



(RESEARCH ARTICLE)



The effect of knowledge and subjective norms on intention to use vasectomy contraception in men

Shelly Amilia *, Zulfa Anida and Mochammad Bagus Qomaruddin

Department Epidemiology, Biostatistics, and Behaviour Sciences, Faculty of Public Health, Airlangga University, Indonesia.

World Journal of Advanced Research and Reviews, 2024, 21(03), 1380–1385

Publication history: Received on 05 February 2024; revised on 13 March 2024; accepted on 15 March 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.21.3.0874>

Abstract

Indonesia has the fourth largest population in the world, which could cause problems if it is not controlled properly. In response to this, the use of contraceptives is one way to regulate the population's birth rate. This study aims to determine the effect of knowledge and subjective norms on the intention of men with more than three children to use vasectomy contraception. This research is quantitative research with an analytical observational research design. This research uses a cross-sectional approach because the variables used in this research were taken at the same time. The population used in this research were men with more than three children who lived in Putat Jaya Village, Sawahan District, Surabaya, Indonesia. The variables in this research consist of independent and dependent variables. The independent variables in this study are knowledge and subjective norms, while the dependent variable in this study is the intention to use vasectomy contraception. The results of this study show that there is a significant effect between knowledge variables and subjective norms on the intention to use vasectomy contraception. The knowledge variable shows a significance value of 0.006 ($<\alpha=0.05$), while the subjective norms variable shows a significance value of 0.000 ($<\alpha=0.05$) or 31,778 times greater in influencing the intention to use contraception. In conclusion, knowledge and subjective norms affect the intention to use vasectomy contraception.

Keywords: Knowledge; Subjective norms; Intention; Vasectomy

1. Introduction

Indonesia is one of the countries with the largest population in the world. Indonesia is ranked 4th in the country with the largest population in the world after China, India, and the United States. It is known that the population of Indonesia as of 2020 is 270,203,917 people (1). Also, population growth in Indonesia in 2023 will reach 1.13% (2). The high population will also cause various negative impacts if not controlled properly. This impact could be a population problem, which will continue to develop into a complex problem if addressed after some time. Among these impacts are increasing poverty, social inequality, and declining quality of life in the community (3). This indirectly occurs due to an imbalance between the supply of resources and the needs of each individual. As a result, community welfare cannot be met optimally (4).

In responding to this threat, the Indonesian government has made various efforts to minimize and overcome various population problems in Indonesia. One of the efforts made by the government is to implement the Family Planning program on a massive scale in the community. The general aim of the Family Planning program is to form a small family that has social and economic strength by trying to regulate the birth of children so that the family can live happily and prosperously and can meet the living needs of each member of the family (5). The Family Planning program is clearly stated in Law Number 52 of 2009 on Population Development and Family Development. In this regulation, the government is limited to regulating family development issues and population control issues (6). The Family Planning

* Corresponding author: Shelly Amilia

program in Indonesia has been implemented since the 1950s and has been proven to reduce birth rates (7). By controlling population growth, it is hoped that community welfare can be achieved well.

In its implementation, the National Family Planning Coordinating Agency Indonesia uses contraception as a way to regulate the population's birth rate. The use of contraceptives is classified into modern and traditional contraception. Modern contraception is carried out using surgical or sterilization methods for women, surgical or sterilization methods for men, pills, IUDs, birth control injections, condoms, and even implant methods. Apart from that, traditional contraception in question is contraception carried out using traditional methods such as the periodic abstinence method, interrupted intercourse, or other traditional methods (7). Of the many types of contraception in circulation, one type of contraception that the government is intensively implementing is the male surgical method contraception or vasectomy contraception. Vasectomy contraception is seen as a manifestation of the government's attention to the issue of gender equality between men and women, especially in efforts to control the population through the number of births.

A person's decision to choose to use a type of contraception depends on several factors that affect it. One factor that can affect a person's intention to use contraception is knowledge. According to Notoatmodjo, knowledge is something a person knows, whether related to health, illness, or other things, especially those related to health (8). Several studies also explain the existence of a relationship between the knowledge a person has and the use of contraception. This research shows a significant relationship between knowledge and contraceptive use, with a p-value of 0.015 (8).

Not only is knowledge a factor influencing a person's use of contraception, but subjective norms are also a factor influencing a person's intention to take an action, which in this case is the use of contraception. The subjective norm is an encouragement or social effect someone obtains in doing something (9). Several previous studies have stated that there is a significant effect between attitudes, subjective norms, and behavioral control on the intention to participate in Family Planning programs (10). Other research also states that subjective norms are the most dominant variable on the intention of couples of childbearing age to use contraception, with a correlation value of 0.450 (11). Based on this, the hypothesis formulated in this research is that there is an effect between knowledge and subjective norms on the intention to use vasectomy contraception in men.

2. Methods

This research is quantitative research with an analytical observational research design. This research uses a cross-sectional approach because the variables used in this research were taken at the same time. This study aims to determine the effect of knowledge and subjective norms on the intention of men with more than three children to use vasectomy contraception. This research was conducted in Putat Jaya Village, Sawahan District, Surabaya City. This research was carried out from May to June 2022. The population used in this research was men with more than three children who live in Putat Jaya Village, Sawahan District, Surabaya City. The sample in this study consisted of 57 men with more than three children, which had previously been determined based on the number of couples of childbearing age with more than three children in Putat Jaya Village using the Lemeshow sample size formula. The sampling technique used in this research is a simple random sampling technique.

The variables in this research consist of independent and dependent variables. The independent variables in this study are knowledge and subjective norms, while the dependent variable in this study is the intention to use vasectomy contraception. The data used in this research is primarily obtained through interviews using instruments in questionnaires given to men in Putat Jaya Village with more than three children. The data was then analyzed using a binary logistic regression test to determine whether there was an effect between variables.

3. Results

Based on this table, it can be seen that the largest number of respondents who took part in this research were in the age range 41-50 years (86%), while respondents in the age range 25-30 years were the smallest age group who took part in this research. Apart from that, based on the last level of education possessed by the respondents, it shows that respondents with a final education of junior high school/equivalent were the largest number of respondents (33.3%), followed by respondents with a final education of elementary school/equivalent (29.8%) and high school/equivalent (29.8%). The table also shows that the knowledge possessed by the majority of respondents regarding vasectomy contraception is moderate (52.6%).

Table 1 Frequency Distribution of Characteristics Respondents in Putat Jaya Village

Characteristics	N	%
Age		
25-30 Years	3	5.3
31-40 Years	5	8.8
41-50 Years	49	86.0
Total	57	100.0
Last Education		
Never Attended School	1	1.8
Elementary School	17	29.8
Junior High School	19	33.3
Senior High School	17	29.8
College	3	5.3
Total	57	100.0
Knowledge		
Low	18	31.6
Medium	30	52.6
High	9	15.8
Total	57	100.0

Table 2 Frequency Distribution of Respondents Based on Subjective Norms

Subjective Norms	N	%
Doesn't Support	29	50.9
Support	14	24.6
Very Supportive	14	24.6
Total	57	100.0

As previously explained, subjective norms are an encouragement or effect in doing a certain thing that is obtained through the social environment, which in this case is the use of vasectomy contraception (9). Meanwhile, based on the table above, it can be seen that as many as 50.9% of all respondents do not support the use of vasectomy contraception.

Table 3 Frequency Distribution of Respondents Based on Intention

Intention	N	%
No Intention	38	66.7
Intend	19	33.3
Total	57	100.0

Based on this table, it can be seen that the majority of respondents in this study have no intention of using vasectomy contraception, namely 66.7% of the total number of respondents.

Table 4 Results of Analysis of the Effect of Knowledge on Intention to Use Vasectomy Contraception in Men in Putat Jaya Village in 2022

Knowledge	Intention				Total		Regression Test Results Binary Logistics		Description
	No Intention		Intend				P-Value	Exp (B)	
	N	%	N	%	N	%			
Low	7	38.9	11	6.1	18	100.0	Ref.	Ref.	Significant Effect
Medium	24	80.0	6	20.0	31	100.0	0.006	0.159	
High	7	36.8	12	63.2	19	100.0	0.069	1.182	

From this table, it is known that the majority of respondents who have no intention of using vasectomy contraception have moderate knowledge, namely 80.0%. Not only that, based on the results of the binary logistic regression test, it was found that there was a significant effect between knowledge and intention to use vasectomy contraception. Based on this test, a significance value of 0.006 ($<\alpha=0.05$) was obtained in the "medium" knowledge category, so it can be concluded that sufficient knowledge provides a 0.159 times chance of preventing the respondent's intention to use vasectomy contraception than the "low" knowledge category.

Table 5 Results of Analysis of the Influence of Subjective Norms on Intention to Use Vasectomy Contraception among Men in Putat Jaya Subdistrict in 2022

Subjective Norm	Intention				Total		Regression Test Results Binary Logistics		Description
	No Intention		Intend				P-Value	Exp (B)	
	N	%	N	%	N	%			
Not Sure	26	89.7	3	10.3	29	100.0	Ref.	Ref.	Significant Effect
Certain	9	64.3	5	35.7	14	100.0	0.057	4.815	
Very Confident	3	21.4	11	78.6	14	100.0	0.000	31.778	

The table shows that the majority of respondents (89.7%) who have no intention of using vasectomy contraception are respondents with the subjective norms condition of "not sure" about the use of vasectomy contraception. Next, this research used a binary logistic test to determine the effect between variables. Through the test results, it was found that the two variables had a significant effect with a significance value of 0.000 ($<\alpha=0.05$) on subjective norms in the "very confident" category. So, based on this table, it can be concluded that subjective norms in the "very confident" category can have a 31,778 times greater effect in influencing the intention to use vasectomy contraception than subjective norms in the "not sure" category.

4. Discussion

4.1. The Effect of Knowledge on Intention to Use Vasectomy Contraception

Knowledge is something a person has and is obtained through education and experience. The more experience a person has, the more directly proportional it will be to the amount of knowledge he has (12). This research shows that there is a significant effect between the knowledge the respondent has and the intention to use vasectomy contraception. This research is in line with research conducted by Putri, Laili, and Salim (13) which states that there is a relationship between the level of knowledge and the intention to use contraception. This research also aligns with the offshoots of research conducted by Irawati (14), which shows a relationship between increasing knowledge and contraception, with a p-value of 0.000.

A person's knowledge is affected by many things, such as education, experience, exposure to information, social relationships, and other factors (15). The knowledge a person has is a basis that can be used in determining an action; the higher the level of knowledge a person has, the higher the level of knowledge. Knowledge will make it easier for

someone to determine an action based on their insight. The better knowledge a person has about contraception, the higher the person's intention to use contraception (14). In this case, even though the level of knowledge the respondent has regarding vasectomy in this study is included in the category of sufficient knowledge, the intention of men of childbearing age with more than three children in Putat Jaya Village to use vasectomy contraception is still relatively low.

4.2. The Effect of Subjective Norms on Intention to Use Vasectomy Contraception

A subjective norm is a motivation for an individual to do something or an action based on other people's views of him (16). In this case, subjective norms refer to the perception that men of childbearing age with more than three children have regarding the use of vasectomy contraception. The results of this study show that there is a significant effect between subjective norms and the intention to use vasectomy contraception. This research is in line with research conducted by Kharisma and Isni (11), which shows that there is a relationship between subjective norms and respondents' intentions to use contraceptives. In this research, it is stated that subjective norms are the most dominant variable in the intention of couples of childbearing age to use contraception, with a correlation value of 0.450.

Based on the theory put forward by Ajzen (17) regarding the Theory of Planned Behavior (TPB), it is stated that a person's behaviour will be determined by three main determinants, one of which is subjective norms. In this case, normative beliefs and desires affect a person's subjective norms. Apart from that, another theory that includes subjective norms' effect on a person's intention to do something is the Theory of Reasoned Action (TRA). In this theory, a person's intentions depend on the components of their attitudes and subjective norms. This attitude is determined by opinions regarding the results that can be obtained if we do something. In contrast, subjective norms are determined by other people's opinions regarding individual motivation and behaviour (18).

5. Conclusion

Based on the results of research conducted regarding the effect of knowledge and subjective norms on the intention to use vasectomy contraception, the results showed that knowledge and subjective norms affect the intention to use vasectomy contraception, especially in men of childbearing age with more than three children. It is hoped that this research can become a reference and reference material for further research, namely research related to vasectomy contraception, by considering other factors that have not been included in this research.

Compliance with ethical standards

Disclosure of Conflicting Interests

The author(s) declared no conflicts of interest to disclosed.

References

- [1] BPS. Jumlah Penduduk Indonesia Sensus penduduk 2020 [Internet]. 2020. Available from: <https://sensus.bps.go.id>
- [2] BPS. Laju Pertumbuhan Penduduk dalam Persen Tahun 2021-2023 [Internet]. 2023. Available from: <https://sensus.bps.go.id>
- [3] Ramadan. Analisis Masalah Kependudukan Di Indonesia. *J Econ Educ.* 2023;2(1):29-37.
- [4] Tuharea J, Metekohy LM, Maatoke S. Peran Pemerintah Menciptakan Desa Keluarga Berencana (KB) Sebagai Upaya dalam Peningkatan Kesejahteraan Masyarakat (Studi pada Desa Wasia Kecamatan Elpaputih Kabupaten Seram Bagian Barat). *JETISH J Educ Technol Inf Soc Sci Heal.* 2023;1(1):108–13.
- [5] Meilani, M. Putranti Prasetyo Wijiharto Tunggal, A. Pemilihan Alat Kontrasepsi dalam Rahim (AKDR) pada Akseptor Keluarga Berencana. *Jurnal Kebidanan.* 2020;9 (1), 31-38.
- [6] BPK RI. UU Nomor 52 Tahun 2009 tentang Perkembangan Kependudukan dan Pembangunan Keluarga [Internet]. 2020. Available from: <https://peraturan.bpk.go.id>.
- [7] Yuniar, V. Implementasi Program Keluarga Berencana (KB) dengan Metode Operasi Pria (MOP)/Vasektomi di Kabupaten Bojonegoro. *JIAN-Jurnal Ilmu Administrasi Negara.* 2023;7 (1), 18-27.

- [8] Satria D, Chairuna C, Handayani S. Hubungan Tingkat Pengetahuan, Dukungan Suami, dan Sikap Ibu dengan Penggunaan Kontrasepsi IUD. *J Ilm Univ Batanghari Jambi*. 2022;22(1):166.
- [9] Amin K, Hadisiwi P, Ratna Suminar J, Dida S. Pengaruh Terpaan Informasi Keluarga Berencana terhadap Intensi Penggunaan Metode Kontrasepsi Jangka Panjang. *J Komun*. 2022;16(2):205–22.
- [10] Putri AP. Identifikasi Perilaku Pasangan Usia Subur Terhadap Keikutsertaan Program Keluarga Berencana Dengan Pendekatan Teori Perilaku Yang Terencanakan (Theory Of Planned Behaviour). *Interes J Ilmu Kesehatan*. 2018;7(1):6–14.
- [11] Kharisma KY, isni K. Niat Pasangan Usia Subur dalam Menggunakan Alat dan Obat Kontrasepsi selama Pandemi COVID-19. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI)*. 2023;6(1):59-67.
- [12] Rosidah LK. Pengaruh Tingkat Pendidikan Dan Usia Terhadap Penggunaan Metode Kontrasepsi Jangka Panjang Tahun 2018. *J Kebidanan [Internet]*. 2020;9(2):108–14. Available from: <https://akbid-dharmahusada-kediri.ejournal.id/JKDH/index>
- [13] Putri A, Laili FA, Salim AL. Hubungan Usia Dan Pengetahuan Terhadap Penggunaan Kontrasepsi Pasangan Dengan Kondisi Unmer Need. *Prepotif J Kesehat Masy*. 2023;7(1):167–74.
- [14] Irawati T. Pengaruh Konseling dengan Pemberian Buku Saku terhadap Penggunaan Metode Kontrasepsi Jangka Panjang di Wilayah Puskesmas Tikung Kecamatan Tikung Kabupaten Lamongan. *J of Health [Internet]*. Available from: <https://jurnal.uuiac.id>.
- [15] Pardosi M, Nababan D, Brahmama NE, Ginting D, Sitorus ME. Faktor - Faktor yang Berhubungan dengan Minat Ibu Bersalin dalam Pemilihan Alat Kontrasepsi KB Pascasalin dengan Metode Kontrasepsi Jangka Panjang di Kecamatan Rantau Utara Tahun 2021. *J Heal Technol Med [Internet]*. 2021;7(2):1470–84. Available from: <https://jurnal.uui.ac.id/index.php/JHTM/article/view/1729>.
- [16] Apriliani IM, Purba NP, Dewanti LP, Herawati H, Faizal I. Open access Open access. Citizen-Based Mar Debris Collect Train Study case Pangandaran. 2021;2(1):56–61.
- [17] Ajzen. *Attitude, Personality and Behaviour Second Edition*. 2005. New York: Open University Press.
- [18] Octamelia M. Tingkat Kecemasan Dengan Niat Bertindak Kunjungan Ulang Penggunaan Kontrasepsi Dalam Situasi Pandemi Covid-19. *J-KESMAS J Kesehat Masy*. 2022;8(1):1.