



BEHAVIORAL CHANGES IN CONTRACEPTIVE USE AMONG WOMEN OF REPRODUCTIVE AGE WITH UNMET NEEDS FOLLOWING FAMILY PLANNING COUNSELING

Ida Ayu Desy Ulandari^{a*} ; I Nyoman Wirata^b ; Ni Nyoman Suindri^c

*^{a, b, c} Program Studi Sarjana Terapan Kebidanan Poltekkes Kemenkes Denpasar ; Puputan Renon
Street ; Denpasar 80234 ; Indonesia*

Abstract

The low participation of women of childbearing age in participating in family planning services has led to an increase in the incidence of unmet need in Indonesia. This research aims to determine the differences in knowledge, attitudes, and decision-making in women of childbearing age who have unmet needs before and after being given family planning counseling in the working area of the UPTD Puskesmas Tabanan III. This research uses a pre-experimental research design. The sample for this research is women of childbearing age (WUS) with unmet needs in the UPTD Puskesmas Tabanan III sample of 40 people. The data was then analyzed univariately and bivariately using the Wilcoxon test. The results show that there are differences in knowledge, attitudes, and decision-making in women of childbearing age who have unmet needs before and after being given family planning counseling. It is hoped that health workers will maintain and improve the quality of providing family planning services to the community.

Keywords: *Behavior; Contraception; Unmet Need*

1. Introduction

One of the welfare indicators in a country is the Maternal Mortality Rate (MMR) and the Infant Mortality Rate (IMR). The MMR target in 2024 is 183 deaths per 100,000 live births and 70 deaths per 100,000 lives in 2030. The Directorate of Nutrition of Maternal and Child Health has developed a strategy with the experts and also through the direction of the Minister of Health, one of the programs is the management of WUS who are not suitable for pregnancy. This program is implemented in FKTP with 2 main activities Family Planning service, Anemia Treatment, Hypertension, and Obesity. In this case, Family Planning services are family planning programs that can prevent the close pregnancy and inappropriate timing for pregnancies and birth. The use of contraception will be able to prevent 30% of maternal deaths and reduce infant mortality by up to 20% (JNPK-KR, 2017).

Not all post-fertile women (WUS) participate in this family planning program due to many factors. Several factors are the lack of knowledge about women of childbearing age (WUS) about appropriate family planning methods, fear of the side effects, the lack of partner support, and the lack of explanation and counseling from officers about family planning methods and their side effects. This is what will give

*) Corresponding Author (Ida Ayu Desy Ulandari)
E-mail: gekulan87@gmail.com

the incidence of the unmet need in Indonesia. Unmet Need is the unmet need of WUS for family planning, in other words, WUS does not use

contraception (BKKBN, 2021).

The incidence of unmet needs in Indonesia in 2022 is 14.7% from the target of 8%, while the percentage of unmet needs in Bali province based on 2021 Family Data Collection (PK21) is 17.90% from the target of 7.94% (Ministry of Health of the Republic of Indonesia, 2023). This high number of unmet needs is also seen in Tabanan District, especially in Dajan Peken and Delod Peken Villages. Based on the data from the Tabanan District Family Planning Office in 2021, the unmet need figure in Dajan Peken Village is 18.87%, and in Delod Peken Village is 25.45%, which means the unmet need figure in the working area of Puskesmas Tabanan III is 22.1%. This figure is certainly quite high and still far from the target set by the BKKBN, namely 7.94%. This case will be a quite serious problem because it will increase the number of pregnancies with risks in the working area of the UPTD Puskesmas Tabanan III. Several efforts have been made to reduce the number of unmet needs risks in the working area of the UPTD Puskesmas Tabanan III, such as the birth planning and complications prevention program (P4K) which is carried out starting from pregnancy, free family planning services in collaboration with BKKBN in Tabanan sub-district Family Planning Office, and the counseling family planning counseling at Posyandu. However, there are still many WUS with unmet needs in the working area of the UPTD Puskesmas Tabanan III.

The appropriate family planning counseling for women of childbearing age (WUS) who behave in an unmet need is expected to increase the understanding of potential acceptors so they can choose contraception rationally. Based on data from the Tabanan District Family Planning Office in 2021, there were 573 PUS unmet needs in the work area of the UPTD Puskesmas Tabanan III. Based on a preliminary study carried out at posyandu in the working area of UPTD Puskesmas Tabanan III, there were 23% or 132 PUS with unmet needs who had never received in-depth family planning counseling and heard more often from their friends, family, and social media. This study aimed to determine the differences in knowledge, attitudes, and decision-making regarding the use of contraceptives in women of childbearing age (WUS) who did not need them before and after being given family planning counseling in the UPTD Puskesmas Tabanan III.

2. Method

This research uses a comparative study with a pre-experimental research design with a one-group pretest-post-test design. The research was conducted in Dajan Peken Village and Delod Peken Village which are within the working area of the UPTD Puskesmas Tabanan III in Bali Province. The research was carried out from February 21 to March 21, 2024. The population of this study was women of childbearing age (WUS) with unmet needs in the working area of the UPTD Puskesmas Tabanan III totaling 573 peoples. The research sample came from a population of unmet need WUS who had never received family planning counseling with 40 samples. The sampling technique is non-probability purposive sampling. The data collected is primary data using a questionnaire with validity and reliability. The result of the validity and reliability test with cronbach's alpha value greater than 0.8 which means that all instruments were declared valid and reliable. The data were analyzed univariately and bivariately using the Wilcoxon test. This ethical clearance was gained from Poltekkes Kemenkes Denpasar with the number DP.04.02/F.XXXII.25/0122/2024.

3. Result and Discussion

The respondents in this study were women of childbearing age (WUS) with unmet needs in the work area of UPTD Puskesmas Tabanan III who had never received family planning counseling. The respondents consisted of 40 patients who met the inclusion criteria. The distribution of respondent characteristics is presented in the following table.

Table 1. The characteristics of WUS *Unmet Need* in UPTD Puskesmas Tabanan III

Characteristic (n=40)	Frequency	Percentage (%)
Age		
20-35 years	31	77.5
>35 years	9	22.5
Last Education		
Elementary	1	2.5
Secondary	14	35.0
University	25	62.5
Job		
Unemployed	17	42.5
Employed	23	57.5
Parity		
Primipara	16	40.0
Multipara	24	60.0
Information Source		
Health workers	10	25.0
Family/friends	13	32.5
Information media	17	42.5

Based on the characteristics of the childbearing age women of unmet need, most were aged 20 to 35 years (77.5%). Judging from the recent education and employment, as many as 62.5% of WUS had a tertiary education and 42.5% of mothers did not work. As many as 60% of WUS are multipara and 42.5% are found as sources of information through information media.

The normality test aims to test whether each variable data is normally distributed or not. Analyzing the normality test can use Shapiro Wilk for data that has a sample of less than 50. The basis for the decision is if the t-statistic probability score > the level of significance (0.05) the data is normally distributed.

Table 2. The result of the Normality Test

Variable	Statistics	Df	Sig.
<i>Pre-test knowledge</i>	0.9	40	0.00
<i>Post-test knowledge</i>	0.8	40	0.00
<i>Pre-test attitude</i>	0.9	40	0.00
<i>Post-test attitude</i>	0.9	40	0.00
<i>Pre-test decision</i>	0.6	40	0.00
<i>Post-test decision</i>	0.2	40	0.00

Based on the Shapiro-Wilk normality test data, it can be seen that the significance score (p) of the knowledge, attitude, and decision-making variables is smaller than 0.05, indicating that the data is not normally distributed. Differences in knowledge, attitudes, and decision-making of unmet need WUS before and after being given family planning counseling were measured using the Wilcoxon test. Table 3 shows the results of the Wilcoxon test analysis.

Table 3. The Knowledge and Attitudes of WUS Unmet Needs Before and After Being Given Family Planning Counselling in the UPTD Puskesmas Tabanan III

Variable (n=40)	Min	Max	Mean ±SD	P- Score
<i>Pre-test knowledge</i>	14	24	20.4 ± 2.8	0.00
<i>Post-test knowledge</i>	21	24	23.1 ± 1.0	
<i>Pre-test attitude</i>	30	39	33.2 ± 2.4	0.00
<i>Post-test attitude</i>	31	42	36.5 ± 3.4	

The average WUS unmet need knowledge score before being given counseling was 20.4 and after being given counseling was 23.1. The average WUS unmet need attitude score before being given

counseling was 33.2 and after being given counseling was 36.5. Based on the Wilcoxon test output table above, it is known that the p-score for the knowledge variable is 0.00 (<0.05). As is the basis for taking This decision-making result shows that there is a difference in WUS knowledge of unmet needs before and after being given family planning counseling in the UPTD Puskesmas Tabanan III. The p-score for the attitude variable is 0.00 (<0.05), which means that there is a difference in the attitude of WUS who have unmet needs before and after being given family planning counseling in the UPTD Puskesmas Tabanan III.

Table 4. Decision Making for WUS Unmet Needs Before and After being given Family Planning Counselling in the UPTD Puskesmas Tabanan III

Decision-making (n=40)	Frequency	Proportion (%)	P Score
Decision-making of <i>pre-test</i>			
No	23	5.5	0.00
Yes	17	42.5	
Decision-making of <i>post-test</i>			
No	3	7.5	0.00
Yes	37	92.5	

Table 4 explains that before family planning counseling was carried out, the majority of unmet need WUS were not willing to use contraception (57.5%) However, there was an increase after family planning counseling was carried out to 92.5% of unmet need women who were willing to use contraception. The p-score for the decision-making variable is 0.00 (<0.05), which means that there is a difference in decision-making for WUS with unmet needs before and after being given family planning counseling in the UPTD Puskesmas Tabanan III.

Several efforts have been made to reduce the number of WUS unmet needs in the working area of the UPTD Puskesmas Tabanan III, such as the birth planning program and complications prevention (P4K) which is carried out starting from pregnancy, free family planning services in collaboration with the BKKBN in Tabanan sub-district family planning office, and outreach - counseling Family planning at Posyandu. Not all post-fertile women (WUS) participate in this family planning program due to many factors. Based on the characteristics of women of childbearing age, the majority were aged 20 to 35 years (77.5%) and as many as 22.5% were aged more than 35 years. This research has the same results as Etnis (2018), namely that 73.1% of WUS are more than 30 years old (Etnis, 2018). In line with research by Huda (2016), the results found that the majority of respondents were in the low-risk age category in the 20 to 35 year age range, namely 62.1% more than those in the high-risk age category in the age range of more than 35 years (Huda et al. , 2016). The older you are, the more mature person's level of maturity and strength will be in thinking and working, thereby fostering confidence in knowledge from people who are not mature enough, this is a result of soul experience (Nursalam, 2011).

Judging from recent education and employment, as many as 62.5% of WUS had a tertiary education. This is not in line with Siregar's (2021) research which shows that the majority of respondents had low education (64.7%) (Siregar et al., 2021). However, this is in line with research by Fadhila (2017), which found that 82.2% of couples of childbearing age were highly educated (Fadhila, 2017). Education can influence a person's behavior and lifestyle, especially in development. The higher the education, the wider a person's knowledge will be (Bagaskoro, 2019).

In this study, 42.5% of mothers did not work. In line with Fadhila (2017), based on the type of work, it was found that 77% of mothers did not work or were housewives (Fadhila, 2017). The awareness of mothers who do not work to use family planning is based on the mother's low economic condition so that the mother thinks about controlling the number of births (Khatulistiwa et al., 2014).

Based on the number of children, more than half of the respondents (60%) were multiparous. In line with research by Sumarsih (2022), most parties fall into the multiparous category, namely 68.3% (Sumarsih, 2022). Contraceptive use increases in women with high parity. The number and gender of living children

have quite a large influence on the acceptance of family planning methods (Sariyati et al., 2015).

Judging from the sources of information obtained by WUS unmet needs, as many as 42.5% found sources of information through information media, 32.5% from family or friends, and 25% from health workers. The same results were also obtained from research by Santoso (2022) which stated that the majority of mothers received family planning information from online media (Santoso, 2022). Research conducted by Nzokirishaka explains that socialization can be done through electronic media because women who are exposed to radio and TV will not choose to unmet need for family planning (Nzokirishaka & Itua, 2018). The presence of the media plays an important role in the process of disseminating information, one of which is health information such as reproductive health, use of contraceptives, and family planning behavior.

The average WUS unmet need knowledge score before being given counseling was 20.4 and the average WUS attitude score was 33.2. In Sitorus' (2019) research, the odds ratio for the knowledge variable on family planning was 0.882, meaning that mothers with poor knowledge would have unmet needs 0.882 times compared to mothers with good knowledge (Sitorus, 2019). The behavior of accepting a program that is based on knowledge will be better absorbed by the community. In line with research by Kusumastuti and Suarsih (2023), it was found that 48.3% of mothers' attitudes towards family planning before being given IEC were in the unfavorable category. Good maternal attitudes toward family planning programs and contraceptive choices result from good knowledge (Kusumastuti & Suarsih, 2023).

In this study, before family planning counseling was carried out, the majority of WUS were not willing to use contraception (57.5%). In line with Yanti's (2023) research, it was found that before community service activities in the form of counseling, there were only 14.42% of MKJP users (implants and IUDs). The impact resulting from the small number of people using contraceptives is unwanted births, causing a population explosion (Yanti, E. M., Wirastrri, 2023).

Knowledge about the positive and negative aspects of family planning programs changes a person's attitude toward family planning programs. The average WUS unmet need knowledge score before being given counseling was 20.4 and after being given counseling it was 23.1. This proves that after being given counseling there was an increase in the average WUS knowledge score. In line with Dewi (2022), she found an increase in WUS knowledge after counseling was carried out using the Click KB application media (Dewi, 2022).

Bad perceptions about contraception will lead to negative attitudes towards the use of family planning. Attitude shows the connotation of appropriate reactions to the stimulus, with a positive attitude there will be positive actions regarding the benefits of family planning, so attitudes towards family planning will increase. In this study the average WUS unmet need attitude score before being given counseling was 33.2 and after being given counseling increased to 36.5. The same results were found in Darmastuti's (2021) research which found that the average pretest attitude score in the experimental group was previously 8.70 and experienced an increase after being given counseling (Darmastuti et al., 2021).

In this study, there was an increase after family planning counseling to 92.5% of WUS willing to use contraception. Decision-making is rational, meaning making choices by maximizing consistent values within certain limits. In line with the results of Widiantari and Widiastuti (2021), it was found that there was an increase in awareness and changes in behavior in couples of childbearing age after being given counseling assistance in the form of participants' willingness to use contraceptives through family planning services which were provided free of charge, especially in PUS with unmet need status (Widiantari & Widiastuti, 2021).

Based on the Wilcoxon test output table, it is known that the p-score for the knowledge variable is 0.00 (<0.05). As a basis for decision-making, these results show that there is a difference in WUS knowledge of unmet needs before and after being given family planning counseling in the UPTD Puskesmas Tabanan III. In line with research by Mindarsih (2019), the results showed that there were differences in the mean and increase in knowledge of postpartum mothers about contraceptives before and after treatment in the

counseling group and the non-counseling group. The success of counseling is also influenced by the service providers provided by clinics or health service providers (Mindarsih, 2019). Lack of knowledge is the main cause of WUS not using contraception. Some WUS were identified as having poor knowledge of contraception because they had never heard about contraception, used contraception, or been consulted about contraception. This is due to a lack of information about contraception and limited accessibility to contraceptive services (Yesy et al, 2017). The age and education of WUS are one of the determinants of knowledge. Regarding age in this study, 77.5% of WUS were aged 20 to 35 years and 62.5% of WUS had tertiary education so as age increases, changes will occur both physically and psychologically. so that a person's way of thinking becomes more mature and mature. In terms of education, it is a strength for a person to become an authority in determining the desired goals and how to achieve these goals (Dewi, 2022).

The p-score for the attitude variable is 0.00 (<0.05), which means that there is a difference in the attitude of WUS who have unmet needs before and after being given family planning counseling in the UPTD Puskesmas. Simanjutak's (2017) research found that structured counseling was proven to increase positive attitudes about modern contraception in couples of childbearing age who had no met need with a p-value <0.001 . A person's attitude is determined by beliefs about the behavior they will display. If individuals have the perception that using contraception is a positive behavior, a positive attitude will grow toward receiving contraceptive information (Simanjutak et al., 2017).

The p-score for the decision-making variable is 0.00 (<0.05), which means that there is a difference in decision-making for WUS with unmet needs before and after being given family planning counseling in the UPTD Puskesmas Tabanan III. In line with Yulianita (2023), there is a significant influence of balanced counseling strategies between before and after counseling in making family planning decisions for pregnant women in the third trimester. Through counseling, mothers can see problems more clearly so they can choose their own solution according to the information they have previously received. Mothers can determine contraception firmly according to their own wishes and do not regret the decision they have taken (Yulianita et al., 2023). According to the researchers' assumptions, the views given by health workers are not through coercion but through careful consideration. This technique provides effectiveness in creating stability in the selection of contraceptives.

4. Conclusion and Suggestion

From the results of this study, it can be concluded that there are differences in knowledge, attitudes, and decision-making in women of childbearing age (UWS) who have unmet needs before and after being given family planning counselling.

5. Acknowledgments

Thank you to the UPTD Puskesmas Tabanan III, respondents, and all parties who have helped us in completing this research.

6. References

- Bagaskoro. (2019). *Pengantar Teknologi Informatika dan Komunikasi Data*. Deepublish.
- BKKBN. (2021). *Modul Pelatihan Pelayanan Kontrasepsi bagi Dokter dan Bidan di Fasilitas Pelayanan Kesehatan*. Jakarta: Kementrian Kesehatan RI.
- Darmastuti, A. S., Kasiati, K., Cahya Laksana, M. A., & Dewanti, L. Effect of Balance Counseling Strategy Towards Knowledge and Attitude in Contraception Among Pregnant Women. *Indonesian Midwifery and Health Sciences Journal*, 4(2), 150-159.

- Dewi, C., Pipitcahyani, T. I., & Sulistyowati, D. W. W. (2022). Pengaruh Aplikasi Klik KB terhadap Pengetahuan Kontrasepsi Pada Wanita Usia Subur. *Gema Bidan Indonesia (e-Journal)*, 11(2), 60-65.
- 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 Tahun 2016. *Global Health Science*, 3(1), 103-114.
- Fadhila, N. H., Widoyo, R., & Elytha, F. (2016). Unmet need keluarga berencana pada pasangan usia subur di kecamatan padang barat tahun 2015. *Jurnal Kesehatan Masyarakat Andalas*, 10(2), 151-156.
- Huda, A. N., Widagdo, L., & Widjanarko, B. (2016). Faktor-faktor yang berhubungan dengan perilaku penggunaan alat kontrasepsi pada wanita usia subur di puskesmas jombang-kota tangerang selatan. *Jurnal Kesehatan Masyarakat*, 4(1), 461-469.
- JNPK-KR. (2017). *Asuhan Persalinan Normal*. Jakarta .
- Kemendes RI. (2023). *Survei Demografi dan Kesehatan Indonesia*. Jakarta: Kemendes RI.
- Katulistiwa, R., Baroya, N. M., & Wati, D. M. (2014). Determinan unmet need KB pada wanita menikah di kecamatan klabang kabupaten Bondowoso (determinants for family planning among married women at klabang sub district in Bondowoso). *Pustaka Kesehatan*, 2(2), 277-284.
- Kusumastuti, N. A., & Suarsih, A. (2023). Komunikasi, Informasi, dan Edukasi tentang Pentingnya Program KB dan Pemilihan Alat Kontrasepsi pada Ibu Nifas. *E-Dimas: Jurnal Pengabdian kepada Masyarakat*, 14(4), 851-855.
- Mindarsih, T. (2019). Faktor Konseling Dan Pengetahuan Yang Mempengaruhi Ibu Postpartum Dalam Menggunakan Metode Kontrasepsi Di Kota Kupang. *CHMK Midwifery Scientific Journal*, 2, 1-26.
- Nzokirishaka, A., & Itua, I. (2018). Determinants of unmet need for family planning among married women of reproductive age in Burundi: a cross-sectional study. *Contraception and reproductive medicine*, 3, 1-13.
- Santoso, S., Hendarso, Y., & Wildayana, E. (2022). Fenomena Unmet Need di Kampung KB. *Kaganga: Jurnal Pendidikan Sejarah dan Riset Sosial Humaniora*, 5(2), 435-439.
- Sariyati, S., Mulyaningsih, S., & Sugiharti, S. (2015). Faktor yang Berhubungan dengan Terjadinya Unmet Need KB pada Pasangan Usia Subur (PUS) di Kota Yogyakarta. *JNKI (Jurnal Ners dan Kebidanan Indonesia)(Indonesian Journal of Nursing and Midwifery)*, 3(3), 123-128.
- Simanjuntak, H., Anwar, A. D., Lestari, B. W., Madjid, T. H., Setiono, I. L., & Husin, F. (2015). Perbedaan Pengetahuan dan Sikap tentang Kontrasepsi Modern pada Wanita Usia Subur setelah Dilakukan Konseling Terstruktur The Different of knowledge and attitude of modern contraception after structured counseling.
- Siregar, N., Rangkuti, N. A., Marito, B. S., Aufa, U., Di, R., & Padangsidempuan, K. (2021). Faktor yang Berhubungan dengan Kejadian Unmet Need pada Pasangan Usia Subur (PUS) di Desa Pasir Matogu Kecamatan Angkola Muaratais Kabupaten Tapanuli Selatan Tahun 2021. *Jurnal Kesehatan Ilmiah Indonesia*, 6(2), 67-79.
- Sitorus, A. (2019). Faktor Pengetahuan dan Sikap Kebutuhan KB yang Tidak Terpenuhi di Kabupaten Tapanuli Selatan dan Kabupaten Asahan. *Jurnal Bidan Komunitas*, 2(2), 65-75.
- Sumarsih, S. (2023). Hubungan Karakteristik Ibu Nifas Terhadap Pemilihan Metode Kontrasepsi Pascalin Di Puskesmas Selopampang Kabupaten Temanggung. *Sinar: Jurnal Kebidanan*, 5(1), 1-14.
- Widiantari, K., & Widiastuti, N. M. R. (2021). Pendampingan pada Pasangan Usia Subur dalam Penggunaan Kontrasepsi sebagai Upaya Menekan Unmet Need Kb di Masa Adaptasi Kebiasaan Baru. *SELAPARANG: Jurnal Pengabdian Masyarakat Berkemajuan*, 5(1), 806-810.
- Yanti, E. M., Wirastri, D., & Supiani, S. (2023). Edukasi Pentingnya Keluarga Berencana (KB) Dalam Meningkatkan Pengetahuan Dan Pemilihan Alat Kontrasepsi Pada Wanita Usia Subur (WUS) Di Dusun Anjani Timur Desa Anjani Kecamatan Suralaga Kabupaten Lombok Timur: Indonesia. *Indonesian Journal of Community Dedication*, 5(1), 7-12.

Yulianita, Y., Virawati, D. I., & Suryani, H. (2023). Pengaruh Strategi Konseling Berimbang (Skb) Terhadap Pengambilan Keputusan Ber Keluarga Berencana (Kb) Pada Ibu Hamil Trimester Iii Di Wilayah Puskesmas Tanjung Selor. *Aspiration of Health Journal*, 1(3), 448-456.