



The Influence of Family Planning Pocketbook on Cadres' Knowledge and Skills in Changing the Couples Perceptions in Special Region of Yogyakarta

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Abstract

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BACKGROUND: The number of traditional contraceptive methods used in the National Health Insurance (JKN) era is increasing compared to the previous year. One of the contributing factors is the public's negative perception due to the lack of information about modern family planning. Consequently, family planning cadres are needed to provide accurate information to change people's negative perceptions of modern family planning. A guideline written in a pocketbook can help cadres provide accurate information.

AIM: This study was conducted to determine the effect of the family planning pocketbook on the knowledge and skills of cadres in changing the couple's perception about family planning.

METHODS: The research design was pre-experimental with a one-group pre-test–post-test approach. The research population was 186 people who were the representatives of family planning cadres from Bantul and Yogyakarta city. The sampling technique was performed random sampling, and 90 cadres were selected. The data were analyzed using Mann–Whitney U-Test because the data not normal distributed.

RESULTS: The results demonstrated that the knowledge and skill cadres were higher after receiving the family planning pocketbook with $p < 0.05$. There is an effect of the pocketbook on family planning services in the JKN era on cadres' knowledge about the family planning program.

CONCLUSION: The family planning pocketbook affects cadre's knowledge and skills in changing couples of childbearing age perceptions about family planning.

Introduction

National health insurance is the government's effort to ensure that all people access excellent, effective quality health services [1]. Family planning services (KB) is one of the services covered by National Health Insurance (JKN). Based on Government Regulation No. 59 of 2014, the family planning services funded by JKN include birth control pills, condoms, insertion/removal of IUD/implants, contraceptive injections, tubectomy vasectomy, and counseling and handling the family planning complications at a predetermined rate. Through this regulation, the government is trying to increase the number of couples of childbearing ages who utilize modern contraception to control the birth rate [2]. Hence, the government's efforts have yet to succeed due to the rate of modern contraception use that is still cannot achieve the target [3], failed achievement is also previous studies stating that the use of JKN for family planning services by the community is still considered low. The evidence-based on the long-term contraceptive method (MKJP) usage encountered

a significant decrease compared to before JKN was introduced [4], [5]. The number of new family planning participants from 2015 to 2018 tends to be below the national target [3].

According to the key performance indicators' achievement of the Indonesia Family Planning Aboard in 2017, the national total birth rate (TFR) is 2.40 for every woman of childbearing age. The percentage of modern contraceptive use (CPR) is 57.6%, unmet need is 17.5%, family planning participants with active MKJP is 21.5%, and the contraceptive dropout rate is 22.3%. The achievement of these indicators is still below the target, resulting in a high rate of population growth in Indonesia [6].

The percentage of the traditional contraceptive methods utilized by a couple in Indonesia has increased, which was seen in 2013. The percentage of traditional contraceptive methods used was 0.4%, and it increased to 0.99% in 2015 [7]. According to the health profile of D.I.Y province in 2017, Yogyakarta city and Bantul district were areas with the lowest scope of active family planning participants at 75.9%. Moreover,

Yogyakarta has the lowest CPR at 71.76% and the second-highest unmet need rate at 12.8% for the province in Indonesia [8].

The previous research has reported that internal and external factors influence the decision-making in selecting contraceptive methods. The essential factor that affects contraceptive use is the provision of adequate information. Thus, it can change the PUS's perception about contraception and become the basis for choosing the type of contraceptive [9].

A previous study stated that the limited acceptance and accessibility of family planning services are considered one of the causes of low active participation in family planning among men. The limited acceptance of family planning causes inadequate knowledge and ability of cadres to conduct health education and counseling. Sariyati and Paramita (2018) found that cadres had difficulty changing negative perceptions about family planning, because they felt less confident conveying it to the public guidebook for family planning services in the JKN era [10]. Based on this condition, it is necessary to determine the effect of family planning pocketbooks on the cadres' knowledge and skills in changing the couple's perceptions regarding family planning (KB) in the Special Region of Yogyakarta.

Methods

This study design is pre-experimental with a one-group pre-test–post-test design. The population of this study was representatives of family planning cadres from Yogyakarta city and Bantul district with a total number of 186 people. Family planning cadres from Wirogunan sub-district represented the cadres from Yogyakarta city, Mergangsan, Yogyakarta. In contrast, those from the Bantul district were represented by family planning cadres from the Trirenggo sub-district, Bantul. From the two research sites, 90 people were obtained as samples according to specific criteria: Willing to participate as respondents and have a smartphone. A simple random sampling technique was employed to obtain those samples. The data were analyzed using Mann–Whitney U-Test to determine the effect of the family planning services pocketbooks on the cadres' knowledge and skills in changing couples' perceptions about family planning.

Results

Based on the research data, the respondents' age characteristics are classified into late elderly,

early elderly, late adulthood, early adulthood, and late adolescence. The majority of the cadres (37.8%) are the early elderly (46–55 years), and the least number of cadres is late teens (17–25 years). Based on formal educational background, most cadres have a secondary educational background (54%) and at least a higher education background (13%). Most family planning cadres are housewives who do not formally working (83.3%) based on the length of service as cadres, most of them have been serving for 1–5 years (26.7%), and there are 3.3% of people who have been serving as cadres for 31–35 years. The number of cadres appointed for more than 5 years is incomparable to those who have received family planning cadre training. There are only 32.2% of cadres who have undergone the training. The respondents' characteristics are described in the following Table 1:

Table 1: Respondents' characteristics

Variable	Number of cadres	Percentage
Age		
Late teens	1	1.1
Early adulthood	2	2.2
Late adulthood	23	25.6
Early elderly	34	37.8
Late elderly	30	33.3
Education		
Primary education (elementary-junior high school)	29	32.2
Secondary education (high school/vocational school)	49	54.4
Higher-level education (D3/S1/S2/S3)	12	13.3
Employment		
Employed	15	16.7
Unemployed	75	83.3
Length of service as KB cadre/sub officer		
1–5 years	24	26.7
6–10 years	15	16.7
11–15 years	23	25.6
16–20 years	9	10.0
21–25 years	5	5.6
26–30 years	6	6.7
31–35 years	3	3.3
36–40 years	5	5.6
Training history of family planning		
Receiving training	29	32.2
Never receiving any training	61	67.8

A normality test was conducted first before a t-test was carried out to figure out the effect of the family planning service pocketbooks on the cadres' knowledge about family planning. The results of the normality test are described as follows:

The results in the Table 2 show that the knowledge data before studying the pocketbooks are typically distributed at a significance level of 5% ($0.051 > 0.05$), while the knowledge data after studying the pocketbooks are not generally distributed at a significance level of 5% ($0.047 < 0.05$). Skills of the cadres before and after studying pocketbooks were typically distributed at a significance level of 5% ($0.152 > 0.05$) and ($0.095 > 0.05$). To examine the effect of the pocketbook for family planning services in the JKN era on the skills of cadres in changing the PUS's perceptions

Table 2: Normality test results

Variable	Sig.	Description
Knowledge before studying the pocketbooks	0.051	Normal
Knowledge after studying the pocketbooks	0.047	Not Normal
Cadres' skills before studying the pocketbooks	0.152	Normal
Cadres' skills after studying the pocketbooks	0.095	Normal

Sig. Use Kolmogorov–Smirnov.

of family planning, data analysis was carried out using the T-test.

Based on these results, to test the effect of the pocketbook for family planning services in the JKN era on the knowledge of cadres about family planning, the data were analyzed using a Mann–Whitney U-test and T-test with the following results:

The results show that the average difference between the knowledge data of cadres before and after studying pocketbooks is 3.51 (Table 3). Table 3 also shows the results that $p = 0.001$. It can be concluded that there is a significant difference between knowledge before using pocketbooks and after using pocketbooks. This significant difference proves an influence from the family planning service pocketbook in the JKN era to cadres' knowledge about the family planning program.

Table 3: Pre-post-score of cadres' knowledge and skills on family planning

Variable	Paired Differences				OR	Δ	p value	
	Score	Std.	Std.	95% Confidence				
	Mean	Deviation	Error Mean	Interval of the Difference				
Pre-test Knowledge*	34	3.7	0.3	2.638	4.384	4.1	3.51	0.001
Post-test knowledge*	37.3	1.4	0.1					
Pre-test skills**	12.1	3.2	0.4	3.437	5.897	5.1	4.6	0.001
Post-test skills**	16.7	2.6	0.2					

*Pre-post knowledge use Mann–Whitney U-test test analysis. **Pre-post skills use T-test.

Discussion

The Ministry of Health of the Republic of Indonesia categorizes a person's age into nine levels, namely, early toddlerhood (0–5 years), childhood (5–11 years), early adolescence (12–16 years), late adolescence (17–25 years), early adulthood (26–35 years), late adulthood (36–45 years), early elderly (46–55 years), late elderly (56–65 years), and senior elderly (>65 years) (Table 1). Someone in the early adulthood age category has the best physical and psychological abilities than those in the other age categories [11]. The Havighurts Developmental Theory states that the early elderly is a productive age when the responsibilities of this age category are social responsibilities; thus, a person prefers to play an active role in social activities [12].

Education is the process of forming fundamental skills, both intellectually and emotionally. Education drives a person to get curious and seek experience so that the information, they receive, will turn into knowledge. Formal education consists of primary education, secondary education, and higher education. The primary education is the level of education for the first 9 years of the school period, which underlies education. The secondary education is the different level of education after the primary education, divided

into senior high school and vocational school. Higher education is the level after secondary education which colleges, institutions, and universities hold [13].

Formal education at the primary, secondary, and higher education levels has an essential role in developing self-capacity. By receiving higher formal education, the learning experience and knowledge gained will also increase. Based on this experience and knowledge, we can conclude that a positive attitude and better skills can be developed. For family planning cadres, high knowledge, positive attitude, and high skills will make them more adaptive to change, deal with problems well, plan their work, and evaluate it more precisely. This evidence follows a theory that believes that the function of education is to reveal individual potential and human ways to control the potential that has been developed. It can help improve the quality of life [14].

In this study, the most significant number of family planning cadres were those who had performed their duties for 1–5 years. This study also found that 5.6% of family planning cadres had carried out their duties for 36–40 years. The cadres' length of service in carrying out this task will affect their level of experience. Their level of experience will later be related to their ability to carry out their roles. The experience in conducting family planning counseling has a significant role for the cadres in developing counseling activities to apply appropriate counseling methods and techniques [15].

Training is one example of informal education, which is usually given to provide specific knowledge and skills, education, or training is needed to achieve successful performance by the tasks they hold [15]. Therefore, through this training, it is expected that family planning cadres will increase their knowledge and skills, think more efficiently, have higher initiative, and thus will be easier for them to find efficient ways to carry out their job well.

Knowledge is the result of human sensing or someone's observation of objects through their senses (eyes, nose, ears, and skin). The range of sensing time to produce knowledge is strongly influenced by the object's intensity of attention and perception [16].

This study follows Caesar's research on the effect of pocketbook media on knowledge about environmental sanitation in health cadres in Cranggang village, which also stated that there was a significant effect of giving pocketbook media on health cadres' knowledge about environmental sanitation in the area [17]. Rahmawati *et al.* conducted a similar study on the Effect of Using Pocketbooks by Motivators on Motivator Knowledge and Skills in Overcoming Breastfeeding Problems. It is obtained results that support this research, stating that there is an effect of using pocketbooks on motivator knowledge in overcoming problems in breastfeeding [18].

The use of pocketbooks as intervention media must fulfill several aspects so that it is readily

accepted and understood and generates interest in the target group to read its messages. A pocketbook is a small book that can be put in a pocket and is easy to carry everywhere [19]. Pocketbooks can be used as a medium for delivering information that is one-way in nature that can develop the potential of readers to become independent learners [20].

Table 3 also shows the analysis results that the post-test score is increasing after using pocketbooks as 4.6 with $p = 0.001$. It can be concluded that there is a significant difference between skills before using pocketbooks and after using pocketbooks. The result means an influence of the pocketbook for family planning services in the JKN era on improving the skills of cadres in changing the PUS's perception of family planning.

Skills are behaviors that indicate an individual's ability to perform specific mental or physical tasks that can be observed [18]. In this study, the average skill score of cadres in changing PUS's perceptions of family planning before and after studying the pocketbooks showed an increase. This increase in the average skill score occurred because respondents properly absorbed information from the pocketbook of family planning services in the JKN era. The success of pocketbooks as learning media for cadres in improving their skills is because pocketbooks have fulfilled the principles of effectiveness and efficiency, relevance, and productivity [21].

The results of this study are supported by research by Rahmawati *et al.* on the effect of using pocket books by motivators on motivator knowledge and skills in overcoming breastfeeding problems (in Sewon District, Bantul Regency). This study proved that the use of pocketbooks increases motivator skills in overcoming breastfeeding problems [18]. Another study presents a guidebook needed to provide health education, and counseling include health education for preconception care and family planning [22].

The skills of cadres in changing PUS's perceptions of family planning are defined as the ability of cadres to provide information and education about family planning programs in the JKN era as an effort to change PUS's perception of family planning through the use of WhatsApp (WA) application. The provision of health information and education can be provided in various approaches, such as an approach based on the number of targets, an approach based on the delivery method, and an approach based on its nature. The provision of health information and education with a target number approach consists of individual, group, and mass counseling. In addition, the provision of health information and education with a delivery approach is divided into face-to-face and non-face-to-face counseling. In non-face-to-face counseling activities, the extension workers are not directly related to the counseling target, but they utilize printed and non-printed media [23].

The current state of the COVID-19 pandemic has forced the government to introduce new policies, such as large-scale social restrictions. The community is no longer allowed to hold community activities that can initiate crowds of residents. Therefore, innovation is needed to communicate still to share information even without face-to-face activities, for example, using social media as a means of communication. At present, one of the most widely used social media services by the public is WA. The ease of using WA service features makes this social media frequently used by cadres to provide information and education activities by health cadres to the public. Educational programs through WA can be optimized by sending educational text messages and picture messages. In addition, the group discussion feature on WA gives a significant opportunity to increase interest in learning in cognitive enhancement programs. The WA-based learning method provides an interactive discussion space between the sender and the recipient of the message [24].

Even though the provision of education and information is not carried out directly, which is conducted using WA social media, educators and informants need to make some efforts to provide education and information that can be effective and efficient. The things that educators must do are to introduce themselves and explain the aims and objectives to be achieved in the activity. Furthermore, they need to explain information systematically, use fresh humor interludes, use props, provide opportunities for the target to ask questions, and use language or sentences that the target can understand, answer the target question appropriately and convincingly, and conclude the material that has been discussed and close the meeting properly [23].

Conclusion

The pocketbook influences family planning services in the JKN era on the cadres' knowledge and skills in changing the perception of couples of childbearing ages. They were related to the results of this study, so relevant agencies are suggested to provide training or regular programs for the family planning cadres to increase their knowledge and skills in changing the perceptions of couples of childbearing age about family planning.

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