RESEARCH ARTICLE

Relationship between Predisposing Factors and the Incidence of Contraceptive Dropout in West Java

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Abstract

The incidence of contraceptive dropout in West Java is still high. Analyzing the reasons would help to improve programs. This study explores the relationship between predisposing factors and the incidence of contraceptive dropout in West Java. The research was cross-sectional and conducted from August to December 2021, and the dataset came from Program Performance and Accountability Survey (*Survei Kinerja dan Akuntabilitas Program*, SKAP) 2019. The sample in the study were women of childbearing age 15–49 years with married status both ever and currently using contraception—a total of 338 samples with simple random sampling. This study used univariate, bivariate, and multiple logistic regression to analyze the discontinuation of contraception. A study has shown a relationship (p<0.05) between parity, education level, level of knowledge, and the incidence of contraceptive dropout. Furthermore, age and employment status did not affect them. In conclusion, a relationship exists between predisposing factors such as education, parity, knowledge, and contraceptive dropout. There is a need to emphasize the health promotion of contraception, especially for women of childbearing age with marital status, low education, fewer children than two, and inadequate knowledge level. In addition, contraceptive service standards should be implemented to prevent the incidence of contraceptive dropout.

Keywords: Contraceptive, dropout, knowledge

Introduction

National Population and Family Planning Board (*Badan Kependudukan dan Keluarga Berencana Nasional*, BKKBN) West Java needs to achieve the family planning target in 2024. However, the incidence of contraceptive dropout is still high. Based on BKKBN in 2019, the dropping out of contraception in Indonesia reached 29%. Besides it, the contraceptive dropout in West Java increased to 29%.[1] The incidence will impact the total fertility rate (TFR).[2] And then, it will affect the level of welfare, and decrease the quality of education and health, reducing the quality of a country's population. Furthermore, the risk of abortion maternal and baby death also increase.[3]

National researchers have researched East Kalimantan using the Indonesia Demographic and Health Survey 2017. The results show the correlation between age, education level, employment status, and parity with contraceptive dropout.[4] This differs from international researchers in Ethiopia who used the Ethiopian Demographic and Health Survey data in 2016, which showed a relationship between age, level of education, employment status, and knowledge with the dropping out of contraception.[5–7]

Besides, the research indicated a research gap because the result has contradictory. Moreover, contraceptive dropout is rarely researched, especially in West Java. The significant population, different characteristics, and high prevalence of contraceptive dropout provide good research opportunities. The best research for solving the problem is correlation.[8] This study explores the relationship between predisposing factors and the incidence of contraceptive dropout in West Java.

Methods

This research was an analytic correlative with a cross-sectional design, which the study conducted from August to December 2021. The study instrument used secondary data from Program Performance and Accountability Survey (*Survei Kinerja dan Akuntabilitas Program*, SKAP) 2019; hence no instrument validation was

conducted.

The total population of women of childbearing age in West Java from SKAP 2019 is 2,804. The inclusion subject criteria are women of childbearing age who are married, aged 15–49 years, and have been using or have used contraception in SKAP 2019.

The sample size was calculated based on the formula Krecjie & Morgan, and the results were 338 respondents. The sampling has done by random sampling technique using Excel. The samples were analyzed statistically on IBM SPSS version 26.0. The analyzes were univariate to describe the distribution of each variable, bivariate using chi-square, and multivariate using multiple logistic regression. This research has been approved by the Research Ethics Committee of Universitas Padjadjaran, number 674/UN6. KEP/EC/2021.

Results

Table 1 shows that there is a relationship significantly (p<0.05) between education level, parity, knowledge level, and the incidence of contraceptive dropout. The value of r-correlation at education and knowledge levels is meager because the correlation coefficient is less than 0.199. The parity is low, with a correlation coefficient of less than 0.399 (Table 2). A highest risk of dropping out is the level of knowledge. The higher number of women with low knowledge can increase the risk incidence by 1.85 times (Figure).

Discussion

In this study, more than one hundred (39.35%) of the participants had dropped contraceptives. It shows the high incidence of contraceptive dropout in West Java because it has exceeded the maximum target expected by BKKBN, which is 24.6%.[1]

The first variable studied age. Age is the time lapse between the date of birth and the date of the study.[9] The more mature age, the better the strength and maturity of thinking were. It is expected that their perception and belief will mature to continue contraception. However, this study is not in line with the theory. The incidence of contraceptive dropout is prominent in high-risk ages (>35 years), with a presentation of 40.70%. This age is a vulnerable age for having children again because their reproductive organs are not as good as those aged 20–35.[10]

The researcher Anggraeni et al.[4] revealed that age is related to the incidence of contraceptive dropout. However, this study showed no relationship between them. This study is in line

Table 1 Relationship between Predisposing Factors and the Incidence of Contraceptive Dropout in West Java

Predisposing Factors	Incidence of Contraceptive Dropout			p Value[*]
	Yes n=133 (%)	No n=205 (%)	Total n=338 (%)	
Age				
High risk	81 (40.70)	118 (59.30)	199 (58.88)	0.54
Low risk	52 (37.41)	87 (62.59)	139 (41.12)	
Education level				
Low	88 (44.67)	109 (55.33)	197 (58.28)	0.02
High	45 (31.91)	96 (68.09)	141 (41.72)	
Employment status				
Not work	100 (38.61)	159 (61.39)	259 (76.63)	0.61
Work	33 (41.77)	46 (58.23)	79 (23.37)	
Parity				
Low	96 (43.05)	127 (56.95)	223 (65.98)	0.05
High	37 (32.17)	78 (67.83)	115 (34.02)	
Level of knowledge				
Poor	80 (46.51)	92 (53.49)	172 (50.89)	0.01
Good	53 (31.93)	113 (68.07)	166 (49.11)	

Note: [*]chi-square test, p value<0.05 significant

Table 2 Correlate between Predisposing Factors and the Incidence of Contraceptive Dropout in West Java

Predisposing Factors	Coefficient	p Value[*]	OR (95% CI)
Age	0.03	0.54	1.14 (0.73–1.79)
Education level	0.13	0.02	1.72 (1.09–2.70)
Employment status	−0.03	0.61	0.87 (0.52–1.46)
Parity	0.24	0.05	1.59 (0.99–2.55)
Level of knowledge	0.16	0.01	1.85 (1.19–2.88)

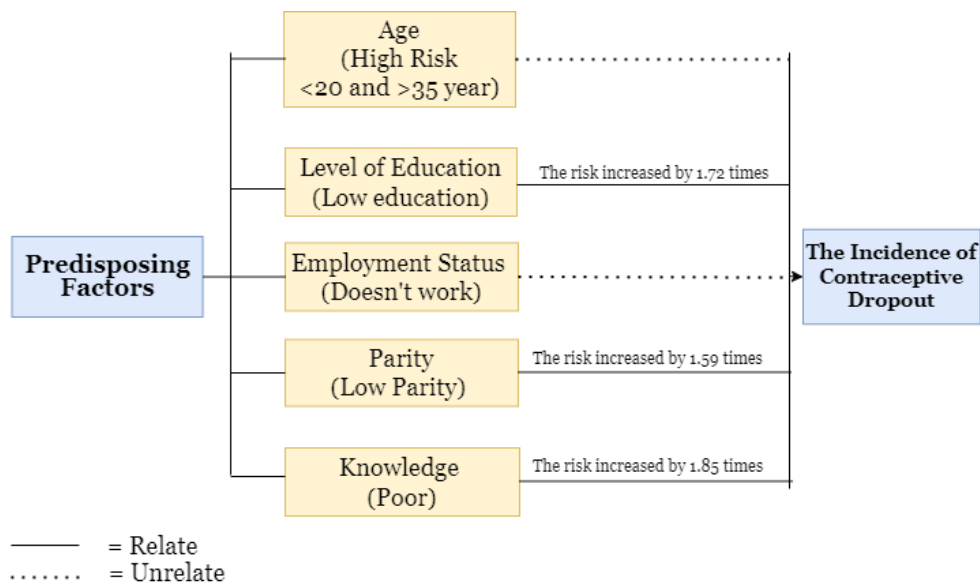Note: [*]multiple logistic regression, p value<0.05 significant

Figure Correlate between Predisposing Factors and the Incidence of Contraceptive Dropout

with the study of Sukardi et al.,[10] Afiati et al.,[11] and Ssebatta et al.,[12] who revealed that there was no relationship between age and contraceptive dropout. According to Chantal et al.,[13] it is influenced by the population's welfare, decision-making, and the lack of information provided by health workers.

From the respondent's education, the highest contraceptive dropout (44.67%) was found in low-education women. Setyawan[14] revealed that the higher a person's education, the easier it is to receive information and knowledge. Good knowledge will impact the length of a person in healthy behavior. Thus, someone with a high education level will not easily give up contraception without the need.[15]

The results of this study are in line with other studies, namely Safari et al.[16] and Kistiana et

al.[17] The level of closeness in this relationship is 0.13. This value belongs to a very low correlation because the r-correlation is less than 0.199. However, the correlation is positive, which means that the higher the number of women of childbearing age with low education, the higher the incidence of dropping out of contraception. Low education can also increase the risk by 1.72 times in the incidence of dropping out of contraception in West Java.

According to Statistics Indonesia (Badan Pusat Statistik), employment status is the type of position a person has in doing work. A working person is defined when the activities he does earn income with a minimum of one hour of work without a break in a week.[18] Women who work also have a shorter time to go to health workers; hence, managing the pregnancy spacing is very

important because it is to maintain the carer and support the family's economy.[19]

In a study by Antarini,[20] family income has a huge influence on increasing health financing, including the cost of contraception. However, it can be influenced by the availability of mobile phones and the Internet, which helps non-working mothers find information to deal with contraceptive issues. This study is in line with Wijayanti,[19] Sappan et al.,[21] and Abraha et al.,[22] that employment status is not related to the dropping out of contraception.

Parity is the number of children born to women.[23] The parity is low if the mother has given birth fewer than twice, while the parity is high if the mother has given birth more than twice.[24,25] This finding found that low parity women (43.05%) experienced contraceptive dropout. This study is in line with the research of Anggraeni et al.,[4] Belete et al.,[26] and Weldemariam et al.[7]

This study indicates that mothers with fewer than two children are prone to dropping out of contraception because they want more children.[4] Meanwhile, high parity still uses contraception because they do not want to have more children and feel they are old. The closeness of this relationship is 0.24 or relatively low because the correlation coefficient range from 0.20−0.399. This value indicates a positive direction. The more mothers with the number of children fewer than two, the higher the incidence of contraceptive dropout in West Java. The risk increases by 1.59 times.

The last category is knowledge. Knowledge is the dominant factor that shapes one's actions. This study found that knowledge in West Java was lacking, namely by 46.51%. This study is in line with the researchers Amru[27] and Aladaham et al.[28] The better a person's knowledge about contraception, the more they want to use contraception. However, the lower the knowledge about contraception, the greater the tendency not to use or stop using contraception.[6] Moreover, the healthcare provider is the main source of information, and women significantly consult healthcare providers more than men.[28]

The closeness level of the relationship between knowledge and the dropping out of contraception is 0.16 or very low. However, this value provides a positive direction, meaning that the more mothers who have insufficient knowledge, the higher the incidence of dropping out of contraception. Insufficient knowledge also contributes 1.85 times to increasing the incidence

of contraceptive dropout in West Java.

The high incidence of contraceptive dropout still needs attention and must be addressed immediately. Mothers with low education, having children fewer than two, and less knowledge will have the opportunity to stop using contraception. It shows the importance of promoting contraception to women of childbearing age between 10−49 years with marriage status, low education, having children fewer than two, and low knowledge level.

The role of midwives can be to motivate the importance of using contraception and provide informed choices regarding its types and side effects, respectively. And then providing counseling to guide clients to get suitable contraceptives for themselves. Regarding and guiding how to handle side effects so that mothers are convenient and continue to use contraception. Therefore, contraceptive service standards should be implemented to prevent the incidence of contraceptive dropout.

As for suggestions to BKKBN of West Java is still increasing women's knowledge through media. Based on research SKAP in 2019 that the most accessed media by targets are television, posters, and banners. Therefore, it can be used in the media for the health promotion of contraception. In addition, insert key messages related to knowledge of contraception in the community. Hence the family planning information in these communities can increase.

This study uses secondary data from the SKAP 2019, so the data cannot explore the use of contraceptives every month, and the independent variables were limited. Therefore, it recommends further study to use SKAP 2019 data as the basis for research and primary data to explore the use of contraceptives every month. In addition, it can explore other predisposing factors, such as income levels and attitudes, and explore reinforcing and enabling factors. Also, there is a need to emphasize the health promotion of contraception, especially for women of childbearing age with marital status, low education, having children fewer than two, and low knowledge level. In addition, contraceptive service standards should be implemented to prevent the incidence of contraceptive dropout.

Conclusions

There is a relationship between predisposing factors such as education, parity, and knowledge

with contraceptive dropout. Meanwhile, age and employment status have no relationship.

Conflict of Interest

There was no conflict of interest.

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