



Knowledge and Selection of The Intrauterine Device Among Women in Sumedang District

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Abstract, **Background:** Sumedang has low Intra Uterine Device (IUD) acceptors coverage. It was 5.7% in 2011, decreasing to 5.2% in 2012. The region with the lowest IUD coverage was the Hargombong Health Center in Sumedang district (4.8%). The problem was multifactorial, one of them is a factor related to knowledge of the IUD. **Methods:** The research method was a cross-sectional study with a sample of 190 respondents. Data collection using a questionnaire, analysis with chi-square test. **Results:** The group of women who had knowledge about the IUD more used the IUD (16.5%) compared to the group of women who had low knowledge (2,3%). Statistical test results showed a significant association (p value 0.001). Women who used an IUD tend to have more knowledge about the IUD (Hlandky, 2011). In this study, women who were knowledgeable about the IUD used more IUDs. The lowest level of knowledge is related to follow up after IUD (85,3%), and how the IUD works (55,3%). **Conclusion:** There was significant association between women's knowledge's and choice of using an IUD. Counselling or health education about the IUD need to be developed and increase

Introduction

Couples of childbearing age (EFA) in Indonesia who choose to use ADKR is still low. EFA uses many other methods which are short-term contraceptive methods such as injections and pills. According to IDHS data in 2007, the prevalence of IUD use was only 4.2%. This figure is much lower than the prevalence of using short-term methods of contraception, for example, 31.9% injections and 13.2% pills ((1)

West Java Province is the province with the largest population compared to other provinces, reaching 43,053,732 people with a population growth rate of 1.90. The population growth rate is higher

than the national average population growth rate (1.49%). According to the 2012 Profile of West Java Province, in West Java Province, EFA used an IUD 10.6%. This figure is also much smaller than that of EFA which uses the short-term method, which is 81.2%, consisting of 57.4% injections, 22.2% pills, 1.3% condoms, and 0.2% other methods. (2)

Sumedang Regency is one of the regencies in West Java Province with a large population of 1,135,331 people. The selection of the IUD as a means of contraception tends to decrease. In 2011, women who used IUDs were 5.7%, while in 2012, women who used IUDs decreased to 5.2%. EFA prefers to use short-term contraceptive methods such as injections and pills, each with an injection

percentage of 55.5% and the pill 13.3% (DinKes Sumedang District, 2012). One of the areas with low use of IUD contraception is the Haurgombong Health Center, Sumedang Regency (4.8%).

Several studies show that the variables related to the choice of contraceptives are education level, = 0.000, age, = 0.039, parity, education (P value = 0.161), knowledge (sig=0.001), anxiety (0.005), husband's support (sig=0.001), Communication, Information, and Education (KIE) (sig=0.018) myth value = 0.013. Negative myths circulating among respondents, such as the IUD contraception, will affect husband and wife intercourse and are also embarrassed when it is inserted, and the IUD can run inside the body which can turn off the acceptor. In addition, most (51.7%) of the socio-cultural community in the community do not support using the IUD, such as

using contraception, which is contrary to religious teachings and the myth that says that many children have a lot of sustenance (1); (2); (3); (4); (5)

Based on the results of a preliminary study conducted on non-IUD acceptors in the working area of the Haurgombong Health Center, it was found that there were several reasons for the acceptors not wanting to use the IUD, including the acceptors perceive that the IUD can rust, can move from place to place in the body, can come out if you work too hard, and can out if lifting heavy weights and various other perceptions that are not in accordance with scientific facts. In addition to these perceptions, some acceptors also feel taboo to show their genitals to others and are worried about disturbing the husband and wife relationship.

Methods

Quantitative study using a cross sectional design. The sampling technique was stratified random sampling as follows: the affordable population was divided into two groups, namely the RW group with low IUD coverage and the RW group with high IUD coverage. Furthermore, samples were taken randomly from the two RW

strata, each 50% of the total, the number of samples was 190 people. The data collected is primary data about knowledge, attitudes, age, parity, education, and occupation, as well as the selection of IUD contraception collected directly from respondents through filling out a questionnaire. Analyze the data using xhi square.

Results and Discussion

Tabel 1. Association of knowledge and selecting IUD

Variabel Pengetahuan	Selecting the IUD		Not Selecting the IUD		P value	OR
	n	%	n	%		
Good	17	16,5	86	83,5	0,001	7,18
Less	2	2,3	85	97,7		
Total	19	10	171	90		

Respondents who chose the IUD mostly found in respondents who had good knowledge as many as 17 people (16.5%). The results of the chi square analysis showed a relationship between knowledge and IUD selection (p value 0.001) and the OR value was 7.18

Knowledge or cognitive is a very important domain for the formation of a person's actions in determining the choice of contraceptives, including the selection of IUD contraceptives. The results of this study indicate that there is a relationship between knowledge factors and IUD

selection. This is in line with the results of Farahan's research (2016) on the level of knowledge of the use of contraceptives in women of childbearing age which states that the higher the level of knowledge, the higher the use of family planning.

Most (87.8%) of the surveyed women had heard of the IUD, and nearly two-thirds had a positive attitude toward the method. But a lower percentage (38.6%) had accurate information about the IUD and more than half (51.6%) did not think the method was available in a nearby facility. More than half of the women believed incorrectly that the IUD can damage the womb (57%), that it reduces sexual pleasure (54%), and that it can cause cancer (58%). Current use of family planning or of a modern method specifically was positively associated with awareness and accurate knowledge and beliefs about the IUD.(6) (7)

Lack of knowledge about IUDs is a major barrier to the use of highly effective contraception. (7) Low level of knowledge is at risk of not using IUD contraception 7 times. Respondents who have less knowledge of the IUD contraception have an effect on decision making in the use of the IUD KB, therefore the provision of education about the IUD KB has a very positive effect on the level of knowledge of women of childbearing age, especially about the use of the IUD KB, a person's knowledge increases and the level of knowledge about the IUD KB greatly affect the mindset of respondents in choosing contraception. Respondents who have less knowledge of IUD family planning certainly have an effect on decision making in the use of IUD family planning. that knowledge is the result of finding out before someone adopts a new behavior or norm, they first find out what the meaning and benefits of that behavior are for themselves and their families. Someone who has good knowledge about IUD contraception will prefer to use IUD contraception while someone who has poor knowledge will be less likely to choose to use IUD contraception. (8), (9) (10); (11)

Lack of knowledge is a barrier to recommending and inserting an IUD

because it relates to knowledge about IUD safety and side effect profiles. Concerns about the risks of using the IUD, but few prospective studies have confirmed the safety of the IUD. Nearly half of the respondents cited side effects as a factor that negatively affected their decision to recommend an IUD. The most common side effects of Tcu 380A, increased menstrual bleeding and cramping, are often relieved by the use of nonsteroidal anti-inflammatory drugg. (13), (12).

Knowledge of contraceptive methods is a predictor of contraceptive compliance, and there is a relationship between knowledge and health choices (13); (14); (15); the results of another study suggested that the proportion of women with knowledge levels was below the median, which was slightly more than a third interested in using the IUD, and finally, that the level of knowledge about the IUD was associated with previous IUD use and interest in using it. Low levels of education have the lowest level of knowledge about IUD. The findings found that the level of knowledge of the IUD was strongly related to its use and interest in using it, which may be related to the fact that it is a stigmatized method. Analysis of IUD knowledge related to the choice of IUD use among women of reproductive age. (16);

Utilization of the IUD as a method for family planning, from this study around 97% of respondents have never used it, although they have knowledge of the method but because they have a negative attitude, they do not like this method. Of the respondents who did not choose the IUD due to reasons for failing to adopt the IUD method such as fear of the procedure was the most frequently mentioned reason not to use the IUD, a person may become pregnant while using the IUD and the baby is born with the device implanted in the body, it may travel to other organs of the body, it can spread the infection to other parts of the body, it causes infertility and can cause cancer.(17);

Conclusion

There is a relationship between knowledge level and IUD selection in

Hargombong Village, Sumedang Regency. There is a relationship between attitude and IUD selection in Hargombong Village, Sumedang Regency. lack of knowledge due to media that does not hit the target, so further research is needed to examine peer models and media development in IEC, especially IUD contraceptives.

Competing Interest

The authors of this paper have no competing interest to report.

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References

1. Van Zijl S, Morroni C, Van Der Spuy ZM. A survey to assess knowledge and acceptability of the intrauterine device in the Family Planning Services in Cape Town, South Africa. *Journal of Family Planning and Reproductive Health Care*. 2010;36(2):73–8.
2. Cuningham et all. *Williams Obstetrics*. 24 th. Newyork; 2014.
3. Ichsan B, A JE, Wijayanto W, Pengajar S, Kedokteran F, Muhammadiyah U, et al. PROGRAM KELOMPOK PENDUKUNG IBU DI WILAYAH PUSKESMAS PURWOSARI SURAKARTA GAGAL DALAM. *Gaster*. 2015;XII(1).
4. Aryati W, Wirawan DN, Sari KAK, Sawitri AAS. Determinants of long-acting contraceptives use among reproductive-age couples in Tanjung Karang Public Health Centre Mataram City, West Nusa Tenggara. *Public Health and Preventive Medicine Archive Journal* [Internet]. 2018;6(1):1. Tersedia pada: <https://phpmajournal.org/index.php/>
5. Nur Y, Sari I, Abidin UW, Ningsih S. FAKTOR - FAKTOR YANG BERHUBUNGAN DENGAN MINAT IBU DALAM Kampus Universitas Al Asyariah Mandar , Fakultas Kesehatan Masyarakat . D / a . Jl . Budi Utomo Indonesia Family planning movement done to the 23rd in which there shall be welfare then family plannin. *Jurnal Kesehatan Masyarakat*. 2019;5(1):47–59.
6. Twesigye R, Buyungo P, Kaula H, Buwembo D. Ugandan Womens View of the IUD: Generally Favorable but Many Have Misperceptions About Health Risks. *Global Health: Science and Practice* [Internet]. 2016;4(Supplement_2):S73–82. Tersedia pada: <http://www.ghspjournal.org/cgi/doi/10.9745/GHSP-D-15-00304>
7. Hall KS, Ela E, Zochowski MK, Caldwell A, Moniz M, McAndrew L, et al. “I don’t know enough to feel comfortable using them.” Women’s knowledge of and perceived barriers to long-acting reversible contraceptives on a college campus. *Contraception* [Internet]. 2016;93(6):556–64. Tersedia pada: <http://dx.doi.org/10.1016/j.contraception.2016.02.007>
8. Azijah I, Ambarwati K, Ariyanti I, Kesehatan FI, Indonesia UR, Kesehatan FI, et al. Pengaruh Pemberian Promosi Kesehatan Tentang Penggunaan Kb Iud Terhadap Tingkat Pengetahuan Wanita Usia Subur the. *Jurnal Kesehatan Bakti Tunas Husada*. 2020;20:1–7.
9. Wijayanti I budi. Hubungan Pengetahuan Tentang Kontrasepsi Dan Dukungan Suami Dengan Pemilihan Kontrasepsi IUD. *Jurnal KesMaDaSka*. 2016;124–30.
10. Saleh H dan IS. Hubungan Pengetahuan dan Sikap Ibu

- Terhadap Pemilihan Metode Alat Kontrasepsi Dalam Rahim. *Jurnal Imiah Kesehatan Sandi Husada*. 2020;9:1070–4.
- RCH in Njombe-Tanzania. 2020;(December).
11. Gallo MF, Nguyen N, Nguyen C, Steiner MJ. Knowledge of contraceptive effectiveness and method use among women in Hanoi, Vietnam. *Contraception: X* [Internet]. 2019;1:100009. Tersedia pada: <https://doi.org/10.1016/j.conx.2019.100009>
 12. Darmawati. Faktor-Faktor Yang Mempengaruhi Wanita Usia Subur Memilih Kontrasepsi Suntik. *Idea Nursing Journal Darmawati*. 2013;ISSN 2087-.
 13. Muhindo R, Okonya JN, Groves S, Chenault M, Muhindo R, Okonya JN, et al. Predictors of Contraceptive Adherence among Women Seeking Family Planning Services at Reproductive Health Uganda, Mityana Branch. *International Journal of Population Research* [Internet]. 2015;2015:1–8. Tersedia pada: <http://www.hindawi.com/journals/ijpr/2015/574329/>
 14. Septalia R, Puspitasari N. Faktor yang Memengaruhi Pemilihan Metode Kontrasepsi. *Jurnal Biometrika dan Kependudukan*. 2016;5:91–8.
 15. Thapa S, Paudel IS, Bhattarai S, Joshi R, Thapa K. Factors affecting IUCD discontinuation in Nepal: A nested case-control study. *Asia-Pacific Journal of Public Health*. 2015;27(2):NP1280–7.
 16. Luiza A, Borges V, Ferreira R, Gonçalves S. Knowledge about the intrauterine device and interest in using it among women users of primary care services *. 2020;
 17. Mvandal SP, Lupoly G, Nhandi J. Knowledge and Attitude concerning use of Intrauterine Contraceptive Device among Women attending Family Planning at Makambako