

## Determinants of Health Cadre Capabilities in Early Detection of Mental Disorders for Better Outcomes: Community Mental Health Nursing (CMHN) Approach

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### Abstract

As part of the CMHN, health cadres can be seen as one of the front guards in early detection of mental disorders. However, the ability of health cadres in early detection of mental disorders in CMHN is not widely understood. The purpose of this study is to examine the determinants of the ability of health cadres in early detection of mental disorders using the CMHN approach.

This research was conducted in Lamongan Districts from 2017 to 2018, using correlation design with a cross-sectional approach. The research sample was 140 health cadres (121 female and 19 male). The sampling technique used multistage random sampling. The data were collected using a questionnaire with a Likert scale. Data analysis used chi-square with a 95% confidence level ( $\alpha = .05$ ).

The results showed that the ability of health cadres in early detection of mental disorders was influenced by attitude ( $p < .05$ ), experience ( $p < .05$ ), motivation ( $p < .05$ ), compensation ( $p < .05$ ), and benefits of action ( $p < .05$ ).

Cadres must always develop their abilities in the early detection of mental disorders. Puskesmas are expected to always support health cadres in the implementation of early detection of mental disorders.

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### Introduction

Mental health services have experienced a paradigm shift from an institutional care model to care that is carried out in the community. It enables patients to be closer to their community with goals focused on empowerment, engagement and recovery. In addition, community care can help develop more integrated care, reduce hospitalization time and

increase focus on patient needs<sup>1</sup>. However, there are obstacles that occur, namely the limited number of mental health workers, which can create a critical problem in providing accessible care for people with mental illness<sup>2</sup>.

Community health workers or so-called cadres are community members who come from the patient's environment who have been trained to provide support<sup>3</sup> education<sup>4,5</sup>, and patient care coordinators<sup>6</sup>. The presence of health cadres can complement health workers who have a high burden and may be the key to increasing the availability and access of basic health services, especially in areas that are difficult to reach, so as to bridge the health equality gap<sup>5</sup>. Health cadres receive mental health training in accordance with their duties and functions<sup>7</sup>. In addition, health cadres also have a role in early detection of people

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experiencing mental health problems. Early detection programs are likely to detect mental health problems from the start<sup>8</sup>. Prediction of risk is associated with high expectations that a shift in the health paradigm toward disease prevention and significant reduction in disease risk can be achieved in the long term<sup>9-11</sup>. This is a predictive, preventive and personal treatment effort<sup>12</sup>.

Health cadres have a role in health promotion and disease prevention, basic medical treatment, and health data collection<sup>5</sup>. Regarding health promotion and disease prevention, health cadres are involved in activities both within the community and related to the health facilities that shelter them. In the community, health cadres provide services to promote healthy lifestyles and prevent disease<sup>13-16</sup>, and help patients to improve their clinical condition by providing psychosocial support<sup>17-19</sup>, and also have a role to play in helping to gather and reporting data through existing mechanisms, as well as providing information on the health status of community members<sup>20,21</sup>. The CMHN model that uses mental health nursing interventions in the community can be used to increase the skills and work productivity of patients with schizophrenia so that it can be an action to strengthen community skills in patients<sup>23</sup>.

Based on the explanation above, the role of health cadres is very vital in implementing CMHN in patients with schizophrenia. So, in this case, there needs to be a study to examine the determinants of the ability of health cadres in early detection of mental disorders using the CMHN approach.

### Materials and methods

The research design used was correlational with a cross-sectional approach. This research was conducted in Lamongan Regency, Indonesia in collaboration with 140 (121 female and 19 male) mental health cadres. Participants were involved in this research which was obtained by multistage random sampling. The data were collected in 2017-2018, and statistical analysis was made in 2019. The independent variables in this study were attitude, experience, motivation, compensation, and benefits of action, while the dependent variable in this study is the ability of cadres in

the early detection of mental disorders. Six types of questionnaires must be filled in by participants. The questionnaire demographic data included questions about gender, occupation, and recent education. Surveys for attitude, experience, motivation, compensation, benefits of action, and abilities were assessed using the Likert scale. The data were analyzed using the chi-square test ( $\alpha = .05$ ). This research has received an ethical eligibility letter from the Health Research Ethics Commission Universitas Muhammadiyah Lamongan, with the reference No.053/EC/KEPK-S2/09/2017.

### Results

Based on Table 1, most of the participants are women (86.43%), work as housewives (36.43%) and most of them have high school education (60%).

Table 2 shows that most of the participants had positive attitudes about early detection of mental disorders in the community (60.7%). It was also revealed that most of the participants had good experiences (48.6%), good motivation (53.6%), good compensation (68.6%), and felt positive benefits of action (62.1%). Based on the results of the correlation in Table 2, it shows that all independent variables are significantly related to the ability of cadres in early detection of mental disorders in the community ( $p < \alpha \leq .05$ ).

Demographic Data	Categories	F	%
Gender	Male	19	13.57
	Female	121	86.43
Occupation	Teacher	18	12.86
	Farmer	24	17.14
	Self-employed	36	25.71
	Housewife	51	36.43
	Others	11	7.86
Level of education	Elementary	9	6.43
	Junior high	21	15.00
	Senior high	84	60.00
	College	26	18.57

**Table 1.** Frequency and percentage distribution of respondents' demographic.

### Discussion

Health cadres come from various backgrounds and characteristics, but according to several sources most are women<sup>24</sup>. Most of them have a positive attitude toward early

detection of mental disorders. Attitudes have a significant relationship with the ability of health cadres in early detection of mental disorders. This is in accordance with research that attitudes have a positive and meaningful relationship with the ability of health cadres in early detection<sup>25</sup>. They mentioned that their work focuses on patients with the goal of preventing mental disorders in the community. If they find a patient with mental disorders, they immediately report it to the puskesmas for treatment.

Variable		Ability				Analysis
		Less		Good		
		F	%	F	%	
Attitude	Positive	62	44.3	23	16.4	.004
	Negative	27	19.3	28	20	
Experience	Good	61	43.6	7	5	.000
	Less	28	20	44	31.4	
Motivation	Good	70	50	5	3.6	.000
	Less	19	13.6	46	32.8	
Compensation	Good	70	50	26	18.6	.001
	Not so fair	19	13.6	25	17.8	
Benefits of action	Positive	64	45.7	23	16.4	.002
	Negative	25	17.9	28	20	

**Table 2.** The relationship between the cadres' abilities with attitudes, experiences, motivation, compensation, and benefits of action.

\* significance of differences p<.05

In addition to attitudes, experience is also significantly associated with the ability of the health cadres' role in the early detection of mental disorders. This is in accordance with the research that experience has a positive and significant effect on the ability of health cadres to detect early<sup>25</sup>. Those who have work experience >5 years have a better understanding of the symptoms of mental disorders so they have better early detection abilities, although half of them still have work experience that is <5 years. This is supported by previous research that health cadres with longer tenure are better able to recognize health problems<sup>26</sup>.

Motivation has a significant relationship with the ability of health cadres to early detection of mental disorders. Health workers who are motivated can do their job effectively<sup>27</sup>. The main motivations for health cadres at work are social respect, morals and religious obligations<sup>28</sup>. This is also experienced by health cadres; they work because they want to help others.

Compensation has a significant relationship with the ability of health cadres to early detection of mental disorders. The compensation given to them is not only in the form of wages, but also rewards. Awards are important in the motivation of health cadres<sup>29</sup>. Some of them think wages are not the main thing. It may be that obtaining and sharing experiences with community members, building relationships between cadres and the community have a higher value than getting wages<sup>30</sup>. However, other studies reveal that government funding support and informal funds are one of the factors related to the ability of cadres to solve health problems<sup>31,32</sup>.

The benefits of action by cadres were significantly related to the ability of health cadres to early detection of mental disorders. This is in accordance with the research that there is a positive perception of the perceived benefits, the influence of increasing the good behavior of cadres in carrying out their duties<sup>24</sup>. Perceived employability may, in fact, be a strong indicator of perceived productivity<sup>33</sup>.

## Conclusions

Cadres who have a positive attitude about early detection of mental disorders have >5 years of experience, good motivation, good compensation, and feel positive benefits of action will have better early detection skills for mental disorders CMHN Approach. Cadres must always develop their abilities in the early detection of mental disorders. Puskesmas are expected to always support health cadres in the implementation of early detection of mental disorders. This can be done by always providing education and training, other facilities needed by cadres, and monitoring every activity.

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## Declaration of Interest

The authors report no conflicts of interest related to what is discussed in this article.

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