

Relationship between occupation and education with the choice of IUD contraception in Pauh District, Padang City, West Sumatra

Fitri Khoiriyah¹, Ariadi², Yusrawati³, Laila Rahmi⁴

^{1,2,3}Midwifery Program Masters Faculty of Medicine Andalas University

⁴Undergraduate Program of midwifery Faculty of Medicine Andalas University

ARTICLE INFO

Article history:

Received Oct 25, 2022

Revised Nov 01, 2022

Accepted Nov 22, 2022

Keywords:

Women of childbearing age

Family planning

IUD

Long-Term Contraceptive

Methods

Acceptor

ABSTRACT

High population growth is a significant problem faced by the Indonesian people in the field of population. Efforts to create quality families are primarily targeted at controlled population growth and increasing the quality of small families, as indicated by the increased use of rational, effective, and efficient contraceptive methods, namely the use of Long-Term Contraceptive Methods (MKJP). Referring to the 2020-2024 BKKBN Strategic Plan, the BKKBN vision has been set: "Creating quality families and balanced population growth to support the achievement of an advanced Indonesia that is sovereign, independent, and has a personality based on mutual cooperation" (BKKBN, 2021). The purpose of this research was to determine the relationship of education and occupation with the selection of IUD contraceptives in the work area of Pauh Health Center. This research was a cross-sectional comparative. The populations in this research were all women of childbearing age (WUS), current family planning acceptors aged 15-49 years who used IUD and non-IUD contraception. The samples of this research were 49 IUD users and 149 non-IUD users. The instruments were a questionnaire. The bivariate analysis used *Chi-Square*. The results the bivariate study found that there was a not significant relationship between occupation with the selection of IUD contraceptives ($p = 0.251$) and there was a significant relationship between education and the selection of IUD contraceptives ($p = 0.001$). This study concludes that there is no relationship between occupation with the choice of IUD contraceptives and there is a relationship between education and the choice of IUD contraceptives

This is an open access article under the [CC BY-NC](#) license.



Corresponding Author:

Fitri Khoiriyah,

Midwifery Program Masters Faculty

Andalas University,

Jl. Perintis Kemerdekaan no.94, Padang, 25127, West Sumatera, Indonesia,

Email: fitrikhoiriyah01@gmail.com

INTRODUCTION

High population growth is a significant problem faced by the Indonesian people in the field of population. Efforts to create quality families are primarily targeted at controlled population growth and increasing the quality of small families, as indicated by the increased use of rational, effective, and efficient contraceptive methods, namely the use of Long-Term Contraceptive Methods (MKJP). Referring to the 2020-2024 BKKBN Strategic Plan, the BKKBN vision has been set: "Creating quality families and balanced population growth to support the achievement of an advanced Indonesia that is sovereign, independent, and has a personality based on mutual cooperation" (BKKBN, 2021). The Family Planning Program (KB) is one of the important programs in improving the welfare of women, both individually and as part of their families and communities. One of the goals of the family planning program is to improve the welfare of mothers and children and to create happy and prosperous small families through birth control, reducing maternal mortality, increasing the Human Development Index (HDI), avoiding unwanted pregnancies, improving the health of pregnant women and children, prevent the transmission of dangerous diseases, ensure the growth and development of infants and children, improve family welfare, help ensure children's education, and improve the quality of the family (Kemenkes RI, 2021).

Padang City Health Profile data, in 2020, the number of active family planning participants was 136,936 people or 54.2% of PUS. The pattern of choosing the type of injectable contraception was 56,250 people (55.8%), and the IUD was as many as 6,029 people (5.9%) (Padang City Health Office, 2020). In Padang City, there are 11 sub-districts, and Pauh sub-district is the sub-district with the most fertile age couples in Padang City, namely 7,796 EFA and including the lowest for the use of IUD contraceptive methods, which are 385 acceptors out of 4,639 acceptors (BPS Kota Padang, 2021).

The IUD is the most effective method of contraception used by women worldwide. However, the use of IUDs in Indonesia is still very low at 8.5% and in West Sumatra, the use of IUDs is only 5.61%, and in the city of Padang only 5.9% (BKKBN, 2021)(Riskesdas, 2018)(Dinas Kesehatan Kota Padang, 2020). The IUD has high benefits when compared to other contraceptives such as injections, and birth control pills because it does not have hormonal side effects, has a high rate of reversibility, does not affect breast milk, and can be used in the long term (Rivlin, 2017).

Although several previous studies have examined several factors that cause the low age of women to use IUD contraceptives such as family influences, cultural influences, religious influences, myths about IUD contraceptives, and knowledge. However, research with other factors is still very much needed to examine the most rational factors in the choice of IUD contraception. So research in the area is needed to see the occupation, education with the selection of IUD contraceptives. The data received were more accurate in identifying which of the two factors influenced women who were eligible to use the IUD but were reluctant to use it. So the results of this study will help formulate strategies for increasing the use of IUD contraceptives in Pauh District, Padang City, West Sumatra.

RESEARCH METHOD

This research is an observational study with an analytical approach using a comparative analytic cross-sectional design. This study uses primary data and secondary data. Primary data are data obtained directly through interviews with women of marginal age as many as 198 WUS and secondary data obtained from the Padang City Health Office, Pauh Health Center, and Pauh Camat Office. This study uses primary data and secondary data. Primary data are data obtained directly through interviews with women of marginal age as many as 198 WUS and secondary data obtained from the Padang City Health Office, Pauh Health Center, and Pauh Camat Office.

This study took two groups of WUS which were divided into groups using IUDs and groups not using IUDs who were active family planning participants. The sampling technique in this study was using the Proportional Stratified Random Sampling technique from 9 villages in the Pauh sub-district and then using the Simple Random Sampling technique. Sampling in this study using a ratio of 1: 3, namely the number of non-IUD samples three times from IUD users. The technique of collecting data in this study was using a questionnaire research instrument with a guided interview technique for each WUS with as many as 198 respondents. This research has passed the ethical review from the FK Unand research commission with no: 706/UN.16.2/KEP-FK/2022.

RESULTS AND DISCUSSIONS

Results of Bivariate Analysis

Table 1 explains that 141 (72,2%) of the total 149 WUS not working and use non-IUD contraception, and 47 (22.7%) of the total 49 WUS not working and use IUD contraception. The results of the statistical test obtained a p-value of 0.251 which means that there is not significant relationship between occupation of WUS and the selection of IUD contraceptives by WUS.

Table 1. The relationship between respondents Occupation and the selection of contraceptives IUD in the work area of the Pauh Health Center, Padang City

No	Independent Variable	IUD KB acceptor				Total		P Value	OddRatio 95% CI
		No		Yes		N	%		
		N	%	N	%				
1	WUS occupation								
	1. Not working	141	72,2	47	22,7	188	94,9	0,251	2,119 (0,572-7,842)
	2. Working	8	3,1	2	2,0	10	5,1		
	Total	149	75,3	49	44,7	198	100		

Source : Primary Data, 2022

Table 2. The relationship between respondents Education and the selection of contraceptives IUD in the work area of the Pauh Health Center, Padang City

No	Independent Variable	IUD KB acceptor				Total		P Value	OddRatio 95% CI
		No		Yes		N	%		
		N	%	N	%				
1	WUS education								
	1. Low	44	26,8	14	2,5	58	29,3	0,001	4,858 (1,816-12,996)
	2. High	105	48,5	35	22,2	140	70,7		
	Total	149	75,3	49	24,7	198	100		

Source : Primary Data, 2022

Based on Table 2 explains that 105 (48.5%) of the total 149 WUS have high knowledge levels and use non-IUD contraception, and 35 (22.2%) of the total 49 WUS have knowledge high levels and use IUD contraception. The results of the statistical test obtained a p-value of 0.001 which means that there is a very significant relationship between the level of knowledge of WUS and the selection of IUD contraceptives by WUS. Based on the table above, the results of the OR value of 4,858 can be interpreted as WUS who have common knowledge 4,858 times not choosing an IUD contraceptive compared to WUS who have a high level of education.

Discussion

a. Relationship between occupation with the choice of IUD contraception

Notoatmodjo 2016 in his book says that people who work tend to get information from their work environment, which will affect their knowledge (Notoatmodjo, 2016). Work can expand one's knowledge, it will make it easier for someone to gain access to knowledge in choosing effective and

efficient contraceptives, namely MKJP (Budiarti et al., 2017). Luki Triyanto and Diah Indriani 2018 conducted a study with the results that WUS who work or have a permanent job prefer MKJP contraception because it is practical, safe, and has long-term effects. The use of MKJP is intended to limit birth spacing and limit the number of children so as not to interfere with their careers and work. Luki Triyanti and Diah Indriani in their research also concluded that WUS who chose to use the IUD felt comfortable this was because the use of this IUD had no effect on hormones that could interfere with WUS work activities (Triyanto, Luki., Indriani, 2018).

Baharika Suci Dwi Aningsih, Yetty Leoni Irawan in 2019 conducted a study with different results from previous studies where it was concluded that the use of long-term contraceptives such as the IUD has nothing to do with WUS employment status (Aningsih & Irawan, 2019). Tri Yunita Fitria Damayanti, et al in 2021 also conducted a study whose results were in line with previous research that there was no significant relationship between the type of work and the choice of long-term contraceptives such as the IUD (Damayanti et al., 2021).

The results of this study also conclude that work does not affect WUS in choosing contraceptives, this is reinforced by the research of Baharika Suci Dwi Aningsih, Yetty Leoni Irawan that WUS women's work has nothing to do with the choice of contraceptives in WUS. . Research conducted by Tri Yunita Fitria Damayanti, et al in 2021 also strengthens the results of this study that there is no significant relationship between WUS working and not working with the choice of contraception. What has been described above means that both working and non-working WUS can choose long-term contraceptives such as the IUD, this is because the use of long-term contraceptives such as the IUD will not interfere with daily activities so that it can be used by WUS who work or not. work. In addition, there are several other factors that play a more important role in determining their WUS method of contraception, such as knowledge, education and support from families such as husbands.

b. Relationship between education with the choice of IUD contraception

A person's level of education is very influential on a person in acting and finding solutions to all the problems that exist in him. Someone who has a higher education will be very rational in acting so it will be easier to accept new ideas. Education is delivering material on targets that aim to change behavior and goals (Notoatmodjo, 2016). The level of education will also be influential in making choices because someone who is highly educated is generally more receptive to innovative ideas (Fahlevie et al., 2022). Baharika Suci Dwi Aningsih, Yetty Leoni Irawan 2019 conducted a study with the results that the level of education influences the decision of a WUS in choosing contraceptives, this is because someone who has higher education, in general, will have a wider view and more receptive to ideas and things. innovative (Aningsih & Irawan, 2019). Iswari Hariastuti, et al in 2017 conducted a study with the results that the last education level of WUS was related to the choice of contraceptive method. WUS who have the last high level of education (college) are more likely to choose to use IUD compared to WUS who do not attend school (Hariastuti et al., 2021).

Iswari Hariastuti in the same study also explained the results that the level of education also affects the willingness to use long-term contraceptive methods. Education will affect a person's attitude in decision-making because the higher the level of education, the more rational in decision-making (Hariastuti et al., 2021). Esti agustina et.al 2021 in the same study also explained There is a relationship between education and the use of tools Intrauterine contraception (IUD) at the Pedamaran Health Center, Pedamaran District in 2019 (Agustina et al., 2021).

Gosavi et al 2016 conducted a study with different results from the results of previous studies that the level of education is generally not associated with more awareness about long-term contraceptive methods even those with secondary school education do not have good knowledge about long-term contraception (Gosavi et al., 2016). These results are supported by research conducted by Zendehtdel, et al in 2020 that the level of education does not affect WUS to choose long-term contraceptives. Even women with higher education avoid using long-term contraception

because they know fully how to determine the fertile period so that they do not need long-term contraceptive methods (Zendehdel et al., 2020). The results of this study are in line with research conducted by Baktianita Ratna Etnis et.al in 2018 with the results that there is a very significant relationship between education and the use of IUD contraception (Etnis et al., 2018).

Theoretically, formal education greatly affects a person's knowledge whereas if someone is highly educated, he will also have high knowledge. On the other hand, if a person has low education, he will have low knowledge. Someone with higher education is expected to be able to more easily and quickly understand how important health is and make their choices (Notoatmodjo, 2016). What has been described above means that education has a role in choosing the type of contraception, this is reinforced by the explanation of the results of previous studies which say that there is a relationship between education and the choice of contraception. This is also reinforced by the results of research at the researcher's place, namely WUS with a minimum education of high school graduates. use contraceptives. This result is also in line with Notoatmodjo's theory which has been explained previously that education is a process of delivering material to the target with the aim of changing behavior and goals.

CONCLUSION

The conclusion of this study is that there is no relationship between work and the choice of IUD contraceptives and there is a very significant relationship between education and the choice of IUD contraceptives.

ACKNOWLEDGEMENTS

The Author's Acknowledgments To The Pauh Puskesmas Who Have Helped The Author In Providing Secondary Data In This Research

References

- Agustina, E., Riski, M., & Sari, R. G. (2021). Hubungan Pendidikan, Usia dan Status Pekerjaan dengan Pemakaian Alat Kontrasepsi dalam Rahim (AKDR) di Puskesmas Pedamaran Kecamatan Pedamaran Kabupaten Oki Tahun 2019. *Jurnal Ilmiah Universitas Batanghari Jambi*, 21(1), 378. <https://doi.org/10.33087/jiubj.v21i1.1204>
- Aningsih, B. S. D., & Irawan, Y. L. (2019). Hubungan Umur, Tingkat Pendidikan, Pekerjaan Dan Paritas Terhadap Penggunaan Metode Kontrasepsi Jangka Panjang (Mkjp) Di Dusun Iii Desa Pananjung Kecamatan Cangkuang Kabupaten Bandung. *Jurnal Kebidanan*, 8(1), 33-40. <https://doi.org/10.47560/keb.v8i1.193>
- BKKBN. (2021). *Laporan Kinerja Instansi Pemerintah 2020*. BKKBN.
- BPS Kota Padang. (2021). Kota Padang Dalam Angka. In S. Afrita Roza, S. S. Sherly Aktivani, S. S. Silvia Netsyah, S. S. Armalia Desiyanti, & S. S. Winda Dwi Putri (Eds.), *BPS*. BPS Kota Padang.
- Budiarti, I., Nuryani Dwi, D., & Hidayat, R. (2017). Determinan Penggunaan Metode Kontrasepsi Jangka Panjang (MKJP) pada Akseptor KB. *Jurnal Kesehatan*, 8(2), 220. <https://doi.org/10.26630/jk.v8i2.490>
- Damayanti, T. Y. F., Sari, D. K. P., & Qonitun, U. (2021). Hubungan Jenis Pekerjaan dengan Pemilihan KB Metode Kontrasepsi Jangka Panjang. *Jurnal Ilmiah Kesehatan*, 14(1), 105. <https://doi.org/10.48144/jiks.v14i1.540>
- Dinas Kesehatan Kota Padang, K. P. (2020). *Profil Kesehatan Tahun 2020: Dinas Kesehatan Kota Padang*.
- Etnis, B. R., Hastono, S. P., & Widodo, S. (2018). Faktor-faktor yang berhubungan dengan penggunaan kontrasepsi IUD pada wanita usia subur (WUS) di Desa Tanjungtani Kecamatan Prambon Kabupaten Nganjuk 2016. *Global Health Science*, 3(1), 103-114.
- Fahlevie, R., Anggraini, H., & Turiyani, T. (2022). Hubungan Umur, Paritas, dan Tingkat Pendidikan Terhadap Penggunaan Metode Kontrasepsi Jangka Panjang (MKJP) di Rumkitban Muara Enim Tahun 2020. *Jurnal Ilmiah Universitas Batanghari Jambi*, 22(2), 706. <https://doi.org/10.33087/jiubj.v22i2.1679>
- Gosavi, A., Ma, Y., Wong, H., & Singh, K. (2016). Knowledge and factors determining choice of contraception

- among Singaporean women. *Singapore Medical Journal*, 57(11), 610-615. <https://doi.org/10.11622/smedj.2015181>
- Hariastuti, I., Baroya, N., Handini, Y. R., & Wicaksono, D. B. C. (2021). Determinan Penggunaan Metode Kontrasepsi Jangka Panjang di Jawa Timur Tahun 2017. *BIOGRAPH-I: Journal of Biostatistics and Demographic Dynamic*, 1(1), 24. <https://doi.org/10.19184/biograph-i.v1i1.23619>
- Kemenkes RI. (2021). *Pedoman konseling menggunakan lembar balik alat bantu pengambilan keputusan ber KB*.
- Notoatmodjo, S. (2016). *Ilmu perilaku kesehatan kesehatan*. PT. RINEKA CIPTA.
- Riskesdas. (2018). Riset Kesehatan Dasar Provinsi Sumatera Barat Tahun 2018. In *Laporan Riskesdas Nasional 2018*.
- Rivlin, K. (2017). O'Connor TG, Heron J, Glover V, Alspac Study T. Antenatal anxiety predicts child behavioral/emotional problems independently of postnatal depression. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2011;41(12):1470-7. 00(00).
- Triyanto, Luki., Indriani, D. (2018). Kontrasepsi Jangka Panjang (Mkjp) Pada Wanita Menikah Usia Subu ... *The Indonesian Journal of Public Health*, 13(2), 244-255. <https://doi.org/10.20473/ijph.v13i1.2018.244-255>
- Zendehdel, M., Jahanfar, S., Hamzehgardeshi, Z., & Fooladi, E. (2020). An Investigation into Long-acting Reversible Contraception: Use, Awareness, and Associated Factors. *European Journal of Environment and Public Health*, 4(2). <https://doi.org/10.29333/ejeph/7837>