European Journal of Molecular & Clinical Medicine
ISSN 2515-8260 Volume 07, Issue 05, 2020

Factors related to cadre perceptions and behavior in promoting family planning at community health centers based on the Health Promotion Model (HPM)

Risniawati[1], Tiyas Kusumaningrum[1*], Aria Aulia Nastiti[1]

[1]Department of Maternity and Pediatric Nursing, Faculty of Nursing, Universitas Airlangga

[*]**Corresponding author: Tiyas Kusumaningrum**
Department of Maternity and Pediatric Nursing, Faculty of Nursing, Universitas Airlangga, Jl. Muyorejo, Surabaya 60115, East Java, Indonesia
Email: tiyas-k@fkp.unair.ac.id

Abstract.
Introduction: The coverage of family planning in Indonesia has yet been evenly distributed. The government, the private sector, and the community, including health cadres, have an important role to succeed the family planning program. Through cadres, family planning promotion can reach a wider community.
Aims: This study aims to explain the relationship between cadre perceptions and their behavior in promoting family planning based on the Health Promotion Model (HPM).
Method: The research design used was correlational with a cross-sectional approach. Participants were 200 cadres from the community health centers obtained by cluster sampling techniques. Participants filled the perception questionnaires and the data was analyzed using Spearman's rho test (α=0.05).
Results: The analysis showed that there were correlations between perceived benefits ($r = 0.490$), perceived barriers ($r = 0.148$), perceived self-efficacy ($r = 0.420$), activity-related effects ($r = 0.165$), and situational influence ($r = 0.481$) with cadres' behavior in promoting family planning at the community health centers ($p<\alpha<0.05$).
***Conclusions*:** Positive perceived benefits of action, perceived barriers to action, perceived self-efficacy, activity-related effects, and high situational influence will increase the cadres' good behavior in promoting family planning to the community. Cadres should enhance their knowledge and ability as well as foster their intention and enthusiasm to support family planning to the community.

Keywords: *family planning, cadre, perception, health promotion model, behavior*

1. Introduction

Based on data on the coverage of active family planning acceptors in 2016, the average in Indonesia stood at 74.8%. The coverage is different across regions. Some regions get coverage less than the national rate. Meanwhile, East Java received the family planning coverage of 76.83%, two percent greater than the national figure [1]. It indicates that the number of contraceptive users is not evenly distributed in Indonesia.

The management of family planning programs must be carried out comprehensively and through cooperation between sectors, both health workers and non-health workers, following the regulations of the Health Minister [2]. The management is expected to reduce maternal and infant morbidity and mortality. Therefore, the implementation of the family planning programs requires the involvement of all parties. The application of family planning promotion activities to the community by cadres is carried out under the management of community health centers (*puskesmas*) [3]. Some studies suggested that most health cadres have good behavior and motivation to support government programs [4–6]. However, some things prevent cadres, particularly the new ones, from performing their duties, such as lack of knowledge and training related to maternal and child health [5,7]. A study by Hermiyanti (2017) stated that of the total cadres appointed, 60% did not actively execute their duties as cadres. This condition shows that health promotion activities by cadres need to be improved, especially in East Java.

Based on the Health Promotion Model (HPM) theory, there are factors influencing health promotion behavior. These factors comprise perceived benefits of action, perceived barriers to action, perceived self-efficacy, and activity-related effects [8]. Several studies mentioned that cadres' roles include motivating the implementation of a healthy lifestyle, mobilizing health services visit, and communicating health messages to all community members [9–12]. Health cadres need to have

positive perceptions regarding benefits, high self-efficacy, and good behavior about the family planning promotion program. This study aims to explain the relationship between cadre perceptions and their behavior in promoting family planning based on HPM.

2. Method

The research design used was correlational with a cross-sectional approach. The population in this study was the cadres of integrated health posts (*posyandu*) in one of the community health centers (*puskesmas*) in Surabaya which serves three villages. The selection of the community health center was based on the activeness of the cadres in implementing the center's health promotion program. A total of 200 participants were involved in this study which was obtained by cluster sampling techniques. The independent variables in this research were perceived benefits of action, perceived barriers to action, perceived self-efficacy, activity-related effects, and situational influence. Meanwhile, the dependent variable in this study was cadres' behavior in promoting family planning. Seven types of questionnaires must be filled out by the participants. The demographic data questionnaire included questions about employment, recent education, ethnicity, and monthly family income. The surveys for perceived benefits of action, perceived barriers to action, perceived self-efficacy, activity-related effects, situational influence, and cadre behavior were assessed using the Likert scales. Data was then analyzed using Spearman's rho test ($\alpha = 0.05$). This research has received an ethical eligibility letter from the Health Research Ethics Commission, Faculty of Nursing, Universitas Airlangga, with the reference number 1382-KEPK.

3. Results

Based on Table 1, most participants were housewives (82%) and had senior high school level (65.5%), while less than 3% only reached the elementary level. Almost all participants were Javanese (97.5%) and most families earned less than the regional minimum wage (68.5%).

Table 1. Frequency and percentage distribution of respondents' demographic

No	Demographic Data	Categories	f	%
1.	Occupation	Nurse	2	1
		Teacher	8	4
		Seller	21	10.5
		Farmer	1	0.5
		Housewife	164	82
		Others	4	2
2.	Level of education	Elementary	5	2.5
		Junior high	27	13.5
		Senior high	131	65.5
		College	37	18.5
3.	Ethnicity	Javanese	195	97.5
		Sundanese	2	1
		Others	3	1.5
4.	Family income/month	< regional minimum wage	137	68.5
		≥ regional minimum wage	63	31.5

Table 2. Correlations between perceptions and cadres' behavior in promoting family planning

Perceptions	Cadres' Behavior		Analysis
	Less	Good	

		f	%	f	%	p
Perceived benefits of action	Positive	72	36	26	13	0.00
	Negative	25	12.5	77	38.5	
Perceived barriers of action	Positive	52	26	40	20	0.03
	Negative	45	22.5	63	31.5	
Perceived self-efficacy	Positive	46	23	10	5	0.00
	Negative	51	25.5	93	46.5	
Activity-related effects	Positive	63	31.5	50	25	0.02
	Negative	34	17	53	26.5	
Situational influence	High	74	37	29	14.5	0.00
	Low	23	11.5	74	37	

Table 2 shows that most participants had positive perception on the benefits of promoting family planning to the community (51%). It was also revealed that most participants had positive perception on the perceived self-efficacy variable (72%). Based on the correlation results in Table 2, it indicates that all independent variables were significantly correlated to cadres' behavior in promoting family planning programs ($p < \alpha \leq 0.05$). However, only perceived benefits, self-efficacy, and situational influence variables provide a medium level of correlation with cadres' behavior in promoting family planning ($r > 0.40$).

4. Discussion

Cadres came from various backgrounds and characteristics, but according to several sources, most were women [9,12–16]. The selection of women as cadres was because they could establish good communication with the community and was easily accepted as health workers [14–17]. The community acceptance of cadres is very important to build a sustainable family planning program [3,18,19].

Almost all participants agreed that family planning promotion increased their knowledge and improved their communication skills. They also agreed that the promotion also raised public awareness and helped people understood family planning issues. However, some participants thought that conducting the promotions drained their energy, increased financial expenditure, and disrupted people's daily activities. Some previous studies explained that community health workers generally understood that there were many benefits gained from health promotion. However, the reference also reminded that the implementation of these activities were performed at individual, family, and community levels as well as the time needed to participate in it[15,20,21]. It is entirely possible that, for whatever benefits perceived by health workers, there are limitations in their ability to cover the whole community.

Data for perceived barriers to action showed that almost half of the participants had positive perception (54%). Some of the things that hindered cadres in promoting family planning were the activities took time, cadres did not have sufficient knowledge and training, and it required special expertise. Several studies have warned about cadres' lack of abilities compared to the roles and tasks

they must undertake [4,5,7,13]. The implementation of training and clear division of tasks among cadres can also help to improve their ability and confidence in executing health promotion activities, especially family planning.

The majority of cadres agreed that they could prepare, implement, increase enthusiasm, and invite or influence the community in family planning promotion activities. This is supported by a study conducted in India which mentioned that cadres' self-efficacy could be increased through health promotion and encouragement from the community. The more frequent and reliable the cadres are in conducting promotions, the more their self-efficacy and productivity increase [15,22].

For the activity-related effect variable, most participants had negative attitudes toward the family planning promotion to the community (56.5%). The negative attitudes included the lack of preparation in conducting family planning counseling and the negative language used by the cadres in the communication, which depicted negligence in the family planning program. This result was related to the knowledge and training the cadres received so far. It could also be due to differences in the cadres or the community's values and culture [9,10]. In addition to skills, training for the cadres on how to communicate with and to resolve conflicts in the community was also required. The government, in the form of community health centers, must prepare comprehensive training and monitor competency plans for both senior and new cadres [23].

In the situational influence variable, the majority of participants had a low situational influence on the behavior of family planning promotion to the community (51.5%). The cadres were very concerned about the safe and convenient environment as well as the adequate facilities when performing family planning promotional activities. They also expected the location to be accessible from their homes to conduct health education. They highly appreciated the activeness of all health cadres in the neighborhood and the community's concern about the family planning promotion program. This result was supported by several studies which stated that cadres were required to visit the client's house and provide material for their health promotional activities [14,19,21].

In the Health Promotion Model (HPM), perceived benefits, barriers, self-efficacy, activity-related effects, and situational influence are cognitive-perceptual elements [24]. The identification results of each component in this study exhibited that most components were positive. It is interpreted as cadres had good internalized values regarding family planning promotion. A HPM-based study stated that cognitive-perceptual positive values owned by health care providers caused them to be ready to identify health problems and to provide recommendations [25]. This is evident that the perceived benefits of action, barriers to action, self-efficacy, activity-related effects, and high level of situational influence motivated cadres in promoting family planning program.

5. Conclusion and Suggestion

The positive perceptions regarding perceived benefits of action, barriers to action, self-efficacy, activity-related effects, and high level of situational influence will increase cadres' good behavior in promoting family planning. Cadres should always improve their knowledge and abilities, as well as foster enthusiasm in advancing family planning program. The community health centers should be able to minimize the barriers cadres encounter in promoting family planning to the community. This can be done by always providing training, education, and other facilities required by the cadres to promote family planning to the community. The community health centers should also monitor every health promotion activities.

References

[1] Budijanto D, Yudianto H B And Soenardi T A 2017 Profil Kesehatan Indonesia Tahun 2016 *Jakarta Kementrian Kesehat. Republik Indones.*

[2] Kemenkes R I 2014 Profil Kesehatan Indonesia Tahun 2013 (Hlm. 143) *Jakarta Kementeri. Kesehat. Ri*

[3] Devi S, Fatchiya A And Susanto D 2016 Kapasitas Kader Dalam Penyuluhan Keluarga Berencana Di Kota Palembang, Provinsi Sumatera Selatan *J. Penyul.* **12** 144–56

[4] Rotua S S 2019 Model Edukasi Cerdas Digital Rosi Bagi Kader Sebagai Upaya Pencegahan Dini Kejadian Stunting Pada Balita

[5] Tse A D P, Suprojo A And Adiwidjaja I 2017 Peran Kader Posyandu Terhadap Pembangunan

Kesehatan Masyarakat *Jisip J. Ilmu Sos. Dan Ilmu Polit.* **6**

[6] Hayani E 2014 Gambaran Peran Kader Kesehatan Tentang Program Kb Di Kecamatan Darussalam Rnaceh Besar Tahun 2014 *Etd Unsyiah*

[7] Akeju D O, Vidler M, Sotunsa J O, Osiberu M O, Orenuga E O, Oladapo O T, Adepoju A A, Qureshi R, Sawchuck D And Adetoro O O 2016 Human Resource Constraints And The Prospect Of Task-Sharing Among Community Health Workers For The Detection Of Early Signs Of Pre-Eclampsia In Ogun State, Nigeria *Reprod. Health* **13** 111

[8] Pender N J 2011 Health Promotion Model Manual

[9] Kelkar S And Mahapatro M 2014 Community Health Worker: A Tool For Community Empowerment *Heal Popul Perspect* 37

[10] Olaniran A, Madaj B, Bar-Zev S And Van Den Broek N 2019 The Roles Of Community Health Workers Who Provide Maternal And Newborn Health Services: Case Studies From Africa And Asia *Bmj Glob. Heal.* **4** E001388

[11] Haver J, Brieger W, Zoungrana J, Ansari N And Kagoma J 2015 Experiences Engaging Community Health Workers To Provide Maternal And Newborn Health Services: Implementation Of Four Programs *Int. J. Gynecol. Obstet.* **130** S32–9

[12] Jarvis L And Lachance N T 2012 Community Health Workers For Maternal And Child Health

[13] Olaniran A, Smith H, Unkels R, Bar-Zeev S And Van Den Broek N 2017 Who Is A Community Health Worker?–A Systematic Review Of Definitions *Glob. Health Action* **10** 1272223

[14] Schiavo R 2013 *Health Communication: From Theory To Practice* Vol 217 (John Wiley & Sons)

[15] Sarin E And Lunsford S S 2017 How Female Community Health Workers Navigate Work Challenges And Why There Are Still Gaps In Their Performance: A Look At Female Community Health Workers In Maternal And Child Health In Two Indian Districts Through A Reciprocal Determinism Framework *Hum. Resour. Health* **15** 1–10

[16] Perry H B, Zulliger R And Rogers M M 2014 Community Health Workers In Low-, Middle-, And High-Income Countries: An Overview Of Their History, Recent Evolution, And Current Effectiveness *Annu. Rev. Public Health* **35** 399–421

[17] Kowitt S D, Emmerling D, Fisher E B And Tanasugarn C 2015 Community Health Workers As Agents Of Health Promotion: Analyzing Thailand's Village Health Volunteer Program *J. Community Health* **40** 780–8

[18] Mazzei A, Ingabire R, Mukamuyango J, Nyombayire J, Sinabamenye R, Bayingana R, Parker R, Tichacek A, Easter S R And Karita E 2019 Community Health Worker Promotions Increase Uptake Of Long-Acting Reversible Contraception In Rwanda *Reprod. Health* **16** 75

[19] Taylor C, Griffiths F And Lilford R 2017 Affordability Of Comprehensive Community Health Worker Programmes In Rural Sub-Saharan Africa *Bmj Glob. Heal.* **2**

[20] Mangham-Jefferies L, Mathewos B, Russell J And Bekele A 2014 How Do Health Extension Workers In Ethiopia Allocate Their Time? *Hum. Resour. Health* **12** 61

[21] Chin-Quee D, Mugeni C, Nkunda D, Uwizeye M R, Stockton L L And Wesson J 2015 Balancing Workload, Motivation And Job Satisfaction In Rwanda: Assessing The Effect Of Adding Family Planning Service Provision To Community Health Worker Duties *Reprod. Health* **13** 2

[22] Munir M And Suhartono S 2016 Community Empowerment Aware Of Health Model *J. Ners* **11** 288–93

[23] Laugen C, Siagian C, Bennouna C And Kusumaningrum S 2018 *Healthy Participation, Healthy People: A Review Of Social Accountability Initiatives In Indonesian Policies And Programs* (World Bank)

[24] Galloway R D 2003 Health Promotion: Causes, Beliefs And Measurements *Clin. Med. Res.* **1** 249–58

[25] Aqtam I And Darawwad M 2018 Health Promotion Model: An Integrative Literature Review *Open J. Nurs.* **8** 485