

The Analysis of Hormonal Contraceptives Counseling Training Side Effects to Midwives in Decreasing Family Planning Drop Out in Lembang West Bandung

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Abstract

Hormonal contraception is the most common type of contraceptive used by family planning acceptors in Indonesia, and some people stop using the method of contraception as they fear of the side effects or health problems. Midwives have an important role in providing counseling especially regarding the side effects of hormonal contraception. One of the efforts to improve the knowledge, attitudes, and skills of the side effects of hormonal contraception is by providing training. The purpose of this counseling training is to analyze the effect of counseling training on the side effects of hormonal contraception to midwives in decreasing Family Planning drop out. This study used a *quasi experimental one group pre post test design* conducted on 30 midwives in Lembang sub-district who received counseling training on side effects of hormonal contraception. Each midwife only took 10 new or former family planning clients who used hormonal contraceptive pills, 1 month and 3 month injections; data obtained from 3 months before and after training. Knowledge and attitude were measured using questionnaires. Data analysis using linear regression analysis. The results of the research analysis showed that there was a significant improvement in midwife knowledge and attitude after training ($p < 0.001$). Linear regression analysis showed that there was no significant effect of counseling training toward the side effects of hormonal contraceptives on Family Plan drop-out decreased. Conclusions of this research, side effects of hormonal contraception counseling training can improve knowledge and attitude but there is no effect on decreasing Family Planning drop out.

Key words: Attitude, family planning drop out, knowledge, midwives, training.

Introduction

Indonesia is one of the four most populous countries in the world after China, India and the United States, with a population of 249 million in 2013 and by 2050 is projected to reach 366 million with the Total Fertility Rate (TFR) rising with no significant from 3 to 2.6 and CPR from 61.4% to 61.9% (Bureau, 2013; BPS, 2013; Riskesdas, 2013). This indicates that the quantity of Indonesian population is a strategic problem, controlling the number and rate of population growth is directed towards the improvement of family planning services and affordable, qualified and effective reproductive health toward the establishment of quality small families (Julianto, 2014).

The rate of contraceptive continuity used has increased from 26% (IDHS 2007) to 27% (SDKI 2012). Higher dropout rates on pill method (41%), condom (31%), and injection (25%) (BPS, 2013). The results of the study explain the main reason for discontinuing the use of a method of contraception is the desire to conceive and the next reason is fear of side effects or health problems (Rosenberg, 1995; Huber, 2006; Samandari, 2011; Krakowiak-Redd, 2011).

Pill users receive at least some information on possible side effects and what to do in case of problems (28% and 24% respectively) and urban planning participants are more informed than in rural areas (BPS, 2013) and by 2014 expected there was a decrease of contraceptive use drop to <5% (Julianto, 2014).

As a health professional, midwives play a very important role in family planning services, about 76.6% of family planning services are performed by midwives and 54.6% are performed by independent midwives (Riskesdas, 2013). Midwives have important duties in counseling and health education, not only for women, but also for families and communities. This activity should include antenatal education and parental preparation and may extend to women's health, sexual health or reproductive health and child care (MoH RI, 2017). The authority of the midwife in carrying out the practice of family planning service is arranged in Minister of Health Regulation No. 1464/2010, Minister of Health Decree No 369/2007, and Minister of Health Regulation 69, 71 and circular of Minister of Health 31 and 32 year 2014 about Social Security Administrator for Health. The regulation states that one of the authority of midwives in family planning services is to provide counseling and counseling of women's reproductive health and family planning.

The skills of midwives or family planning officers in Indonesia in counseling are not widely known, although in fact research shows that client-client interaction is a sector that needs attention. This situation not only occurs in Indonesia but occurs in other developing countries, some studies show that doctors and midwives of family planning officers at Community Health Center have not done good interpersonal communication with clients and recognized counseling skills are skills that are not easily learned (Basuki, 2007). The results of the study explain that midwives' knowledge and behavior about hormonal contraception is lacking (Erbil, 2010; Dragoman, 2010).

To improve the ability of midwives in providing quality services, they are required to change behavior in education, namely skills, attitudes and behavior of midwives in dealing with contraceptive problems (Erbil, 2010). All of these efforts aim to improve midwife's performance in providing quality midwifery services (Sofyan, 2006). The most recent service strategy is to provide training to health workers for the safety of hormonal contraception (Kingsley, 2010; Townsend et al., 2011; Stanback et al., 2001; Standback et al., 2010).

One form of intervention to avoid the occurrence of Family Planning drop out especially hormonal family planning in this study more focused on pill contraceptives and injection 1 month and 3 months. The form of such interventions is by training midwives in counseling the side effects of hormonal contraception. The training is expected to give a positive influence on the performance of midwives which ultimately impact on the decrease in the incidence of Family Planning drop out. On the basis of these thoughts, the researchers wanted to do research on the Analysis of Counseling Training of Hormonal Contraception Side Effects on Midwives to Decrease Family Planning Drop Out in Lembang West Bandung.

Method

This research uses quasi *experimental design with one group Pre test - posttest design model*. Dependent variable is family planning dropout rate, knowledge and attitude, while the independent variable is in the form of training given to the midwife. Variable confounders age, education, long working. The population is 56 midwives. Non-random sampling, based on invitation letters that have been given to all midwives in Lembang sub-district and who are willing to attend a training of 30 midwives. For one midwife only 10 new or old birth control clients who used hormonal contraceptive pills, 1 month and 3 month injections were observed for 3 months to see family planning drop out data. Data collection technique in this research was conducted by using questionnaires to know knowledge and attitude of midwife before and after counseling training of side effect of hormonal contraception and observation sheet.

The data were analyzed by Wilcoxon and paired t test to analyze the differences of knowledge and attitude of midwives at each stage (pre test, post test) and multiple linear regression analysis. This research was conducted in Lembang West Bandung. Implementation of the training was conducted in August 2015. The place of training implementation in the post-graduate building of Medical School of UNPAD. This research was started from June to November 2015.

Results

Table 1 Research Subjects Characteristics

No	Characteristics	Amount (n=30)	%
1.	Age (year)		
	< 35	19	63
	≥ 35	11	37
	Mean (SD) : 33,4 (6,4) Range : 25 – 48		
2.	Education		
	Diploma Degree (3 years)/D3	24	80
	Diploma Degree (4 years)/D4	6	20
3.	Length of Work (year)		
	< 10	14	47
	≥ 10	16	53
	Mean (SD) : 11,2 (6,3) Range : 3 – 26		

Based on table 1 it can be seen that midwives aged less than 35 years are 19 people (63%) and the rest of midwives aged over 35 years is 11 people (37%). Mean age of midwife 33.4 years, standard deviation of 6.4 with range 25-48. Based on education, most of the respondents are D3 educated 24 people (80%) and the remaining D4 education is 6 people (20%). The results of the analysis on the length of work, the number of midwives with the length of work is more the same as from 10 years that is 16 people (53%) and the midwife with less than 10 years working time is 14 people (47%), the average length of work 11.2 years, standard deviation of 6.3 with range 3-26.

Table 2
Comparison of Knowledge Scores, Attitudes, Decreased Family Planning Drop Out Before (Pre) and After (Post) Treatment

No	Variable (scale 100)	Observation		P Value	% (mean)
		Pre	Post		
1.	Knowledge				
	Median	75	90	< 0,001*	20
	Range	60 – 90	65 – 95		
2.	Attitude				
	Mean (SD)	73,5 (4,529)	81,08 (4,97)	< 0,001**	10,3
	Range	65 – 82,5	70 – 90		
3.	Drop out (%)				
	Median	10	0		66,1
	Range	(0 – 30)	(0 – 30)		

Note: *) Wilcoxon Text; **) paired T test

Table 2 shows the percentage ratio between knowledge increase, increase in attitudes and significantly decreased drop out rate with p values of <0.001. The average increase of knowledge is 20%, for the increase of attitude 10.3% and the average decrease of Family Planning out drop is 66,1%.

Table 3
The Influence of Increase Percentage in Knowledge and Attitude Toward the Decrease of Family Planning Drop Out

Variable	Unstandardized		Standardized	t	P value
	Coefficients		Coefficients		
	B	Std. Error	Beta		
The Initial Model					
Constanta	39,961	32,0		1,248	0,223
% Knowledge Increment	1,072	0,809	0,276	1,325	0,197
% Attitude Increment	1,378	3,116	0,091	0,444	0,661

*Note: based on linear regression test $F = 0,885$ $p = 0,425$

Based on the results of the table above shows that any increase in knowledge then the decrease in Family Planning drop out will decrease by 1.072 as well as with any increase in attitude then the Family Planning drop out will decrease by 1.378. Based on the linear regression analysis there was no significant effect of counseling training on the hormonal contraception side effects on the decrease of Family Planning drop out.

Discussion

Knowledge is influenced by several factors, including education, occupation, age, interests, experience, culture and information. Based on the characteristics of respondents, most are <35 years old. Age affects a person in thinking, acting, and doing an action that is gained from in thinking, acting, and doing an action derived from the maturity of thought based on experience. The study informed that midwives with more mature ages were believed to have good attitudes in APN implementation after being released from training.

Educational characteristics are mostly graduates of Diploma Degree (D3) Midwifery. In Mid-Midwifery Diploma Degree (D3) curriculum, midwife candidates have been provided with material about counseling and contraception in accordance with their own authority. The result of research stated that there is a significant correlation between education level and nurse performance and one of the factors that can increase productivity or performance is education formal. Knowledge affects competence. Education is a state in a cognitive field conducting a learning (seeking information) for itself according to its needs, so as to enhance competence. The study explains that midwives with a high level of education will still have good knowledge after being released from training.

The results showed that most of the respondents have a long working ≥ 10 years. Length of work shows the experience of a person in carrying out the work, so the experience gained by someone will increase the competence in carrying out its duties. Another study explained that midwives with more than 10 years of work experience have a greater chance of performing well than midwives who work less than 10 years.

The knowledge which will be enhanced in this training is information on good family planning counseling, various side effects caused by hormonal contraceptives and midwife attitudes in dealing with side effects caused by hormonal contraceptives and all the information presented is in the counseling module of hormonal contraceptive side effects.

Counseling training on the side effects of hormonal contraception has been shown to increase knowledge. The results are in line with the results of the Nana's study and the results of Sulastri's research which states that the skills training (skill training) given to the midwife proved to increase knowledge. The principle of health training is not just a classroom lesson,

but it is a collection of experiences anywhere and anytime, so long as training can affect knowledge, attitudes and habits. Training materials are delivered using learning methods that involve participants actively in learning, the more active the trainees participate in the training process, the higher their motivation and the greater their retention. Wibawati's research shows that motivation is one of the most important dynamic aspects of the learning process.

Knowledge will determine attitude. Good knowledge is not necessarily followed by supportive and otherwise supportive attitude.³The results show that midwives with good knowledge are followed with a good attitude. Basically a person's attitude is not an innate, but the result of interaction between the individual and his environment so that the attitude is dynamic. A person's attitude toward counseling the side effects of hormonal contraception can be influenced by various factors. Someone will be negative or not to provide counseling side effects of hormonal contraceptives due to incorrect information factors, socio-demographic factors, support, culture and religion. Meanwhile Mednick, Higgins and Kirschenbaum mention that the formation of attitudes influenced by social influences, individual characters and information that has been accepted by individuals. Attitudes will affect a person in behaving, a positive attitude toward the family planning program will have a positive correlation with the use of contraceptives.

The results of this study are consistent with the research of Sulastri; which states that there are significant differences in midwife attitudes before and after attending CTU training. Training will influence knowledge and knowledge plays an important role in the determination of attitudes and behaviors. The results of this study are consistent with research conducted by Mboe, et.al. stating that better knowledge and a more positive attitude are demonstrated by officers who have attended training and supervision. The formation of attitudes is primarily due to training, in addition to individual, cultural, media, and emotional experiences. Training provided to midwives creates trust or confidence in trainees. This belief gets stronger as trainees practice the counseling skills of hormonal contraceptive side effects.

The counseling training model for the adverse effects of hormonal contraceptives uses a competency-based training model with an adult learning principle approach, i.e. feedback that generates training participants' motivation. With motivation, emotional involvement causes trainees to awareness of receiving information, responding actively, assessing, establishing a value system for themselves based on convinced values, and ultimately forming a strong commitment to the behavior to be performed.

Training can be defined as an effort to improve the knowledge, skills and attitudes that lead to improved performance in certain environments. The training covers what employees need to know, what they should do and what they need so that they are successful in doing their job. Training focuses on cognitive and behavioral changes and the development of competencies that are critical to the performance of a job. Effective training can result in very high productivity, better work quality, increased motivation and commitment, high morale in teamwork, and minimizing errors leading to a strong competitive advantage.

Various studies were conducted to examine the gap problem between training and work performance. The results of qualitative research explain that there is a model in the process of training effectiveness that is training inputs that can affect the training results either directly or indirectly impact on output training. Training inputs consist of 3 categories: the characteristics of the trainee (cognitive ability, self-efficacy, motivation, and utility felt during the training), training design (behavioral model, error management, and realistic training environment) and work environment (climate, support, opportunity and follow-up).

The results of Rebecca's research indicate that the factors that play a significant role and significantly related to the success of the training are the characteristics of the trainees, the training design and the work environment. The results of this research is in line with the results of Veithzal Rivai research there are several factors that support the effectiveness of the training namely; materials or training content, training methods, trainers, trainees, training facilities and training evaluations. Supardi's research results suggest that based on the results of multiple regression analysis, the training method variables have greater influence than the training material variables.

Conclusion

From the above discussion, it can be concluded that the participation of trainees causes the training process to run quickly. In the training process, trainees are actively involved. Training by applying variety of learning methods helps trainees to more easily understand the material provided, in addition to making the trainees unsaturated. In addition, training providers should not consider that with the completion of formal training as the end of the learning process, training must be followed up with discussion, practice and feedback measures in order to promote the transfer of training.

References

- Abror. 1993. Psikologi Pendidikan. Yogyakarta: Tiara Wacana.
- Arfrida. 2003. Ekonomi Sumber Daya Manusia: Ghalia Indonesia;.
- Azwar S. 2007. Sikap Manusia Teori dan Pengukurannya. 2, editor. Yogyakarta: Pustaka Pelajar
- Badan Penelitian dan Pengembangan Kesehatan. 2013. Riset Kesehatan Dasar 2013. Jakarta: Kementrian Kesehatan Republik Indonesia,
- Basuki E. 2007. Pengaruh Metode Penilaian Diri terhadap Keterampilan Bidan Praktik Swasta dalam Melakukan Konseling Keluarga Berencana di DKI Jakarta. *Majalah Kedokteran Indonesia*. 2007;57(12):428-34.
- Bureau PR. 2013 World Population Data Sheet. In: USAID, editor. Washington DC: Population Reference Bureau; 2013. p. 1-20.
- Julianto Witjaksono, 2012. Rencana Aksi Keluarga Berencana dan Kesehatan Reproduksi Tahun 2012-002014. Jakarta
- Dragoman M, Davis A, Banks E, 2010.. Contraceptive Option for Women with Preexisting Medical Conditions. *Journal of Women's Health*. 2010;19 (575-580).
- Erbil N, Bostan O. 2010. Knowledge, behaviors of nurses and midwives with emergency contraception. *International Journal of Human Sciences*. 2010;7(2):873-84.
- Faizin A. 2008. Hubungan Tingkat Pendidikan dan Lama Kerja Perawat dengan Kinerja Perawat di RSUD Pandan Arang Kabupaten Boyolali, . *Berita Ilmu Keperawatan* September 2008;1(3):137-
- Grossman R, Salas E. 2011. The Transfer Of Training: What Really Matters. *International Journal Of Training And Development*. 2011;15(2).
- Hamalik O. 2008. Manajemen Pengembangan Kurikulum. Bandung: PT. Remaja Rosdakarya; 2008.
- Huber LRB, Hogue CJ, Stein AD, Drews C, Zieman M, King J, et al .2006. Contraceptive use and discontinuation: Findings from the contraceptive history, initiation, and choice study. *American Journal of Obstetrics & Gynecology*. 2006;194:1290-5.
- Indonesia International, 2013. Badan Pusat Statistik. Survey Demografi dan Kesehatan 2012. Jakarta Indonesia: BPS dan ICF International, 2013.
- Keputusan Menteri Kesehatan Republik Indonesia Nomor 369/MENKES/SK/III/2007 Tentang Standar Profesi Bidan. In: Indonesia MKR, editor. Jakarta 2007.
- Kingsley F, Salem RM. 2010. Essential Knowledge About Injectable Contraceptives. In: ToolkitI, Krakowiak-Redd D, Ansong D, Otupiri E, Tran S, Klanderud D, Boakye I, et al, 2010.. Family Planning in a Sub-district near Kumasi, Ghana: Side Effect Fears, Unintended Pregnancies and Misuse of a Medication as Emergency Contraception. *African Journal of Reproductive Health*. 2011;15(3):121-32.
- Mboe M, Rahayuningsih SE, Rusmil K. 2012. Pengetahuan dan sikap bidan dalam praktik penyimpanan vaksin pada bidan praktik swasta. *Journal Indonesian Medical Association*. 2012;62(10):402-6.
- Moheriono. 2010. Pengukuran Kinerja Berbasis Kompetensi. Bogor: Ghalia Indonesia;
- Nawang Sari, Sunjaya DK, Wirakusumah FF, 2009.. Hubungan penguasaan kompetensi asuhan persalinan normal (APN) dengan pengetahuan dan sikap bidan dalam pelaksanaan pertolongan persalinan normal di Kabupaten Jombang Jawa Timur. *Majalah Obstetri Ginekologi Indonesia*. 33(1):3-7.

- Notoatmodjo S. 2010. Ilmu Perilaku Kesehatan. Jakarta: Rineka Cipta; 2010.
- Notoatmodjo S. 2007. Promosi Kesehatan: Teori dan Aplikasi. Jakarta: Rineka Cipta; 2007.
- Kementeriqn Kesehatann Republik Indonesia. 2010. Peraturan Menteri Kesehatan Republik Indonesia nomor 1464/ MENKES/ PER/X/2010 Tentang Izin dan Penyelenggaraan Praktik Bidan. Jakarta.
- Notoatmodjo S. 2012. Promosi kesehatan dan perilaku kesehatan. Jakarta
- Raharjo S. 2012. Pengaruh Metode, Materi Dan Trainer Terhadap Keberhasilan Pelatihan Otomotif Pada Upt Blk Dinas Sosial Tenaga Kerja Dan Transmigrasi Kabupaten Kudus. Kota Kudus: Universitas Muria Kudus.
- Resenberg MJ, Burnhill MS, Waugh MS, Grimes DA, Hillard PJA. 1995. Compliance And Oral Contraceptive: A review. *Contraception*. 52(3):137-41.
- Samandari G, O'connell KA. 2011. "If We Can Endure, We Continue": Understanding Differences Between Users, Discontinuers, And Non-Users Of Hormonal Contraceptive Methods In Pursat Province, Cambodia. *Women & Health*. 51(3):256-78.
- Sarwono S. 1997. Sosiologi Kesehatan Beberapa Konsep Serta Aplikasinya. Gadjah Mada University Press..
- Setiari T. 2012. Faktor-Faktor Yang Berhubungan Dengan Kinerja Dalam Pelaksanaan Inisiasi Menyusu Dini Di RSIA Budi Kemuliaan Jakarta. Depok: Universitas Indonesia..
- Sofyan M, Madjid NA, Siahaan R. 2006. 50 tahun IBI Bidan Menyongsong Masa Depan. VII C, editor. Jakarta: Pengurus Pusat Ikatan Bidan Indonesia.
- Stanback J, Mbonye AK, Bekiita M. 2001. Contraceptive Injections By Community Health Workers In Uganda: A Nonrandomized Community Trial. *Bulletin Of The World Health Organization*. 85(10):768-73.
- Stanback J, Spieler J, Shah I, Finger WR. 2010. Community-Based Health Workers Can Safely And Effectively Administer Injectable Contraceptives: Conclusions From A Technical Consultation. *Journal Contraception*. 81:181-4.
- Sulastrri, Wujoso H, Suryani N. 2013. Pengaruh Pelatihan CTU dan Pengalaman Kerja Bidan Terhadap Keterampilan Konseling di Community Health Center Balongpanggung Gresik Surakarta. Universitas Sebelas Maret.
- Townsend JW, Sitruk-Ware R, Williams K, Askew I, Brill K. 2011. New Strategies For Providing Hormonal Contraception In Developing Countries. *Journal Contraception*. 83:405-9.
- Usnawati N. 2014. Pengaruh Pelatihan Safe Injection Terhadap Peningkatan Kompetensi (Pengetahuan, Sikap, Dan Keterampilan) Bidan Desa Dalam Pelaksanaan Imunisasi Di Kabupaten Magetan. Bandung: Universitas Padjadjaran;.
- Wibawati TA, Soeharto, Supriyadi E, Ismara I. 2012. Efektivitas Pembelajaran Orang Dewasa Pada Mata Diklat Kemitraan Usaha Di Balai Pemberdayaan Masyarakat Desa Yogyakarta. Yogyakarta: Universitas Negeri Yogyakarta.