

Effect of Card Filling Training on Elderly Road-to-Health Card (KMS) through Role-Play Method to Increase Cadre Knowledge

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ABSTRACT

Background: Health cadres are implementers of integrated service post (*posyandu*) activities and have a significant role in applying the integrated service post (*posyandu*) program in the community. One of the cadres' activities is filling out Road-to-Health Card (KMS) which is used for early diagnosis. The level of cadre knowledge is essential as a catalyst of health in the community. Training and coaching to improve cadre skill can be achieved through role-play method, for instance, as this method is the development of imagination and appreciation carried out by cadres by playing characters.

Purpose: To determine the effectiveness of the training in filling out Road-to-Health Card (KMS) for elderly using role-play method to increase the knowledge of cadres.

Methodology: This study is a quantitative study using a *quasi-experimental* design with one group pre-test-post-test design. The population in this study involved 31 elderly *posyandu* cadres. A sample of 31 cadres with a total sampling technique was carried out in the Gedongan village in the course of February-March 2021. Data analysis was conducted using Wilcoxon test.

Results: The majority of knowledge pre-test scores in the medium category found 13 respondents (41.9%), and good category in post-test obtained 27 respondents (87.1%), with a P-value of 0.001. Conclusion: There was a statistically significant influence of KMS training with role play method to increase the knowledge of cadres in Gedongan village.

Originality: The novelty of this research is it has previously been carried out with health education, and researchers have developed the role-play method.

Keywords: *Role-Play, Cadre, Road-to-Health Card, Knowledge.*

1. INTRODUCTION

Elderly are frequently associated with health problems as they age, they may experience from health and body endurance issues. [1]. Currently, the population is getting older and the life expectancy is also increasing so that the number of elderly will eventually increase. In Indonesia, this phenomenon is expected to expand from 18 million (7.56%) in 2010 to 25.9 million (9.7%) in 2019 and is predicted to increase to 8.2 million (15.77%) in 2015. [2]

Health development is the embodiment of the optimum degree of public health so that effort implementation to actualize health can achieve the ability to live a healthy life for the Indonesian population. Integrated service post (hereafter *Posyandu*) is an individual activity or effort that can go beyond the reach and quality of prevailing health services. *Posyandu* is a form of community participation approach in health context managed by *Posyandu* cadres who have received education and training from health

centers. *Posyandu* cadres have a pivotal role because they are health providers close to *Posyandu*'s target activities and have more intimate face-to-face programs than other health workers. The duties of cadres in *Posyandu* are to register, weigh, record maternity and child services in the elderly KMS book, use the elderly KMS book as counseling material, and report the use of elderly KMS books to health workers [3]. Cadres are the implementers of *Posyandu* activities coming from the community and working voluntarily. Cadres have a significant role in implementing *Posyandu* programs in the practice so their presence must be maintained. [4].

The level of cadre knowledge in the implementation of *Posyandu* is demanded, in addition to being a driving force for the community to visit *Posyandu*, cadres can provide health information to the community [5]. The success of *Posyandu* is inseparable from the hard work of cadres who voluntarily manage *Posyandu* in their respective region and location. Lack of training and coaching to improve adequate skills for

cadres will lead to poor understanding of cadre responsibilities, lack of information, as well as coordination between health workers and cadres in the implementation of Posyandu activities which may result in low levels of interest in community attendance to visit Posyandu. [6].

Providing information will be more effective if it is demonstrated through role-play method. The role-play method is a way of learning material mastery through the imagination development and learner appreciation. The imagination development and appreciation is by playing a living figure or inanimate object. This game is generally performed by more than one person, which depends on the scenario. The role-play method is a way of learning material mastery through the imagination development and appreciation carried out by one person by depicting a character. [7].

According to the Ministry of Health, the Elderly KMS has been published, so the data contained in the old Road-to-Health Card (KMS) have experienced many significant changes. Based on data using interviews on seven cadres, they stated that they did not understand the elderly KMS book despite they had previously been informed through a webinar by the health office. The level of cadre knowledge in the implementation of Posyandu is demanded, in addition to being able to provide health information to the community, cadres can also be a driving force for the community to visit Posyandu and guide them to do clean and healthy lifestyle [5]. The novelty of this research is that it has previously been carried out with health education, and researchers have developed the role-play method. The purpose of this study was to determine the effectiveness of the training for filling out the elderly Road-to-Health Card (KMS) using role-play method to increase cadre knowledge.

2. METHOD

This research is quantitative using *quasi-experimental* with one group approach *pre-test-post-test* design. This research was conducted in Gedongan Village, Baki Subdistrict, Sukoharjo Regency, Central Java in February-March 2021. The population in this study involved 31 elderly Posyandu cadres. The sampling technique used total sampling totalling of 31 cadres. The reason for taking total sampling is because the number of population is less than 100 so the entire population should be involved as research sample. The instrument used is a knowledge questionnaire using a Closed-ended questionnaire, in which 20 questions were designed by researchers with the alternatives of True, False and I Don't Know. The category of Good knowledge has score of 14-20,

moderate knowledge of 8-13, and poor knowledge of 0-7. The results of the validity test in Ngargosari village acquired a total score of $r \geq 3$, and the reliability test of 0.756.

Health protocol: research was conducted during the COVID-19 pandemic so researchers applied health protocols by educating respondents to wear masks, wash hands using soap and water, and sit with a distance of 1 meter between respondents in order to minimize the transmission of COVID-19 during the study.

The intervention was administered for three weeks, in which each week comprised one meeting with 120-minute session. The media used in therapy to the respondents consists of booklets and the Road-to-Health Card (KMS) book. 1) First Meeting: Health Counseling on the importance of KMS (Road-to-Health Card) book among elderly, the role of cadres in the activeness of elderly visits to the elderly Posyandu, and explanation about the contents and how-to-use Road-to-Health Card (KMS). 2) Second meeting: each cadre was asked to learn to fill out KMS books comprising Understanding / General Explanation, Filling out identity of elderly, Health History of Elderly, Health And Complaints, Health Development Records of Pre-Elderly/Elderly, Drug use monitoring, Health Information with facilitator assistance, facilitator of village midwives and those in charge of the elderly health program. 3) Third meeting: according to the Posyandu group, one cadre should bring one elderly, the assessment to the elderly was then recorded into a book.

Data were collected in February 2021 by following these procedures: (1) Participants were drawn using the data of village midwife, the number of active cadres managers of elderly Posyandu. (2) Explanation of experimental therapy was performed, then participants were given Informed consent signed by them upon agreement to participate in the research. (3) Participants measured their level of knowledge using a closed-ended questionnaire consisting of 20 questions designed by researchers by taking the material in the elderly KMS. In the previous day, participants were informed to fast prior to examination. (4) The Participant was intervening for 3 weeks, every week one meeting with 120 minutes each session. (5) Measurement of knowledge level after an intervention is done after all the chips complete up to 3 meetings. (6) All data were numerically codified for anonymity and analyzed after collection.

Data were analyzed using SPSS Statistics. General data characteristics, frequency, and percentage. The outcome variables among the three groups were analyzed using the Wilcoxon test.

3. RESULTS

Based on Table 1, it shows that the age characteristic of the majority of respondents ranged 46-59 years totalling of 16 respondents (51.6%). The results of this study correspond to the research conducted by other researchers that characteristics of respondents based on the age of the cadres, the majority were found in the middle adulthood, which is in the age of 40-60 years or can be categorized as pre-elderly age ranging from 46 to 59 years. Characteristics of cadres based on education show that the majority of them were high school graduates consisting of 71%. The characteristics of occupation imply that the majority were unemployed with 16 respondents (51.6%). The results of this study are in line with other studies that the majority of cadres' occupation were unemployed [5].

Age affects a person's level of ability and mindset. Adulthood is the age where an individual thinking ability and mindset will increase so the knowledge obtained will be broader, Education is a way to train one's personality and the ability for life. Education itself can influence a person's learning process; the higher one's education, the easier one will obtain information. Nonetheless, it should also be noted that low education also does not imply low level of knowledge for knowledge is not always acquired in formal education setting but can also be obtained in non-formal education setting. A person will become more receptive to any information that has been obtained with sufficient knowledge of the material that supports better knowledge for cadres.[6].

Education can change a person's behavior and lifestyle in motivating the health development. Education is a learning process through growth,

development, and change towards maturity state in a community group. [4]. Occupation is supporting element in improving social status as it can fulfill daily needs and life in the future that can improve one's life well-being. [8]. By working, a person will be able to fulfill the life needs with the earned income. Occupation will affect a person on activities in the community. This can be attributed to the time to socialize, less time will result in diminishing the awareness to fulfill responsibilities to society or as a cadre. In consequence, this can be observed in unemployed cadres and employed cadres.[9].

In Table 2, it can be determined that the distribution of the level of knowledge before the intervention was in the moderate category as many as 13 respondents (41.9%). After the intervention, the majority were in the good category totalling of 27 respondents (87.1%).

Based on Table 3, the results of the normality test were not normally distributed. The results of the test calculation using *Wilcoxon* secured a significant *p-value* of 0.001 with a mean pretest of 12.13 and a mean post-test of 16.1, meaning there were differences in the level of cadre knowledge before and after training in filling out the Elderly KMS using role-play method. Knowledge is the outcome of knowing, this will happen after a person recognizes something. Abundant information will affect the extent of a person's knowledge, such as experience someone has done will increase knowledge if it is applied or recalled. [6]. One's knowledge can be determined by one's ability to understand information and be able to practice on an object. Knowledge gained through a learning process can foster one's confidence and affect the establishment of responsibility.[10].

Table 1. Characteristics of Respondents include age, education, and occupation.

Characteristic	Frequency (N=31)	%
Age		
18-45	14	45.2
46-59	16	51.6
>60	1	3.2
Education		
Primary school	3	9.7
Junior high school	5	16.1
Senior High School	22	71
Bachelor	1	3.2
Occupation		
Employed	15	48.4
Unemployed	16	51.6

Table 2. Frequency Distribution of Level of Knowledge

Level of Knowledge	Pre-test		Post-test	
	Frequency	%	Frequency	%
Poor	7	22.6	0	0
Moderate	13	41.9	4	12.9
Good	11	35.5	27	87.1
Total	31	100%	100%	100%

Tabel 3. Test Results of Data Analysis of Level of knowledge Differences

Variabel	Mean	SD	P Value	Normality
Pre-test	12.13	± 3.233	0.001	0.017
Post-test	16.1	± 1.758		

4. DISCUSSION

The knowledge and skills of cadres must be adjusted to their duties in developing health programs in their villages. Lack of training and coaching to increase adequate knowledge and skills for cadres prompts poor understanding of cadre duties [4]. Implementation of monitoring activities should be followed by adequate skills from health workers and cadres. The source of cadre skill is knowledge of methods in performing tasks in addition to the experience. [11].

The knowledge and skills of cadres must be tailored to their duties in developing health programs in their villages. Lack of training and coaching to increase adequate knowledge and skills for cadres prompts poor understanding of cadre duties [4]. Knowledge can be interpreted as the ability to answer questions correctly and precisely. Based on the distribution of knowledge, it obtained with a category knowledge level less than seven respondents, this can be due to a lack of information obtained and the emergence of shallow perceptions from information obtained from colleagues/relatives, which sometimes is invalid.

Good knowledge of cadres about the KMS is a factor that supports the role of cadres in the filling out and utilizing the KMS. Knowledge can improve the quality of cadres' work so that the performance of Posyandu can improv (Nurbaiti et al., 2018). Knowledge is the outcome of knowing and occurs after someone has perceived a particular object. Sensing occurs through human sensing, including the senses of sight, hearing, smell, taste, and touch. Most of the human knowledge is gained through eyes and ears.[12]. One of the factors that influence the increase in knowledge is the information that has been received. [13]. One of the problems in the effectiveness of providing the information is the lack of interest in the absorption of information. It

leads to boring, sleepy, and reluctant situation to receive the information. Therefore, interest is an essential factor that must be improved before providing information. One way that interest in receiving information can be improved is by using media in the process of providing information. Providing effective information for adults can be done through learning media with role-play method. [14]. Role-play is one of the effective active learning strategies used in health education, besides it can increase understanding because the method uses critical thinking processes, stimulation of emotions, and moral values. [15] Role-play implicitly advocates an experience-based learning situation in which the "here and now" is analogies to life. [16].

Researchers employed role-play as a method of health education on filling elderly KMS, where one can play as well as learn so there will be no boredom and it will improve spirit in learning. This study applied role-play method. Role-play is a learning activity plan designed to achieve learning objectives to explain roles, attitudes, behaviors, values, perception, and ways of thinking [17]. Role-play is a simulation method that involves more than one senses. In role-play, participants are required to play an active role, thus gaining experience from the role. This method can be used to enhance discussion, practice skills, experience, and to sense a particular event. By playing the role of real-life situations, people will more easily understand the reasons of their problems and the results of their behavior [18].

The purpose of role-play is to make participants understand the feelings of others, put themselves in other's shoes, understand and appreciate different opinion so that they can live their roles and put themselves in their colleagues' situations according to the facilitator's design. There are several

advantages of role-play method: it can be cultivated and lasted in the child's memory, in addition to being a pleasant experience; it encourages active participant engagement; it generates understanding, prejudice, and perception; it helps participants to focus on certain aspects; it can grow and increase learning interest in a learning process [19]. The role-play method is a learning method that involves someone actively in the form of drama that is expected to facilitate understanding of learning materials and achieve learning objectives. [20] Health education can reform unhealthy behaviors to be healthy, meaning it can change respondents' poor knowledge to be more adequate [21]. Changes in knowledge and attitudes or behavior can be influenced by the counseling media. The presence of media in counseling can transform knowledge

and attitudes that will change the practice itself. [22]. Health promotion aims to change a person's behavior and lifestyle. The tendency of good community behavior has a function as a social support for sufferers in reducing a person's stress. Knowledge, attitudes, and tendencies of community behavior that experience a change towards a better direction. Increase of awareness about subjective norms is also had a profound effect on knowledge outcomes. One of the direct determinants of personal intentions is subjective norms that are related to behavior.[23]

Health education is an activity of delivering messages to a group or individual (target), in the hope that the group or individual can obtain better health knowledge and information.

5. CONCLUSIONS

There was a statistically significant influence of KMS training with role play method towards increasing the knowledge of cadres in Gedongan villages.

Ethical Approval: The study was approved by the Health Research Ethics Committee Faculty of Medicine, Universitas Muhammadiyah Surakarta with number No. 3358/B.1/ KEPK FKUMS/III/2021.

Funding: No Funding Sources

Conflict of Interest: None declared

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ACKNOWLEDGMENTS

The authors would like to express their gratitude to the Village Head of Gedongan Village, Director of Baki Public Health Office, Sukoharjo and all employees and respondents who have participated in this study, and all members who have given a positive contribution to this study: head of the Posyandu and cadres.

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