The Effect of Structured Counseling towards Knowledge, Attitude, and Participation of Modern Contraceptive among Unmet Need Couples

Pengaruh Konseling Terstruktur terhadap Pengetahuan, Sikap, dan Partisipasi Kontrasepsi Modern pada Pasangan *Unmet Need*

Herlina Simanjuntak*, Bony Wiem Lestari, Anita Debora Anwar*****

***Magister of Midwifery Program, Faculty of Medicine, Universitas Padjajaran, Bandung, Indonesia,**
****Department of Epidemiology and Biostatistics, Faculty of Medicine,Universitas Padjajaran, Bandung, Indonesia,**
*****Department of Obstetric and Gynecology, Faculty of Medicine, Universitas Padjajaran, Bandung, Indonesia**

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Abstract

The number of unmet need for family planning remains high in developing countries, including in Indonesia. Structured contraceptive counseling potentially increases contraceptive use effectively maintain its continuity and enhances client's satisfaction. Contraceptive counseling had not been properly performed, therefore this study aimed to analyze structured counseling influence toward knowledge improvement, attitude and participation at modern contraceptive among unmet need reproductive-aged couples. This study was conducted on March - June 2015 by using a randomized pretest-posttest measurement with control group design. The subjects were recruited through stratified random sampling method. Inclusion subjects were further classified into 48 persons for the intervention group and other 48 persons for the control group. The increase of knowledge and attitude between intervention and control group was then compared by using Mann-Whitney U test, and the effect of structured counseling toward participation of modern contraceptive was analyzed by using multiple logistic regression. Results showed that there was a significant difference of test score for knowledge and attitude between the intervention and the control group (p value < 0.05). Reproductive-aged women are more likely to participate at modern contraceptive with odds ratio = 6.167 (95% CI= 2,427 - 15,67). Inconclusion, structured counseling can increase knowledge, attitude, and participation at modern contraceptive among reproductive-aged couples.

Keywords: Attitude, knowledge, participation of modern contaceptive, structured counseling, unmet need

Abstrak

Unmet need Keluarga Berencana (KB) masih tinggi di negara berkembang termasuk di Indonesia. Konseling kontrasepsi terstruktur berpotensi meningkatkan penggunaan kontrasepsi secara efektif, menjaga keberlangsungan penggunaan dan meningkatkan kepuasan klien. Selama ini konseling kontrasepsi yang dilakukan belum optimal, sehingga penelitian ini bertujuan untuk menganalisis pengaruh konseling terstruktur terhadap peningkatan pengetahuan, sikap dan partisipasi kontrasepsi modern pada pasangan usia subur (PUS) yang *unmet need*. Penelitian ini merupakan eksperimen semu dengan rancangan *pretest-posttest* dengan kelompok kontrol. Penelitian ini dilakukan pada periode Maret – Juni 2015. Pengambilan sampel dilakukan dengan *stratified random sampling* pada 48 orang untuk kelompok perlakuan (konseling terstruktur) dan 48 orang untuk kelompok kontrol (konseling standar). Perbedaan peningkatan pengetahuan dan sikap pada kelompok perlakuan dan kontrol diuji dengan uji Mann-Whitney U, sedangkan pengaruh konseling terstruktur terhadap partisipasi kontrasepsi modern dianalisis dengan uji regresi logistik ganda. Hasil penelitian menunjukkan perbedaan bermakna pada skor pengetahuan dan sikap setelah dilakukan konseling terstruktur antara kelompok perlakuan dan kontrol dengan nilai p < 0,05. Wanita usia subur (WUS) yang berada pada kelompok perlakuan akan berpeluang ikutserta menggunakan kontrasepsi modern dengan OR= 6,167 (95% CI= 2,427-15,67). Kesimpulan penelitian ini, konseling yang dilakukan secara terstruktur mampu meningkatkan pengetahuan, sikap dan keikutsertaan kontrasepsi modern pada PUS.

Kata kunci: Sikap, pengetahuan, partisipasi kontrasepsi modern, konseling terstruktur, *unmet need*

Introduction

The number of couples of childbearing age who want to delay having children or do not want more children but

Correspondence: Herlina Simanjuntak, Magister of Midwifery Program, Faculty of Medicine Universitas Padjajaran, Eijkman Street No.38 Bandung, Phone: -, e-mail: herlina.simanjuntak09@gmail.com

are not using contraceptives increased from 8.6% in 2002-2003 Indonesia Demographic and Health Survey (IDHS) to 9.1% in 2007 and IDHS 2012) again increased to 11%.[1] This phenomenon is known as the unmet need for contraception.

The unmet need among couples of childbearing age are vulnerable to the incidence of unwanted or unplanned pregnancy. Based on the monthly report (May 2014), the number of unmet need in Lembang District was 12.68% as higher than in West Java 10%.[2]

Some factors that affect the incidence of unmet need, are demographic, socioeconomic, knowledge, and attitude. The reasons identified include contraceptive side effects, such as weight gain, spotting, aside from lack of user's support, barriers to access the services, and lack of information.[3] Based on methods, contraceptives are grouped into traditional and modern. From the benefits perceived by users, the modern contraceptives are more effective than the traditional method because of their higher effectiveness in preventing pregnancy.

Appropriate intervention, particularly counseling is needed to increase the use of modern contraceptives.[4] Provision of information through counseling plays an important role in increasing the use of contraceptives.[4,5] Despite counseling is required in family planning service, it is not optimally implemented and maximized and rarely involves couples. A study on the the implementation of counseling service in Surakarta health center found that the counseling techniques were not mastered by midwives aside from time constraint.[6]

Structured counseling presents the real stages of counseling. Clients will identify problems and be able to develop their self potency based on the condition and problems encountered, make a list or selected decisions made and consequences of each option in terms of positive and negative aspects.[7] Through counseling indicators, the success of the husband and wife in choosing a modern contraceptive method can be seen through their decision. The aim of this study was to analyze the effect of structured counseling to increase knowledge, attitude and participation of the unmet need childbearing-aged couples.

Method

This study design was a pretest-posttest with control group. The number of samples in this study were 96 couples of childbearing age as taken by simple random sampling. Fourty eight (48) respondents (clients) were assigned for each of treatment and control group. The inclusion criteria of this study were, couple who had a child or experienced abortion, wanted to delay or stop childbearing but not using contraceptives or never used contraception, and are willing to participate in all stages of study. Knowledge, attitude and use of contraceptive were measured before and after the treatment. Data were collected by using a previously validity and reliability tested questionnaire, and counseling activity sheet. The treatment group received structured counseling while the control group was given standard counseling.

Structured counseling is a counseling performed in stages. This counseling technique is intended to allow the counselees to process information, so that new ideas might gradually emerged in the counselees' mind. The preliminary stage is to identify of the problems. Focusing on the exploration of the client's problems. Assistance will be given based on the evaluation of what has been understood on the client's problem. The final stage is to decide the attitude and behavior changes. Despite as not anew and always required in family planning service, the counseling is not optimally implemented. Differences in knowledge, attitude and participation before and after treatment in both groups were analyzed by using the Mann-Whitney U test. The influence of structured counseling on modern contraceptive use was analyzed by using multiple logistic regression. This study was been conducted from March to June 2015 in Lembang District area. The study proposal was ethically approved by the Faculty of Medicine, University of Padjadjaran through ethical statement No: 055/UN6.C1.3.2/KEPK/PN/ 2015. This study was performed is done by ethical consideration, such as fairness, confidential and respect to the respondents' dignity.

Results

Table 1 showed the 20-35 years age group was more found in the experimental group (52.1%), meanwhile > 35 years age group was more in the control group (52.1%). Most of the living children were found in both the treatment and control groups were those with 1-2 children (70.8% and 79.2%). Middle and lower educational status dominate in the treatment group and the control is 64.6%. Income less than regional minimum wage (RMW) in both groups had the same amount (87.5%). Most respondents in both groups did not work, 66.7% in the treatment and 56.3% in the of control group. Respondents characteristics, including age, number of children, education, income, and employment status show the value of $p > 0.05$ between these two groups. Similarity between these two groups shows their equity and hence comparable.

Table 2 showed comparison score of knowledge and attitude before and after between the two groups. Early knowledge score between treatment and control groups did not differ significantly with (p value = 0.725), meaning that both groups have a relatively same score initial knowledge. Knowledge about modern contraceptives after structured counseling is higher than the after standard counseling, with a median of 17 in the treatment and 15

Table 1. Characteristics of the Study Subjects

Characteristics		Group				p Value*
		Treatment	%	Control	%	
Age	20-35 years	25	52.1	23	47.9	0.838
	> 35 years	23	47.9	25	52.1	
No living children	1-2	34	70.8	38	79.2	0.48
	>2	14	29.2	10	20.8	
Education	Middle-low	31	64.6	31	64.6	1
	Middle-up	17	35.4	17	35.4	
Income	< District min wage	42	87.5	42	87.5	1
	≥ District min wage	6	12.5	6	12.5	
Working status	Unemployed	32	66.7	27	56.3	0.402
	Employed	16	33.3	21	43.7	

*Based on chi square

Table 2. Comparison of Knowledge and Attitude Scores Before and after between Two Groups

Variable	Category	Groups		p Value*
		Treatment	Control	
Knowledge				
Pre	Mean (SD)	13.6 (2.36)	13.71 (2.21)	0.725
	Median	14	14	
	Range	9-18	7-18	
Post	Mean (SD)	16.67 (1.8)	14.75 (2.23)	<0.001
	Median	17	15	
	Range	12-19	8-19	
Attitude				
Pre	Mean (SD)	70 (6.56)	69.42 (6.94)	0.736
	Median	70	68	
	Range	60-88	57-84	
Post	Mean (SD)	79 (5.78)	72.31(6.87)	<0.001
	Median	79	71	
	Range	63-94	60-88	

*Based on Mann Whitney U-test

Table 3. Comparison of Percentage Increase of Knowledge and Attitude Scores between Two Groups

Variable	Category	Groups		p Value*
		Treatment	Control	
Percents of knowledge score increase	Mean (SD)	24.39 (14.49)	8 (5.8)	<0.001
	Median	20	7.41	
	Range	5.56-66.67	0.00-20	
Percents of attitude score increase	Mean (SD)	13.25 (7.24)	4.26 (2.95)	<0.001
	Median	11.52	3.25	
	Range	2.70-29.03	0.00-16.18	

*Based on Mann Whitney U-test

in the control group using Mann Whitney-U test (p value < 0.001).

This means that there were significant differences in knowledge after intervention. There was no significant difference in attitude between treatment and control groups (p value = 0.736). The attitude scores between the two groups before treatment are relatively similar. After the treatment is provided, higher median in the structured counseling is found higher (79), than in the control group (71). Mann Whitney U-test showed p value < 0.001, which means that there was significant difference in attitudes after treatment.

As shown in the Table 3, knowledge of those two groups increased significantly (Mann Whitney U-test, p value < 0.001), in which higher improvement was found in the treatment group (20%) compared to the treatment group (7.4%). In attitude, significant (p value < 0.001) difference in rise were also found both in the treatment group (11.52%) and and in the control group (3.25%).

Table 4 showed a significant relationship between

Table 4. Relation between Knowledge and Attitude with Participation at Modern Contraceptive Counseling on the Treatment and Control Group

Variable		Treatment		p Value*	Control		p Value*
		Participation After			Participation After		
		Yes	No		Yes	No	
Knowledge After	Decrease	0	3	0,01	4	10	0,541
	Increase	37	8		11	23	
Attitude After	Decrease	0	1	0,229	5	11	0,625
	Increase	10	37		10	22	

*Based on chi square test

Table 5. Relation between Age, Number of Children, Education, Income, Working Status, Group, Knowledge and Attitudes Towards the Use of Modern Contraceptive

Variable	Category	Use (participation)		p Value*
		No	Yes	
Age	20-35 years	21	27	0,838
	> 35 years	23	25	
No living children	1-2	35	37	0,478
	>2	9	15	
Education	Middle-low	30	32	0,052
	Middle-upper	14	20	
Income	< District min wage	39	45	1
	≥ District min wage	5	7	
Working status	Unemployed	24	35	0,285
	Employed	20	17	
Group	Treatment	11	37	<0,001
	Control	33	15	
Knowledge After	< Median	13	4	0,012
	≥ Median	31	48	
Attitude After	< Median	12	5	0,047
	≥ Median	32	47	

*Based on chi square test

knowledge and participation in contraceptive knowledge after counseling in the treatment group (p value = 0.01). A total of 37 persons who had their knowledge improved decided to use modern contraceptive. Post-counseling attitude did not show significant relation to modern contraceptive use in the treatment group (p value = 0.229). There are 37 persons whose increase in attitude after contraceptive counseling did not use the contraceptive, and only 10 persons in the treatment group whose increase in attitude decided to use modern contraceptive. In the control group, knowledge and use of contraceptive showed no significant relation (p value = 0.541). A total of 23 people whose knowledge were increased decided not to use modern contraceptive. Attitude had no relation to the use of modern contraceptive in the control group (p value = 0.625). There were 23 persons whose attitude were more favourable, did not use the modern contraceptive, only 10 of them whose have attitude were supportive decides to use modern contraceptive.

Table 5 showed the relation between age, number of children, education, income, employment status, group, knowledge and attitudes towards the use of contraceptive after counseling. The analysis was required to perform multivariate analysis with $p < 0.25$. The qualified variables were education, group, knowledge and attitudes after counseling (p value respectively 0.052; < 0.001; 0.012 and 0.047).

As shown in the Table 6, variables with p value < 0.001 were structured counseling with OR = 6.167 (2.427 - 15.67; 95% CI). This means that those who obtained structured counseling were 6.167 times more likely to use modern contraceptive than those with standard counseling.

Discussion

The acceptors who stopped using a method or being unmet need were related to lack of information regarding contraceptive methods. One of health promotion activi-

Table 6. Relation between Education, Knowledge and Attitudes and the Use of Contraceptive After Structured Counseling

Variable	Coef B	SE	p Value*	OR	95% CI
Education	0.607	0.534	0.256	1.834	(0.644-5.226)
Knowledge (after counseling)	1.084	0.668	0.105	2.955	(0.798-10.945)
Attitude (after counseling)	0.69	0.691	0.318	1.993	(0.514-7.728)
Structured Counseling	1.819	0.476	<0.001	6.167	(2.427-15.67)
Constanta	-1.606				

*Note: Based on logistic regression, model accuray is 72.9%.

ties that can be carried out by a midwife is counseling. Targeted and effective counseling by a trained health worker, such as a midwife will increase knowledge and growing supporting attitudes among fertile couples.

This study found that structured counseling can improve knowledge of modern contraceptive among the unmet need fertile couples. Analysis conducted using the Mann Whitney U-test showed that the increase knowledge median of the treatment group (20) was higher than the control group (7.41). Increase of knowledge in percent was also found statistically significant (p value < 0.001).

Knowledge that will be upgraded in this study is a wide range information of modern contraceptives (including mechanism of action), advantages of using modern contraceptives, side effects and the possibility of future changing or stop using contraceptive and discussions with health professionals. Information process that occurs during counseling can increase clients' knowledge and use about modern contraceptives. As seen in the Table 2, respondents of the treatment group have their knowledge increased higher than those in the control group. These results were supported by study of Gaudet and colleagues finding that women who had received oral contraceptives counseling had better knowledge than women who did not.[8] Complete information provide flexibility to clients and partner in deciding the choice of contraceptive used, and hence decrease the number of dropouts, unwanted pregnancies, and improve the consistency and accuracy of the contraceptive use.[9]

Structured counseling is proven to be able to increase positive attitudes to modern contraceptive among the unmet need fertile couples. The results of the Mann Whitney U-test (p value < 0.001), found that percentage of attitude increase in the treatment group was higher (11.52%) compared to the control group (3.25%). Table 4 showed a significant relation (p value = 0.01) between increase in contraceptive knowledge and the use after counseling. However, the attitude was not related to the participation of contraception post-test counseling for 37 respondents who experienced an increase in attitudes decided not to use contraception with p value = 0.229. These results were in line with the basic medical study in Senegal in 2013. For instance, there was 13% unmet need had positive attitude, but were not using contraceptives. These results indicated that a positive attitude did not guarantee a person would show positive behavior. Difficulties in assessing the attitudes also affected the results of the study. Measuring attitude using a questionnaire sometimes does not describe the real attitude. Reasons for low contraceptive use in this group were rarely having sex (22.8%), breast-feeding (19.1%) and health problems (15.5%).[10]

Unpleasant experience and misperception can form a negative attitude. Some examples of unpleasant experiences related to contraception are uncomfortable side effects and contraceptive failure. It may also be experienced by clients who have obtained counseling, and hence still reluctant to use contraception. Qualitative study conducted by Chipeta *et al*,[11] in Malawi, mentioned that some negative attitudes/myth, such as condom can lead to impotency in men and interfere with sexual pleasure. Since it was a form of negative attitudes towards the use of contraceptive, therefore a person's attitude is a predisposition towards behavior.[11] Attitude should be accompanied by a strong belief that the client would use the unmet need for contraception. The clients need to be empowered by giving them positive support to raise awareness of the importance of regulating birth, and provide appropriate and easily understood·information.[12]

Multivariate analysis significantly found that the structured counseling affect the participation in modern contraceptives (p < 0.001; OR= 6.167: 2.427-15.67; 95%CI). This means that structured counseling provided in the modern contraceptives service could increase the participation 6.167 times compared to the standard counseling. Similar result was shown by Lopez LM,[13] 2 Randomize Control Trial study showed women who did counseling two times likely to use modern contraceptives than the control group (OR =2.35; 95% CI: 1.82 to 3.03), the method sterilization, the pill, injections, intra uterine devices (IUDs) or methods barrier.

Implementation of counseling with information and contraceptive services qualified on the client can increase the effectiveness of contraceptive use. It was certainly offset by the availability of the complete method, continuity of provision of contraceptives and training for health workers to assist clients in replacing a method.[14] Process of learning or adjustment conditions for behavioral change can be facilitated through the counseling process, other than that the key to successful implementation of the program family plans are implemented at the time of the decision-making counseling.[9] A good counseling is conducted stage-by-stage completely because of the counseling process cannot proceed to the next stage if the target has not been achieved at the previous stage. Counselors ensure that counseling is a communication process intrerpersonal do that can make the client understand, aware and know about the condition and needs of herself, so that clients avoid irrational decisions and belief.

Most recipients of family planning and contraceptive counseling are women. Unmet need of contraceptive studied by Mekkonen,[15] found that woman who discusses contraceptives with their partner was 2.2 times likely to use contraceptives (95% CI: 1.8 to 2.7). Use of contraception was 2.6 times more likely taken by married woman as supported by her partner (95% CI: 2.1 to 32).

Study by Tilahun,[16] concluded that knowledge did not guarantee the use of contraceptives, however, awareness of contraception is important. Contraceptive counseling should involve every couple to assure that interventions are based on client's need. Participation of husband and wife can be used as a strategy to increase the use of contraceptives.

Conclusion

This study shows that the effect of structured counseling can increase knowledge, strengthen attitude and participation of fertile couples in using modern contraceptive. Women who obtain structured counseling are 6.167 times more likely to increase their participation at modern contraceptive. However, there are many other variables that may affect participation in family planning in addition to knowledge and attitudes.

Recommendation

Implementation of contraceptive counseling should include couples. The counseling of control group that obtained standard counseling needs to be provided structured counseling. Supports need to be given to strengthen the clients during the counseling process. There should be a cooperation with and support from other agencies, such as Ministry of Health, health centers, and the District Family Planning Office to conduct structured counseling training for health personnels in Lembang Districts. Other studies involving more variables and comprehensive are recommended.

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References

1. Badan Pusat Statistik. Laporan pendahuluan SDKI 2012. Jakarta: Badan Pusat Statistik; 2012.
2. Kisaakye P, editor. Determinants of unmet need for contraception to and limit births among various groups of currently married women in Uganda. 1st Annual International Interdisciplinary Conference; 2013; Portugal.
3. Ali AAA, Okud A. Factors affecting unmet need for family planning in Eastern Sudan. BMC Public Health. 2013;13 (102):1-5.
4. Egarter C, Grimm C, Nouri K, Ahrendt H-J, Bitzer J, Cermak C. Contraceptive counselling and factors affecting women's contraceptive choices: results of the CHOICE study in Austria. Reproductive Biomedicine Online. 2011: 1-6.
5. Departemen Kesehatan Republik Indonesia. Proses dan praktik konseling. Jakarta: Departemen Kesehatan Republik Indonesia; 2008.
6. Widayati RS, Widagdo L, Purnami CT. Analisis pelaksanaan konseling kontrasepsi oleh bidan di wilayah dinas kesehatan kota Surakarta. Gaster. 2014; 11: 78-87.
7. Madden T, Mullersman JL, Omvig KJ, Secura GM, Peipert JF. Structured contraceptive counseling provided by the Contraceptive CHOICE Project. Contraception. 2013; 88 (2): 1-12.
8. Hall KS, Castaño PM, Stone PW, Westhoff C. Measuring Oral Contraceptive Knowledge: A Review of Research Findings and Limitations. Patient Education Counseling. 2010; 81 (3): 388-94.
9. Manurung S. Model pengambilan keputusan meningkatkan akseptor keluarga berencana metode kontrasepsi jangka panjang. Kesmas: Jurnal Kesehatan Masyarakat Nasional. 2013; 7(11): 483-8.
10. Machiyama K, Cleland J. Insights into unmet need in Senegal. London: London School of Hygiene and Tropical Medicine; 2013.
11. Chipeta EK, Chimwaza W, Kalilani-Phiri L. Contraceptive knowledge, beliefs and attitudes in rural Malawi: misinformation, misbeliefs and misperceptions. Malawi Medical Journal. 2010; 22 (2): 38-41.
12. Montaño DE, Kasprzyk D. Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. In: Health behavior and health education: theory, research, and practice. San Francisco: Jossey-Bass A Wiley Imprin; 2008. p. 70-3.
13. Lopez LM, Steiner M, Grimes DA, Hilgenberg D, Schulz KF. Strategies for communicating contraceptive effectiveness. The Cochrane Collaboration. 2013; 4: 1-9.
14. Singh S, Darroch JE. Adding it up: costs and benefits of contraceptive services estimates for 2012. 2012 [cited 2015 jan 5] [about 1-28]. Available from: http://www.guttmacher.org/pubs/AIU-2012-estimates.pdf.
15. Mekonnen W, Worku A. Determinants of low family planning use and high unmet need in Butajira District, South Central Ethiopia. Journal of

Reproductive Health. 2011; 8 (37):1-8.
16. Tilahun T, Coene G, Luchters S, Kassahun W, Leye E, Temmerman M, et al. Family planning knowledge, attitude and practice among married couples in Jimma Zone, Ethiopia. Plos One. 2013; 8 (4): 1-8.