

## IT-BASED MENTAL HEALTH POSYANDU TRAINING ON CADRE KNOWLEDGE AND SKILL LEVELS IN BONGKOT VILLAGE

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### ABSTRACT

The mental health post is an integrated service center for patients with mental disorders. The continuity of the posyandu cannot be separated from the role of cadres, therefore the knowledge and skills of cadres are important in order to improve the quality of posyandu services. Public awareness of the importance of preventing patients who experience recurrence can encourage cadres to routinely carry out posyandu activities, besides that they also teach skills to ODGJ patients to increase their productivity. The purpose of this study was to determine the level of knowledge and skills of cadres in providing IT-based mental health posyandu services in Bongkot Village. This study uses a pre-post test design, sampling using purposive sampling technique, samples taken from cadres who meet the inclusion criteria, measuring instruments using cadres' knowledge level instruments and checklists to measure cadres' skill levels. The test used using Wilcoxon statistics. The results of the study showed that there was a change in the level of knowledge of the cadres, a significant value obtained was 0.001 less than  $p < 0.05$ . While the skills of cadres after receiving training obtained a significance value of 0.003 there is a significant increase in skills before and after training. This training can increase the knowledge of cadres regarding the benefits of using IT-based posyandu applications. In addition, cadres are trained to directly practice operating the posyandu application system so that the process of recording, reporting and monitoring patient progress becomes easier and more effective.

*Keywords: IT, Skills, Knowledge, Posyandu*

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### Introduction

Mental health is a condition in which individuals are able to realize their full self-ability, can solve problems and deal with any stressors that come, are able to play a role and contribute in their environment and

work productively and fulfill all the necessities of life <sup>1,2</sup>. Most of the teenagers who experience obstacles development will affect mental health problems <sup>3</sup>. The prevalence of mental health in Indonesia is 18.5 %, which means that from 1,000 residents there are at least 185 people with mental health disorders, which means that every there are family members who have mental health disorders <sup>2</sup>.

Mental disorders will have an impact on the quality of life and productivity of individuals and society in general. It is of course become a heavy burden for sufferers and their families both materially and mentally for the cost of care and treatment sufferer. In addition, it is also a burden on the family to face stigma in society <sup>4</sup>. The government's efforts to improve mental health is indicated by the enactment of Law no. 18 of 2014 concerning mental health with a purpose one of which is to ensure that everyone can achieve a good quality of life, enjoy a healthy mental life,

free from fear, pressure, and other disturbances that can cause mental disorders. so it needs to be handled comprehensive, holistic and complete mental health problems for handling mental disorders <sup>5</sup>.

Mental posyandu is an integrated service center for patients with mental disorders, posyandu is a hand in hand of the puskesmas in providing comprehensive health services in the community. Posyandu activities consist of five table covering registration, assessment, treatment, counseling and skills training <sup>6</sup>. Posyandu and family have a very important role in efforts to improve the health of patients with mental disorders, the village of bongkot The number of people with mental disorders is so high that in the village a mental health post was established and its cadres were formed from trained non-governmental organizations. The continuity of the posyandu cannot be separated from the role of cadres, therefore it is important knowledge and skills of cadres in order to improve the quality of posyandu services. Public awareness of the importance Preventing patients who experience recurrence can encourage cadres to carry out routine activities posyandu, besides that they also teach skills to ODGJ patients in order to increase their productivity <sup>6</sup>.

Posyandu activities in Bongkot Village have been running and are routinely carried out once a month,

held in the fourth week and attended by all ODGJ participants in Bongkot Village. However, this is a separate problem for the service Posyandu in bongkot, considering the limited number of cadres is not proportional to the number of patients who come to the posyandu. The staff was overwhelmed when serving patients, especially at the first registration desk which took a long time. Patient also had to queue for a long time because they were waiting for the cadre officers to find a list of names in the pile of KMSJ books. Until time a lot of wasted, not to mention if you find a torn patient card and have to replace it with a new card by writing re-identify the patient. This of course requires additional costs and even longer time. Besides that on the second table, namely In the assessment, here the cadre must examine in detail the complaints felt by the patient, find out the new symptoms experienced by the patient and ask for skills that have been trained. Of course, to know the signs of symptoms and problems experienced by patients, cadres should be given special training regarding the characteristics of disorders in mental health problems. However, it does not require that all cadres can memorize all the disorders experienced by the patient. So that at the time of the assessment 57% of cadres did not memorize and were still confused about the the symptoms experienced by the patient. There is a risk of error 47% of cadres writing the symptoms incorrectly and entering supporting data others, and 72% of KMSJ were not filled in completely by cadres due to the large number of patients waiting in line. This is because the cadre are required to be fast in providing services, so they are less observant in seeing the list of disorders based on the patient's symptoms emerging. Of course this will also be related to the intervention given, errors in providing therapy and treatment training the patient's skills will certainly hinder the patient's healing process.

The government, especially the Ministry of Health, strongly urges the community to support the activities of the health posyandu, to: create a healthy community by being actively involved in every posyandu activity. Improved skills and knowledge Health cadres must be carried out regularly aiming to improve the quality of a health service <sup>7</sup>. cadres who formed from non-governmental organizations will first be equipped and given training related to how to communicate ask patient complaints, teach to practice daily activities, conduct mental status checks, perform blood pressure measurement. In addition, cadres are also equipped with knowledge about mental disorders and management mechanisms adaptive coping for patients with mental disorders and their families. Implementation of referrals to the health center if abnormalities are

found which cannot be handled at the primary level posyandu <sup>5</sup>.

In order to carry out posyandu activities more effectively and make it easier for cadres to carry out posyandu activities at tables one to five tables, the researcher proposes to apply Information Technology (IT) or Information Technology to reduce the risk of such errors. A computer-based system was established to facilitate posyandu cadres. The system is expected to increase the knowledge of cadres regarding mental disorders and can improve the skills of cadres in providing posyandu services. The purpose of this study was to determine the level of knowledge and skills of cadres in implementing IT-based mental health posyandu services in Bongkot Village.

## Method

This study uses a pre-experimental design with a pre-post test design by measuring the level of knowledge and skills of cadres after being given training related to the implementation of posyandu using IT-based applications, this research is a non-parametric research using Wilcoxon data analysis. Sampling technique is the methods taken in taking samples, in order to obtain a sample that is truly in accordance with the whole research subject <sup>8</sup>. Sampling in this study using purposive sampling, all cadres in the village of Bongkot meet the inclusion criteria. The sample in this study was 45 people. The instrument used in this study was to distribute questionnaires related to the level of knowledge of cadres and a checklist to measure the skills of cadres in running the posyandu using the IT program. The questionnaires were distributed to cadres before receiving training and after receiving training cadres were asked to fill out questionnaires and checklists. After the data was collected, the data was tabulated and analyzed to determine the significance value between pre and post training using the SPSS 22 program . The location of the research was at the Posyandu Jiwa Pelita Harapan, Bongkot Peterongan Village, Jombang.

## Result

### 1. General Data

Characteristics of respondents based on age, education, duration of being a mental health post cadre in Bongkot Village.

Table 1. Frequency distribution of respondents by age, education and length of cadre

No	Age	Frequency	%
1.	20-25 years	9	20
2.	26-30 years	16	35.5
3.	old	12	26.6
4.	31-40 years	8	17.7
	old		
	>40 years		
	old		

No	Education	Frequency	%
1.	SD	8	17.7
2.	JUNIOR	14	31.1
3.	HIGH	21	46.6
4.	SCHOOL	2	4.4
	SENIOR HIGH SCHOOL PT		
No	Old Cadre	Frequency	%
1.	6-11 months	3	6.6
2.	1-2 months	17	37.7
3.	>2 months	25	55.5
Total		45	100

Based on table 1, the frequency distribution of respondents is seen from the age of most of the respondents aged 26-30 years as much as 35.5%, then cadres who are 31-40 years old are 26.6% and cadres who are 20-25 years old are 20%.

The respondent's data is seen from the level of education that most of the respondents have a high school education level of 46.6%, while those with junior high school education are 31.1% and those with elementary education are 17.7%, the remaining 4.4% are tertiary education.

Respondents' data based on the length of service as cadres, most of the cadres served more than 2 years as many as 55.5%, while those who had been cadres for 1-2 years were 37.7%, the remaining cadres who served 6-11 months were 6.6%.

## 2. Special Data

Respondent data is based on the level of knowledge and skills of mental health cadres in Bongkot Village.

Table 2. Respondent data based on the level of knowledge and skills of cadres

	N	median (min-mak)	P
Knowledge before Posyandu IT training	45	7 (3-5)	0.001
Knowledge after Posyandu IT training	45	6 (4-9)	
Skills before IT posyandu training	45	14(8-22)	0.003
Skills after IT Posyandu training	45	23 (12-28)	

### Wilcoxon test results

Respondent data from the results of the bivariate analysis showed that there was a change in the level of knowledge of cadres on mental health problems, the significant value obtained was 0.001 less than  $p < 0.05$ . While the results of the assessment of the skills of cadres after receiving training related to the implementation of IT-based posyandu obtained a significance value of 0.003 there is a significant change in skills before and after training.

## Discussion

### 1 . Knowledge level of cadres after being given IT-based posyandu training

The results of the data obtained after the analysis test using Wilcoxon obtained a significance value of 0.001 ( $p < 0.05$ ). with Thus it can be concluded that there is a significant difference in the level of knowledge between before and after being given training IT-based posyandu. At the time of giving the material the cadres were divided into several small groups and accompanied by the facilitator, the material presented is related to mental health knowledge and accompanying symptoms, not only that, cadres are taught to provide SP and train patient skills. After the presentation of the material, each group was asked to do a role play that accompanied by a facilitator. This learning activity is very effective, it is proven that after an evaluation there is an increase knowledge from before.

The level of knowledge is influenced by a person's level of education, the higher a person's education, the easier it is the person in receiving information <sup>9</sup>. This is reinforced by the research data on the average number of cadres who actively participate in activities MA. Posyandu cadres with bongkot souls have the average education level high school, so to receive information, they get not only from formal education but also get from non-formal education that can have an effect on short-term knowledge. So that you can change their level of knowledge. Various new sources of information on social media can affect people's knowledge such as: social media, TV, radio so as to shape public opinion and trust <sup>10</sup>.

Age can also affect a person's level of knowledge, the more mature a person's age is, the ability to accept information and develop a mindset more easily. The research data shows that the average respondent is 26-30 years old as much as 35.5%. Based on the level of development, the age of 26-30 years reaches the stage of productive development age. Individuals who has reached emotional maturity able to control and control his emotions, can think well by seeing objectively and able to take the right attitude and decision on the right thing. In individuals who have Good emotional maturity can be task oriented, have clear goals and work efficiently. This matter evidenced by the cadres who have a high enthusiasm for learning by always participating in training activities that provided by health workers, they can accept input and are willing to change in developing services mental health post and do their duties independently, they work with full awareness and responsibility so that the dibongkot mental health post can run regularly every month.

### 2 . Skills of cadres after being given IT-based Posyandu training

Based on the data from the analysis related to the skill level of cadres after being given IT-based posyandu training, the results obtained are significance 0.003 ( $p < 0.05$ ) which means that there is a significant influence on the skills of cadres in implementing IT-based posyandu. The results of the study describe the skill level of cadres that increased after being given training and mentoring on running IT-based posyandu. In this training, all participants were immediately asked to practice one by one how to access and input data at the posyandu by using a web-based application. Thing This is quite effective because the cadres do not have to write, look for patient data and make mistakes in assessing the patient's symptoms on the system There are already several options available, so the cadres just click and save all the data.

Posyandu can run effectively depending on the level of knowledge, attitudes and skills possessed by cadres to manage the posyandu. Some people determine attitudes based on the knowledge they have. Through the process senses he can analyze and process in the brain so that it is made as an experience that will not be never forgotten <sup>9</sup>.

The skills of mental health posyandu cadres include being able to carry out activities from table one to table five, starting from from registration, assessment, treatment, counseling, and patient skills training. Cadres have received supplies and training to implement an IT-based posyandu service system, taught how to operate the service Starting from a shorter registration process, cadres can review the symptoms that appear in patients by ticking a list that is already in the system, then when finished, click calculate, a list of recommended disturbances will appear experienced by the patient <sup>11</sup>. This makes it easier for cadres during the assessment process, cadres are not afraid of making mistakes and are confused about opening notes if they forget about the symptoms experienced by patients. By implementing IT in posyandu , it will save more time and

cadres have enough time to train patient skills. Based on general data, the age of cadres is at most 26-35 years, age has a close relationship with a person's level of maturity, the level of maturity here includes having motivation, responsibility and one's skills. This is also supported by data on the length of service period as cadres, the average posyandu cadres in Bongkot have served more than 2 years. the longer the working period will affect their skills <sup>11</sup>. Ability can be divided into two types, namely intellectual ability and physical ability that must be adapted to the job. Intellectual ability is the ability needed to perform mental activities, while physical

ability is the ability needed for a task that requires strength, and <sup>similar</sup> skills .

This study trains the skills of cadres to implement IT-based posyandu, by switching from the manual posyandu administration system to an online-based IT system. Of course, the process of recording, reporting and monitoring patient progress has become easier and more effective.

## Conclusion

The research above can be concluded that the average cadre serving at the Bongkot Posyandu is more than two years, and the level of education is mostly high school, while judging from the age level of cadres who are active in posyandu on average enter productive age. Cadres are given training and assistance to run posyandu applications that use

IT, there are significant results on the level of knowledge and skills of cadres on the implementation of IT-based mental health post.

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