]. This study's results align with Agustina's research, which states a significant relationship between work and using IUD contraception. The mother's decision to use contraceptives is influenced by work because work is an everyday environment where she is exposed to the second-highest information after friends or neighbors [9].

#### *The Relationship between the Age Factor and the Use of IUDs*

Based on the statistical test results, the p-value was 0.967. This means there is no relationship between age factors and IUD use in women of childbearing age in the working area of the Serongga Health Center, Kotabaru Regency, in 2022. No relationship between factors of age and IUD use in this research is because most women of childbearing age who are classified as high risk do not use IUDs, while women of childbearing age who are classified as low risk mostly use IUDs. In the results of this study, it is known that the average age of the respondents is 35 years and over. Age is not necessarily a risk factor that allows someone to use an IUD. A woman's decision to determine which contraceptive method to use is not always influenced by age, but there are other influencing factors, such as personality (maturity).

Generally, women of childbearing age tend to use short-term contraceptives such as pills, injections, or condoms. Women of childbearing age who are young are usually parity, or the number of children is still tiny, so they still want to have more children one day. This is what makes women of childbearing age who are young more likely to have an interest in using short-term contraceptive methods than long-term contraception. Conversely, women of childbearing age who are relatively old, have sufficient parity, and no longer desire to have children will tend to use long-term contraceptive methods such as IUDs [18].

The results of this study are in line with the results of Veronica's research, which stated that there was no significant relationship between the age of women of childbearing age and the use of IUD contraception at the Kotabumi Udik Health Center, North Lampung Regency in 2019 [19]. Ages under 20 and over 35 years are at risk for getting pregnant, giving birth, and using contraception, so it should be closely related to their participation in family planning [20].

#### *The Relationship between Parity Factors and the Use of IUDs*

Based on the statistical test results, the p-value was 0.586. This means there is no relationship between factors parity with the use of IUDs in women of childbearing age in the working area of the Serongga Health Center, Kotabaru Regency, in 2022. The results of this study indicate that the average parity of respondents is in the multipara category. There is no relationship between factors parity with IUD use in this research because most of the primiparous women of childbearing age do not use IUDs, while the majority of women of childbearing age who are multiparous use IUDs.

The low use of the IUD in primiparas is due to fear of the installation method where the device must be inserted into the uterus. They think it will damage their reproductive organs, as well as fears that the use of the IUD will penetrate the uterine wall and fears of side effects caused by the IUD. Mothers with parity are also worried about their fertility, afraid that after removing the IUD, their fertility will return for a long time: infectious diseases and vaginal discharge caused after IUD insertion prevent mothers from using them. Meanwhile, acceptors with two or more children tend to use IUDs because mothers start to think about stopping having children, especially if mothers are at an unproductive age because they think about childbirth risks [21].

#### *The Relationship between the Husband's Support Factor and the Use of the IUD*

Based on the statistical test results, the p-value was 0.011. This means there is a relationship between factors of husband's support with the use of IUDs in women of childbearing age in the working area of the Serongga Health Center, Kotabaru Regency, in 2022. The Odds Ratio value

obtained is 2.813. This means that women of childbearing age who have the support of their husbands in using the IUD have a 2.813 times greater chance of using the IUD than women of childbearing age who do not get the support of their husbands. This is in line with Novita's research results, which show that there is a relationship between the husband's support and the use of long-term contraceptive methods [22].

A husband's support is a caring attitude shown through good cooperation and moral and emotional support [22]. The husband's support is necessary for the success of the family planning. Meanwhile, the husband's family planning support is a form of concern and responsibility for men. Forms of male participation in family planning can be done directly or indirectly. Forms of male participation indirectly include choosing suitable contraception, namely contraception according to the wishes and conditions of his wife, assisting his wife in using contraception properly, such as reminding her when taking birth control pills and reminding the wife to control, Helping seek help if there are side effects or complications from using contraception, take the wife to a health service facility for control or referral, find other alternatives if the contraception used is not suitable, replace the use of contraception if the wife's health condition does not allow. Low or negative husband support will affect a wife's decision-making in choosing contraception. Help seek help if side effects or complications occur from using contraception, accompany the wife to a health service facility for control or referral, seek other alternatives if the contraception used is not suitable, and replace the use of contraception if the wife's health condition does not allow it.

Low or negative husband support will affect a wife's decision-making in choosing contraception. The husband's support includes efforts to obtain information, deliver health services, and finance the installation of contraceptives. The better the husband's support is, the more decision-making is made by the wishes of the husband and wife. Deliver health services and finance the installation of contraceptives [23].

The family and the husband have an essential role, where the husband is highly demanded not only as a breadwinner but as a motivator in various policies that will be decided, including family planning. Therefore, husbands supporting their wives using long-term contraception, such as the IUD, can drive women to participate in government programs. The reason why there are still husbands who do not support the selection of IUDs is because of the perceived discomfort during intercourse, feeling disturbed or uncomfortable, and the method of insertion, which is considered taboo. Some side effects of using an IUD are spotting, changes in the menstrual cycle, amenorrhea, dysmenorrhea, menorrhagia, fluor albus, and post-sexual bleeding. As a result, husbands think hormonal contraception, such as pills or injections, is better than the IUD.

This study's results align with the results of Arbaiyah's research, which states a significant relationship between the husband's support factor and the use of IUDs. The role of medical personnel in being more effective in terms of husband support, namely the formation of a fathering class, is very helpful in increasing the husband's knowledge so that he can protect his wife in decision-making [24].

**Table 3.** Results of phase 1 multiple logistic regression analysis.

No	Variable	B	SE	Wald	Sig	Exp(B)
1	Work	0.981	0.444	4.870	0.027	2.667
2	Husband Support	1.034	0.514	4.052	0.044	2.813

Table 3 shows that two variables can be included in the multivariate analysis model: work and husband support. Exp(B) for both variables shows that the work variable has an Exp(B) value of 2.667, while the husband support variable has an Exp(B) of 2.813. Apart from that, the B

value for both variables show a positive number; this means that the two independent variables are positively related or in the same direction as the dependent variable (IUD use).

Based on the bivariate analysis, several variables can be included in the multivariate analysis because the results show a relationship between these variables and IUD use. Variables that can be included in the multivariate analysis are the husband's work and support. After conducting multivariate analysis with the Logistic Regression test, the results obtained for the variable work ( $p$ -value = 0.027) and husband's support ( $p$ -value = 0.044) are proven to be related to IUD use. Based on multivariate analysis, work has the smallest  $p$ -value compared to other variables.

Based on the results of multivariate analysis, it is known that the husband's support can increase the chances of using the IUD by 2.813 times. The husband's support is a reinforcing factor in the mother's attitude in determining contraceptive methods [8]. Based on the results of the multivariate analysis, it is known that the husband's support factor plays a role in using the IUD. This is because a wife's decision to choose contraception depends on her husband's support. Because the use of contraceptives chosen by the wife will affect the quality of the husband-and-wife relationship. The contraception the wife chooses still guarantees the couple's comfort when having intercourse with husband and wife. When a mother receives support from her husband, she is being loved and cared for, has self-esteem, and realizes she is being valued. The support itself is also part of communication and shared responsibility.

Based on the results of multivariate analysis, it is known that work can increase the chances of using the IUD by 2.667 times. Working is generally an activity that takes up time working for mothers and will impact the family. The occupations of the family planning participants and their husbands will affect the income and economic status of the family. In a family with high economic status, fertility behavior encourages the formation of large families. Job status can affect participation in family planning because factors influencing the work environment encourage someone to participate in family planning, so it will indirectly affect status in contraception [25]. Husband's support in choosing the use of IUDs for women of childbearing age who work is also very influential.

## Conclusions

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The findings of this research indicate that factors such as education, knowledge, age, and parity do not significantly influence the use of IUDs among women of childbearing age in the Serongga Health Center's working area, Kotabaru Regency, in 2022. Despite higher education levels, individuals may still refrain from using IUDs due to external environmental factors. Similarly, possessing knowledge about IUDs does not necessarily translate into adopting this form of contraception, as negative attitudes can override one's understanding. Furthermore, age alone does not dictate contraceptive choices; rather, factors such as personal maturity and external support, particularly from husbands, play crucial roles in decision-making. Concerns about the IUD insertion process, potential reproductive health implications, and fear of side effects also contribute to low adoption rates, especially among primiparas. The study highlights the need for further exploration into the intricacies of contraceptive decision-making, particularly in understanding the influence of external support systems like spousal encouragement. Additionally, future research should delve deeper into unexamined factors and explore diverse populations to ascertain the generalizability of these findings. By doing so, we can gain a more comprehensive understanding of the complexities surrounding contraceptive use among women of childbearing age.

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**Data Availability Statement:** The data is confidential and unavailable, in addition to the data results in this article.

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