

## **EMPOWERMENT OF HEALTH CADRES IN RECOGNIZING AND MANAGING PEOPLE WITH HYPERTENSION**

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### **ABSTRACT**

*The community service with KKN PPM (Field Work Education-Community Empowerment) scheme proposed by the team is a community service focused on the health care sector carried out in Ngemplak Hamlet, Donoharjo, Suryohadi, Sleman, which involves health cadres in the local area for screening of hypertension. This community service was carried out in 2 stages. The first stage is health education regarding hypertension and how to treat it at home. The second stage is training for local health cadres to perform blood pressure measurement in communities of the Ngemplak area. After each stage of the implementation of the training had done, we found that the knowledge and skills of the majority of cadres were at a good level. In our analysis, this could be a provision for cadres to take responsibility in the process of optimally monitoring public health care, especially for hypertension sector.*

**Keywords:** Health cadres; Cadre training; Community empowerment; Hypertension screening

### **INTRODUCTION**

One of the health problems that people often experience and don't realize they have is hypertension. Hypertension is a disease that does not cause significant symptoms, but becomes a silent killer because of complications arising from delay of treatment. The prevalence of hypertension or high blood pressure in Indonesia is quite high. In addition, it results in a public health problem since hypertension is one of the most influencing risk factors for the incidence of heart and blood vessel disease. Hypertension often shows no symptoms and people only realized that they have hypertension when it has caused organ disorders such as heart failure or stroke. It is not uncommon for hypertension to be found accidentally during routine health checks or when it comes with other complaints ("Indonesia Ministry of Health" Kemenkes RI, 2012).

According to data from the World Health Organization (WHO) in 2019, there is an increase in cases of hypertension every year. As of 2015, WHO estimates the prevalence of hypertension globally at 22% of the total world population, and of that number the sufferers who control their blood pressure is not less than one-fifth (Ministry of Health, 2019). Based on Basic Health Research (RISKEDAS, Ministry of Health of Indonesia), the prevalence of hypertension in Indonesia has increased to 34.11% compared to the prevalence in 2013 which was 25.8%. Meanwhile, the prevalence of hypertension in the Special Region of Yogyakarta (DIY) per 2018 is 32.86%. From these data, DIY occupies the top 15 with the highest hypertension cases (Ministry of Health of Indonesia, 2019).

The increase in the number of hypertensive sufferers means that the possibility of an increased risk of complications due to hypertension will also increase. In addition, because the disease cannot be cured and can only be controlled, it is certain that this disease will have

an impact on the quality of life of the sufferer. Decreasing quality of life will further reduce productivity and activeness of hypertensive sufferers in their life. In line with Sari's opinion (2017) which states that uncontrolled hypertension that lasts for a long time can cause several complications such as stroke, heart attack, heart failure, and is the main cause of chronic kidney failure cases. This can then cause discomfort to the sufferers that lead to decreased quality of life.

The increase in the number of hypertensive patients with serious impacts has not been matched by the increase in efforts to prevent complications that may arise due to hypertension and to improve of the quality of life of the sufferers. This is indicated by the absence of any counseling or educational program to improve the quality of life for people with hypertension in this region.

## **METHOD**

This training was given to cadres in charge of the health care sector. The training process were carried out in 2 stages, namely:

1. The first stage is health education about hypertension and how to treat it at home. The health education materials provided include healthy lifestyles and diets for people with hypertension. The media used were *powerpoints* presentation, laptops, LCD projectors, and zoom meetings app. Due to pandemic conditions, this activity was carried out online. After the educational activity is completed, a hypertension knowledge questionnaire was given to measure the cadre's understanding of the material presented.
2. Stage 2 is training in measuring blood pressure to detect possible hypertension in Ngemplak hamlet. Cadres were taught how to use digital tensimeter in detail. After being demonstrated by the trainer, the cadre practice one by one until they understood the steps. At the end of the activity, the cadres are evaluated by the trainer with an assessment based on the blood measurement procedure checklist. The media used are tensimeter, laptop, projector and zoom meeting app.

The trainer was providing assistance to cadres for a month. If within 1 month of mentoring there are cadres who are not able to carry out an independent examination with a digital tensimeter, they will be given a video of the procedure for checking blood pressure which can be watched independently by the cadre. Partners actively participate in preparing the place, training facilities and communication with all cadres.

## **DISCUSSION AND RESULT**

Activism in community empowerment is a problem that is always correlated with how to grow cadres to be ready to maintain the sustainability of the empowerment program. This is a reminder of the formulation of Parsons, et.al (in Hiryanto, 2017) which stated that someone involved as a cadre in an empowerment program, in addition to being sufficient in terms of skills and knowledge, must also be able to carry out the mandate of the output they receive for their personal life as well as those of others under their guidance.

From the previous statement, the concept of community empowerment which is also carried out by a cadre are able to run optimally if empowerment, as a strategy in the context of alternative development, is finally able to provide access to the community to achieve their rights, namely improving the quality of their life, by cutting the limitations of knowledge and skills (Parsons, et al., in Hiryanto, 2017; Zubaedi, in Hatu, 2010; Suhartini, et. Al., In Hatu, 2010)

Therefore, it is clear that the figure of community empowerment cadres played a role to help the community in solving various problems and needs. Helping the changing process, in

deeper meaning as a catalyst who is obliged to guide starting from finding problems to finding solutions (Amalia, et al., 2017). Regarding the context of community empowerment in the health sector, a cadre is required to have deeper knowledge of health care than the general public. In addition to knowledge, awareness and motivation to maintain their own health, the cadre are encouraged to also contribute positively in maintaining the health of the surrounding community in the form of promotive and preventive efforts. These three things will greatly affect the activeness/participation of the cadres in maintaining public health (Wijaya, et. Al., In Wulandari, et. Al., 2019).

Regarding this matter, it is true that formal health problems should be resolved directly by health professionals —such as doctors and nurses. However, according to Rwafa-Ponela, et. al. (2020), in developing countries —including Indonesia the number of health professionals has not been able to meet the demands to promote and empower health programs on a small regional scale. For this reason, the presence of health cadres is needed to act as the newest part of the health work unit in the community (Rwafa-Ponela, et. Al., 2020; Ariff, et. Al., 2010; Kumar, et. Al., 2016; Musoke, et. al., 2021), moreover the position of health cadres, in this case, becomes more important because they essentially play a role in reducing inequalities in the quality of health services in the community by carrying out educational agendas, such as through health promotion agendas and peer-counseling regarding public health issues. In addition, the existence of health cadres can be utilized to carry out curative health efforts, such as by identifying health problems experienced by the community using techniques commonly used by health professionals. Both efforts are of course meaningful in the world of health care because cadres are able to carry out their functions to prevent people from getting various diseases (Phiri, et. Al., 2017; Gilmore & McAuliffe, 2013; Besada, et. Al., 2018; Leon, et. al., 2015; Braunstein & Lavizzo-Mourey, 2011).

The problem is, in many cases, community empowerment in the health care sector is often faced with the weak ability to identify and solve health problems by the cadres (Sulaeman, et. Al., 2015). Regarding this, Notoatmodjo (in Hernawan, et. Al., 2016) argues that health education such as counseling, in this case especially for cadres, is the answer to produce change and increase in individual knowledge, where this increase must be accompanied by individual abilities in receive information. Access to information related to health care itself is recognized as a key determinant of health. These various types of information then play a role in improving the knowledge, attitudes and skills of the community to live cleanly and healthy. With that said, as Lueckenotte put it, better levels of education will affect people's ability to understand the method of identifying and solving health problems. In this condition, the response to the information is conceptually expected to be able to encourage people to participate in health development, both at the individual level and in community level (Sulaeman, et. Al., 2015; Ernawati, 2012).

The training session/practical session regarding this matter, was then jugdeg by Notoatmodjo (in Hernawan, et. Al., 2016) as the effort with the most powerful feedback immediately after receiving a stimulus such as counseling. Rahfiludin (in Hernawan, et. Al., 2016) further agrees with this argument by arguing that the increase in skills is due to one's active participation by conducting practice in which psychologically, people do not easily forget and learn and correct their mistakes. Knowledge will be more easily memorized and the participant will be easier to get interested with the object and will provide motivation to further appreciate the object.

In his thesis, Mubarak (2010) also argues that understanding community development, including in the realm of health care, is a process that must be followed by continuous

capacity building efforts. This argument originated from the awareness that the outcome of the community development process is not a condition that stops at a certain point when the stated development goals are achieved. More than just a one-time goal, the goals of community development is a continuous cycle, in line with the dynamic condition of society. When capacity building efforts have reached a certain level, new, more complex and heavier challenges will emerge. It is in the community development cycle that the capacity building process, according to Mubarak, must be carried out repeatedly so that awareness for development will become a culture and part of each individual in society.

To test these arguments, we conducted research on 17 health care cadres in Ngemplak Hamlet, Donoharjo, Suryohadi, Sleman. In this case we found that the educational activities for these cadres – “in order to teach the points about hypertension and its treatment at home, healthy lifestyles, and diets for hypertensive sufferers” - had a significant effect on the health knowledge of post-activity of the cadres. This can be seen in table 1. In details, the participant obtained good parameters when they were able to answer at least 7 questions correctly out of 10 questions; sufficient parameters if participants were able to answer at least 5 questions correctly out of 10 questions; Poor parameter if the participant answered less than 5 questions correctly out of 10 questions.

**Table 1. Post-Education Knowledge level of Health Cadres**

<i>No.</i>	<i>Category</i>	<i>Number (n)</i>	<i>Percentage (%)</i>
1	Good	14	82.35
2	Enough	3	17.65
3	Poor	0	-
		17	100

In addition to measuring the variables above, we also assessed the extent to which cadres could skillfully perform blood pressure measurement. Our results show that all cadres are able to perform this at a skilled level (see table 2). This also shows that in general, they are not only able to understand the knowledge they absorb theoretically, but also can absorb it practically. As a side note, the skillful parameters we propose here apply when the participant is able to perform all the core procedures and additional procedures in sequence; the parameter determined that participants are sufficiently skilled if the participant missed a maximum of 2 additional procedures; the parameter determine that the participants are less skilled if there are more than 2 procedures that the participant does not perform.

**Table 2. Skills of health cadres in checking blood pressure**

<i>No.</i>	<i>Category</i>	<i>Amount (n)</i>	<i>Percentage (%)</i>
1	Skilled	17	100
2	Sufficiently Skilled	0	0
3	Less skilled	0	0
		17	100

By looking at these two findings, we argue that training activities are important to be implemented in the community health empowerment process. This urgency of this, apart from being related to the priority to meet the needs of health curation actions in the community, also aims to help participants to increase their knowledge in understanding the real conditions of the clients under their care, in addition to the theoretical material they have previously obtained. This statement is in line with the results of Effendi & Makhfudli's research (in Adistie, et. Al., 2018), in the statistical test reports they write, it is shown that the training activities provided to health cadres have an effect on improving the knowledge of the health cadres. In a research conducted by Fatmah and Nasution (in Adistie, et. Al., 2018), in their study on Integrated Community Health Post (Posbindu) cadres training, also showed that the training of *Posbindu* cadre in measuring anthropometry of the predictive body height of the elderly and counseling on balanced nutrition and hypertension in the elderly were not only improved their skill but also responsible for improving the knowledge of cadres before and after the training.

Thus, Notoatmodjo (in Sukiarko, 2007) formulate that an attitude does not necessarily manifest in the practice or action of the community empowerment participant or cadre, before fulfilling certain conditions, namely:

1. Participants are given the opportunity to see and hear other people perform the skills and are given the opportunity to practice it themselves.
2. Participants are given the opportunity to master the sub-components of skills before mastering the skills as a whole.
3. Participants must practice/perform the new skills themselves
4. The trainer evaluates the results of new skills and provides feedback.

However, in addition to improving knowledge the cadres and the community in general can practice, adequate training and supervision of cadres can act as incentives to improve cadre's performance. This is because pre-empowerment matter such as training, according to Frederick Herzberg, will motivate someone who acts as a cadre to reach for achievement, recognition, responsibility, workload and opportunities for advancement (Wirapuspita, 2013; Gani, 2007). This argument has also been adopted by Liu (2016) in his findings which emphasized that the sense of achievement that is grown towards 'village cadres' will make them more responsible through the leadership of the activities they carry out on a government project that is submitted to them. Interestingly, this leadership does not always give them strategic structural positions they are capable of in the villages. Liu found this leadership activity was present when village cadres applied what Liu called non-power influence, which is a leadership concept that encourages a cadre to complete a coaching task in small community groups formed in an empowerment program. For example, by educating the public on certain health values and delegating curative tasks to health professionals as absorbed by the cadres themselves from the empowerment program organizers to then be connected to stakeholders and / or health professionals who are more authorized. This leadership activity comes when village cadres apply what Liu calls non-power influence, a leadership concept that encourages a cadre to complete a coaching task in small community groups formed in an empowerment program. For example, by educating the public on certain health values and delegating curative tasks of the health professionals to the cadres themselves from the empowerment program organizers which then connected to stakeholders and / or health professionals who are more authorized.

Furthermore, the escalation of individual competence ultimately has an effect on increasing self-confidence in the ability to carry out the task of early detection of serious mental disorders after mental health cadres receive an explanation and immediately try to detect mental disorders early during training. (Sutarjo, et. Al., 2016) This, in time, will be able to improve the quality of health services. (Wirapuspita, 2013). Sociologically, at that point, health cadres are fully utilized; from an intrapersonal point of view, namely, self-confidence in the knowledge that already possessed; from an interactional point of view, namely the ability to communicate these knowledge and skills to the public; as well as from a behavioral point of view, as when health cadres are able to grow social capital themselves by becoming role models for society to practice universal health values in a sustainable manner (Zimmerman, in Kasmel & Tanggaard, 2011; Haldane, et. al., 2019).

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