

The effect of telehealth and family planning service modules on interest in choosing long-term contraceptive methods for postpartum mothers in Cimahi City in 2021

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ARTICLE INFO

Article history:

Received 15 Nov, 2022

Revised 30 Nov, 2022

Accepted 17 Des, 2022

Keywords:

Interest
Long Term Contraception
Telehealth
Method
Module

ABSTRACT

The participation of long-term contraceptive method users is still not satisfactory. The pandemic condition and the lack of quality information about counseling caused this problem. Existing counseling guidelines have not been able to encourage women of childbearing age to choose long-term contraceptive methods. Telehealth which is carried out in a structured manner has the potential to increase interest in choosing long-term contraceptive methods, so the purpose of this study was to analyze the effect of telehealth on interest in choosing long-term contraceptive methods in postpartum women in Cimahi City. This type of research is a quasi-experimental. This study used a randomized pretest-posttest with a control group. Sampling was carried out by stratified random sampling on 50 postpartum mothers in Cimahi City. The selected samples were grouped in a simple random order so that there were 25 people for the treatment group and 25 people for the control group. The treatment group was given counseling using Telehealth while the control group was given standard counseling using the family planning module. The difference in the increase in interest in the treatment and control groups was tested by the Mann-Whitney test. The results showed a significant difference in interest scores after telehealth counseling was carried out between the treatment and control groups with a median interest of 17 (13-19) with a p value <0.05. In addition, telehealth influences the interest in choosing long-term contraceptive methods in postpartum women. The conclusion of this study, telehealth which is carried out in a structured manner can increase interest in choosing long-term contraceptive methods.

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INTRODUCTION

The impact of the Covid-19 outbreaks in Indonesia which began in March 2020 affected various aspects, including the services of the Family Planning Program (Aqmal, 2020)(Akrim et al., 2020). Throughout Indonesia, there was a decrease in family planning participants in March 2020

compared to February 2020 (Rosdiana & Puspita, 2022)(Selvy Apriani, 2020)(Shariff et al., 2022). The use of IUDs in February 2020 decreased from 36,155 to 23,383, implant usage dropped from 81,062 to 51,536, injections from 524,989 to 341,109, pills from 251,619 to 146,767, condoms from 31,502 to 19,583, MOP from 2,283 to 1,196, and MOW from 13,571 to 8,093 (Purwati & Dwiaini, 2021)(Nugraheni & Alviana, 2020)(Utami & Sari, 2022).

Not only reducing the number of family planning participants, the spread of the Covid-19 outbreak has also decreased the activity in activity groups (BKB, BKR, BKL, PIK R and UPPKS) as well as a decrease in operational mechanisms in the field, including in KB Village (Witono & Parwodiwiyo, 2020). Group meetings and monitoring by OPD-KB are not optimal. Many family planning acceptors feel afraid to access family planning services during the Covid-19 pandemic (Selvy Apriani, 2020). Various problems occur and BKKBN carries out various policies to increase participation in family planning to anticipate the baby boom phenomenon in the future, for the sake of people's welfare during the Covid-19 pandemic, both in short and long term. Family planning services are greatly affected by the Covid-19 outbreak because they are done in a full contact, people to people or person to person approach, such as through social services or socialization by family planning instructors, and also cadres. In consequence, when the physical and social distancing policy were issued, the services plummeted.

To overcome the COVID-19 pandemic, the government has issued social and physical distancing policy as well as health and safety regulations such as wearing a mask and washing hands (Wahidah et al., 2020)(Sianipar, 2021). Health service facilities are now required to provide online services and to arrange visit schedules and shorter service flows (Alfa et al., 2021). Since face-to-face consultations and services cannot be carried out as usual, online consultations or services are necessary so that the target community of midwifery is able to receive sufficient information to maintain their health and to endure this pandemic healthily and safely. The advance development of technology enables us to communicate virtually and paperless. People are now able to access the services without having to physically meet. An alternative solution is to create a consultation media that can be accessed by the public regardless the distance and time, which is very much needed in midwifery services, especially during the Covid-19 Pandemic. The method is known as telehealth.

Telehealth or also known as telemedicine is the use of information and communication technology combined with medical expertise to provide health services, ranging from consultations, diagnoses and medical procedures, without being limited to space or carried out remotely. To be able to run properly, this system requires communication technology that allows the transfer of data in the form of video, sound and images interactively in real time by integrating it into video- conferencing support technology.

RESEARCH METHOD

The research design was a randomized pretest-posttest design with a control group. The number of samples in this study were 50 postpartum mothers. Sampling was done by simple random. Each was allocated 25 for the treatment group and 25 for the control group. The exclusion criteria for this study were the postpartum period mothers who were willing to participate in all stages of the study. The interest variable was measured before and after the treatment. Data collection was carried out using instruments in the form of questionnaires that had been tested for validity and reliability, and counselling activity sheets. The treatment group underwent telehealth while the control group was given a module. Differences in interest before and after the treatment in both groups were analysed using the Mann-Whitney test. While the effect of the two treatment groups on interest was analysed by multiple logistic regression. The research was conducted from September 2020 - February 2021 in Cimahi City.

This research has gone through ethical approval from the General Achmad Yani College of Health Sciences and Technology, Cimahi. The implementation of this research was carried out by considering the ethical aspects, namely, fairness, confidentiality and respecting the dignity of the respondents.

RESULTS AND DISCUSSIONS

Table 1. Distribution of feeding patterns in stunting toddlers in the Cicangkanggirang Primary Healthcare working area

Characteristic	Group		p-value*
	Intervension (n=25)	Control (n=25)	
1. Age (year) :	0	0	0,251
< 20	21	23	
20-34	4	2	
≥ 35	1	2	0,216
2. Education :	2	3	
LowMid	11	16	0,321
High	14	9	
3. Occupation :			
Employed Unemployed	6	3	0,258
4. Parity :	18	21	
Primipara	1	1	
Multipara	9	10	0,153
Grand Multipara	11	10	
5. Family Planning History :	5	5	
Hormonal			
Non Hormonal			0,156
6. Previous use of family planning:	6	10	
Less than 1 year	9	10	
More than 1 year			
Never	10	5	
7. Information Source:			0,142
Yes	15	24	
No	10	1	
8. History of Disease:			0,324
Yes	4	5	
No	21	20	
9. Decision Maker regarding Family Planning:			0,132
Husband	22	21	
Wife	3	4	

Note : * based on Chi-square test, except for maternal age by t test.

Table 1 shows basic data on the characteristics of mothers in both research groups: age, education, occupation, parity, history of family planning, duration of use, sources of information, medical history and decision making are equal or homogeneous so that the two groups are comparable ($p > 0.05$).

Table 2. Comparison of interest scores before and after in both groups

Variable	Group		p-value*
	Treatment (n=25)	Control (n=25)	
Interest			
Pre Mean (SD)	12,6(2,36)	14,71(2,21)	0,725
Median	14	14	
Range	9-18	6-18	
Post			<0,001
Mean (SD)	16,67(2,8)	13,65(2,13)	
Median	17	15	
Range	13-19	7-19	

*) Based on Mann-Whitney test

Table 2 shows a comparison of interest scores before and after between the two groups. The initial interest score between the treatment and control groups was not significantly different with a p value of 0.725, meaning that the two groups had relatively the same initial interest score. After being given the post treatment the interest score between the two groups showed a significant difference with a p value <0.05, meaning that giving telehealth can increase the interest of postpartum mothers.

Table 3. Comparison of percentage in interest scores increase between the two groups

Variable	Group		p-value*
	Treatment (n=25)	Control (n=25)	
Interest increase Percentage			<0,001
Mean (SD)	24,39(14,49)	8(5,6)	
Median	21	8,51	
Range	5,66-67,68	0,00-19	

*) Based on Mann-Whitney test

Table 3 shows a comparison of the percentage increase in interest between the two groups. Comparison of the percentage increase in knowledge and attitudes between the two groups increased significantly with a p value <0.05 respectively.

The results of this study show that telehealth can increase mothers' interest in choosing long-term contraceptive methods. The results of the analysis that was carried out using the Mann-Whitney test showed that the median interest in the treatment group was higher than the control group and statistically the percentage increase in interest was significant ($p < 0.001$).

Interest is an early indicator for the formation of behavior, where interest is a prerequisite for achieving an action. This research is in line with the research of Tibajuka (2017) that there is a high interest in choosing long-term contraceptive methods. Receiving wrong information about contraception can affect one's view of the implementation of family planning programs. The results of misconception about contraception can influence a person's perception to strengthen his intention to behave, this can be seen from the scope of contraceptive use. Several studies show that misunderstandings in capturing and interpreting the results of knowledge about the side effects that occur with certain types of contraceptives are considered common. Therefore, the provision of appropriate information on PUS has an important role in increasing contraceptive use. The results of this pre-test are in line with research by Salviana (2013) that most have low interest in long-term contraceptive methods. The lack of interest is thought to be influenced by several factors including: the mother's education level, knowledge, economy, culture, religion, and the lack of public understanding of long-term contraceptive methods and the lack of public awareness to use them. Another influence that

affects the mother's lack of interest in using long-term contraception is the fear of experiencing side effects and complaints that can occur.

Interest in choosing a long-term contraceptive method can be influenced by sources of information. In its development, the source of information comes from health workers who innovate, one of which is using telehealth. Telehealth can help midwifery care activities for patients at home or known as home care. With the contribution of telehealth in midwifery services at home or home care, there will be many benefits received by the patients and their families receive, midwives, and health service agencies. However, in order to apply telehealth in midwifery there are many challenges and obstacles, for example: cost factors, human resources, policies and behavior. The tendency of increasing interest in respondents indicates a change in cognitive and affective aspects of long-term contraceptive methods.

In the cognitive aspect, it was found that most of the respondents thought that the effectiveness of long-term contraceptive methods was not better than short-term contraceptive methods. Many respondents still experience fear of the side effects of the IUD or implant method. During the process of providing telehealth, researchers carry out the provision of correct and relevant information, so as to minimize side effects that can occur during long-term use of contraceptive methods.

The conditions of the Covid-19 Pandemic made many people reduce their visits to health service providers such as health centers, clinics and/or hospitals, and instead people chose to use digital-based services during the Covid-19 pandemic, where digital-based services related to education and health increased (Falah & Syamsidar, 2021).

The Covid-19 pandemic has changed many aspects of life, one of which is the health service model. Various features in telehealth such as chat, telephone and online video will affect health service providers in clinics. Telehealth can be used as health services alternatives during a pandemic for health education and/or questions and answers about health, especially reproductive health (Siti Nur Endah Hendayani, 2020). The method of implementing telemedicine includes two ways, namely the direct method or what is also called asynchronously. In synchronous method, clients and service providers present at one time to interact, whereas asynchronous method does not require direct presence, follow-up can be carried out synchronously as needed. This e-health method certainly reduces costs and is effective (Irianti et al., 2021).

The results of this study are in line with Wahyuni (2020) that telehealth can be an alternative solution to the problem of health service disparities by utilizing communication media to conduct online communication (Ganiem, 2021). Not only health-related applications on smartphones can be used to seek health information, especially regarding family planning, they can also be used by health workers (midwives) as a tool to get closer to patients even though they are not physically present (Wahyuni et al., 2020).

The provision of health education is carried out by spreading messages and instilling beliefs, so that people are not only aware, know and understand but are willing and carry out recommendations related to health. Interesting forms of counselling influence success in counselling. Counselling can be delivered in a lecture method where polite and easy-to-understand language are used and intermezzo or a little humor are inserted to engage the respondents. Providing opportunities to ask questions related to the material, as well as using leaflets help respondents understand the information easily. These methods help the counselling to take place and the objectives of the counselling, to increase the interest of mothers in choosing long-term contraceptive methods, can be achieved.

This research is in line with research conducted by Widayati regarding the implementation of midwife counselling in the Surakarta City Health Office, which states that midwives had not understood the problems and needs of clients, did not prepare counselling media well, explained about all contraceptive methods to all clients regardless of new or old

acceptors, explained in medical language which were difficult for client to understand, and did not pay attention to the client's verbal and non-verbal language. The same thing was also shown in a study conducted by Dehlendorf et al which showed that counselling was dominated by providers and didn't involve the clients much. In consequence, the counselling provided did not cater the needs of clients, providers also did not provide complete information, especially regarding the side effects and contraceptive use (Rina Sri Widayati, laksmono Widagdo, 2014).

Starting in 2005, the National Family Planning Coordinating Board (BKKBN) in collaboration with Johns Hopkins University/Population Communication Services (JHU/PCS) has developed interpersonal/counselling communication curriculum and modules designed to increase interaction between providers and clients. The development of the curriculum and modules is complemented by various media such as brochures, leaflets, posters, videos, and the Family Planning Decision Making Tool (ABPK). ABPK was developed and used to improve rational family planning patterns where the main priority of contraception recommended in this condition is stablecontraception (Kontap), implants for contraception (AKBK), and IUDs. However, the expected results so far have not met the expectations. (BKKBN, 2015)

Other factors that also influence a person's interest are knowledge and motivation. Motivation is closely related to needs, motives, and goals greatly affect learning activities and outcomes. Motivation is very important because it moves organisms, directs actions, and chooses goals that are felt to be most useful for individual life. If a person's motivation to succeed is stronger than the motivation to fail, then he will detail the difficulties he faces.

A systematic and structured guide in the form of a module containing long-term contraceptive method counselling is expected to assist midwives in studying MKJP counselling material, and can be used independently because it is equipped with learning instructions. Family planning modules developed based on consensus from experts, related providers and certain theories are expected to suit needs and can be applied in the workplace (Murad et al., 2010).

CONCLUSION

The results of this study show the effect of telehealth on increasing mothers' interest in choosing long-term contraceptive methods. Therefore, counselling needs to be carried out in a structured manner and its implementation must involve partners.

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