

# Mental Health Education with Simulation Models on Family Ability in Treating Patients of Mental Disorders with Quasi-Experiment Method

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**Abstract--** *Mental disorders are maladaptive responses to stressors originating from internal or external that cause changes in mental function that cause suffering to individuals and / or obstacles in carrying out social roles. Prevalence of mental disorders according to Riskesdas 2013 data was 1.7 while Riskesdas data in 2018 prevalence of severe mental disorders was 7. Family dysfunction is one of the causes of mental disorders. The family is a small unit and is the unit closest to the client and is the "primary nurse" for the client. One way to improve the family's ability is by mental health education with model simulation. The general objective of this study is to describe the effect of mental health education with a simulation model on the ability of families to care for family members who have mental disorders. The research design used was a "Quasi-experimental", the with a sample size of 30 respondents. The results showed that there was an influence of mental health education with a simulation model on the cognitive and psychomotor abilities of families in caring for family members who have mental disorders (p-values 0.029 and 0,000). Education with a simulation model is recommended to be conducted on the order of health services in the community as a form of health services for families who have family members who experience mental disorders. As well as being the basis for consideration and thought in developing and implementing therapy.*

**Key words--** *Mental disorders, psychomotor abilities, stressors originating.*

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## I. INTRODUCTION

Mental health according to the Mental Health Regulation No 18 of 2014 is a condition in which an individual can develop physically, mentally, spiritually, and socially so that the individual is aware of his own abilities, can overcome pressure, can work productively, and is able to contribute to his community. Mental health is greatly influenced by one's ability to cope with stressful sources of life. A person who cannot adapt to stress will provide a maladaptive response from psychosocial problems to mental disorders.

Mental disorders according to Townsend (2009) are maladaptive responses to stressors from the internal and external environment as evidenced through thoughts, feelings and behavior that are not in accordance with local norms or local culture and disrupt social, work or physical functions. Whereas mental disorder according to Riskesdas (2013) is a mental disorder characterized by a disturbance in the ability to assess reality or poor insights.

The prevalence of mental disorders according to the 2013 Riskesdas data is equal to that of the 2018 Riskesdas data on the prevalence of severe mental disorders by 7. The prevalence of mental

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disorders in West Java is 1.6%. The number of mental disorders in Tasikmalaya City was 171 people while in Tamansari sub-district there were 35 people. With these problems the government makes a priority scale whose goal is to achieve Healthy Indonesia in 2015 - 2019, one of which is tackling the problem of mental disorders. One cause of mental disorders is family dysfunction. The family is a small unit and is the unit closest to the client and is the "main nurse" for the client. Therefore the family's role is very large in providing the care needed by clients at home. And this is in accordance with the efforts developed by the government, namely Community Based Mental health efforts.

Mental health efforts undertaken are promotive, preventive, curative and rehabilitative. Preventive family efforts carried out in the form of developing parenting that supports the growth and development of the soul; communication, information and education in the family; and other activities in accordance with community development. The role of the family is very large in providing the care needed by clients at home. If the family is seen as a system, the disturbance that occurs in one member can affect the whole system, conversely family dysfunction is one of the causes of disruption in family members. According to the 2006.Keliat study it was found that the recurrence rate in patients without family therapy was 25-50%, while the relapse rate in patients given family therapy was 5-10% (Wardani, 2009).

Efforts are made to improve the ability of families to care for family members who experience mental disorders, namely by conducting health education. Health education/education according to Notoatmodjo (2010) is an effort or activity to create community behavior that is conducive to health. This is consistent with the results of the 2012 Sulisnadewi study that family health education can improve the ability of families to care for patients. Based on the description above, the main problem can be formulated as follows: How does the influence of mental health education with a simulation model on the ability of families to care for family members who experience mental disorders in the Tamansari, Tasikmalaya Work Area?

## **II. RESEARCH OBJECTIVES**

Describe the effect of family education with a simulation model on the ability of families to care for family members who have mental disorders in the city of Tasikmalaya.

## **III. RESEARCH METHOD**

This research is a quasi-experimental, this research was conducted in June to July 2019. The population in this study were all families that have family members who have mental disorders. The sampling technique is total sampling of all families who have family members who have mental disorders in the working area of TamansariPuskesmas in Tasikmalaya City, with a sample size of 30 respondents.

## **IV. RESEARCH RESULTS**

The results of mental health education research with a simulation model of the ability of families to care for family members who experience mental disorders in the Puskesmas Tamansari, Tasikmalaya Working Area conducted in June to July 2019 with the number of respondents 30.

#### 4.1 Characteristics of Respondents

Characteristics of respondents were divided according to the type of data, namely data numerical and categorical data. Numerical data consists of age. While the categorical data consist of gender, education, employment and relationships with family members who have mental disorders.

The characteristics of the age of a mother, are numerical variables so analyzed using the central tendency to get the mean, standard deviation, minimum and maximum values as well as the Confidence Interval (95% CI) and the results of the analysis are presented in Table 1.

**Tabel 1.** Age Analysis of Respondents in Puskesmas Tamansari Area, year of 2019

N	Mean	Median	SD	Min-Max
30	47,60	48,50	13,158	19-75

Source: Result of Research 2019

The results of age analysis in table 1 were obtained from 30 respondents who were conducted in this study with an average age of 47.60 years with the youngest age 19 years and the oldest 75 years.

Characteristics of Respondents Based on Gender, Education, Employment, and Relationships with Family Members Who Have Mental Disorders Analysis of gender, education, employment, and relationships with family members who have mental disorders is done by using a frequency distribution whose results can be seen in table 2

**Tabel 2.** Respondent distribution based on gender, education, works, dan relationship with family member that have mental disorder in Puskesmas Tamansari 2019

	Characteristics	N	%
	<b>Gender</b>		
a.	Male	21	70
b.	Female	9	30

	Education	N	%
a.	Elementary	22	73,3
b.	Junior High School	3	10,0
c.	Senior High School	5	16,7
d.	University	0	0,0

	Works	N	%
a.	Employed	11	36,7
b.	Unemployed	19	63,3
	<b>Relationship with Mental Disorder family</b>		
a.	Parents	18	60,0

b.	Siblings	11	36,7
c.	Spouse	1	3,3

Source: Result Research 2019

The Gender who care for family members who experience mental disorders are Female, namely 21 people (70%), the most education is elementary that is 22 respondents (73.3%), the most work does not work/unemployed is 19 respondents (63.3%), the relationship with family members who experience mental disorders are parents of 18 respondents (60%).

#### 4.2 Family Ability in Caring for Family Members Who Have Mental Disorders.

This section will explain the ability of respondents to care for members of cognitive abilities is a numerical variable so that it is analyzed using central tendencies to get the mean, standard deviation, minimum and maximum values and Confidence Interval (95% CI), and family's ability to care for family members who have mental disorders. before and after being given education with a simulation model a Wilcoxon test was conducted which would be explained on table 3.

**Table 3.** Analysis of Family Ability in Caring for Family Members Before And After Education With a Simulation Model in the Work Area of Puskesmas Tamansari in 2019.

Family Ability	N	Mean	SD	SE	Z	P-value
Cognitive Ability						
a. Before	30	67,20	4,866	0,888	-2,177	0,029*
b. After	30	70,10	3,68	0,672		
<b>differences</b>		<b>2,9</b>				
Psychomotor Ability						
a. Before	30	57,73	16,00	2,921	12,669	0,000*
b. After	30	70,87	7,758	1,416		
<b>differences</b>		<b>13,14</b>				

Source: Result Research 2019

The statistical test results in table 3 show that the cognitive and psychomotor abilities of the respondents increased after being given education with a simulation model. The psychomotor abilities of the respondents experienced a higher increase of 13.14 scores compared to the cognitive increase of 2.9 scores. The statistical test results can be concluded that there is a significant increase, the average ability of respondents in caring for family members who have mental disorders before and after being given education with a simulation model (p-value <0.05).

## V. DISCUSSION

Family is the main support system that provides direct care for every situation of a patient, both in good health and sick condition. Related to the health care of a patient, the family has five health tasks, namely: 1. Knowing health problems, 2. Making health care decisions, 3. Providing care for a healthy family, 4. Creating a healthy family environment, and 5. Using resources existing in the community (Bailon and Maglaya, 1978 in Yosep and Sutini, 2014).

Having a family member who has a mental disorder, the family needs to get to know and know about health problems related to it, and must also be able to make decisions regarding health actions that must be taken when caring for them. Therefore, accompanying and caring for family members who have mental disorders especially, requires not only sincere willingness as a family member, but also requires knowledge about the condition of mental patients and understanding of how to treat them properly and correctly, in accordance with the rules of patient care with mental disorders.

This research is a quasi-experimental study by educating family members who have mental patients in their homes, using simulation models. Based on the results of the study, data were obtained that there was a significant increase in the cognitive abilities of family members after education. If you look at the characteristics of respondents who are mostly educated at the level of basic education, the educational method using simulation models has proven to be effective in increasing the cognitive abilities of families in caring for family members who have mental disorders. Education with a simulation model allows all respondent's sensory devices to be activated, so that the learning process becomes effective, because participants are actively involved in the learning process, not just sitting still, listening to the material presented. With a low educational background of respondents, the educational method with simulation models, can overcome and cover up the weaknesses of the respondents' ability to process information that is theoretical, especially if the education model is only given in the form of lectures. With simulation models, theoretical knowledge is translated into behavioral or practical experience, which is easier for participants to understand. Especially for participants who already have previous experience in caring for family members who have mental disorders, the knowledge delivered with a simulation model, will be directly linked to the experience that has been previously owned. Thus their knowledge is cognitively easier to improve.

The results of research on psychomotor aspects, also showed a significant increase. With the use of simulation models, education for families in caring for patients with mental disorders is possible to directly practice the material presented. Educational model with simulation, allows participants to learn directly to take action at a practical level. The simulation model itself is a way to explain something (lesson material) through pretend actions or through a process of imitation behavior or role play that is performed as if in actual circumstances (Sudjana 2009: 89, in Handayani). With this model, families who care for mental patients, immediately do and practice themselves how to care for family members properly and correctly as exemplified when education is given, so that it will be easy for families to understand and apply it according to the conditions that are actually faced daily.

Most respondents who care for families suffering from mental disorders in this study are parents. Educational methods for parents, are also more appropriate if given with a simulation model. The learning

process in parents, is different from the learning process in children, or young people. At the time of learning, parents bring all the experiences in their lives, so they will directly connect between what has been done so far, with what is conveyed during learning. This process is called the process of assimilation in learning. If the experience that has been done is in line with the information obtained during the learning process, then the information will be easily stored and can be accessed again whenever needed. With a simulation model, parents who learn and have previous life experiences, have knowledge stored in muscle memory, or memories of habits that have been done before, stored in their muscles, if the memories are in line with the material delivered, then they will easily receive and store the information conveyed.

With the education through simulation models, their muscle memory gets strengthened. The knowledge acquired is not only theoretical, but also practical and contextual or based on facts and the real situation. Wahab (2007) in Oktapyanto (2016), said that to develop an understanding and appreciation of an event that more leads to psychomotor, then the use of simulation learning models, will be very useful. This explains why the ability to care for family members in psychomotor aspects also increased significantly after receiving education with a simulation model.

## VI. CONCLUSIONS AND SUGGESTIONS

Family cognitive and psychomotor abilities before mental health education with simulation models are 67.20 and 57.73.

Cognitive and psychomotor abilities after doing mental health education with simulation models are 70.10 and 70.87

Respondents' cognitive and psychomotor abilities have increased after being given education with simulation models. The psychomotor abilities of the respondents experienced a higher increase of 13.14 scores compared to the cognitive increase of 2.9 scores.

There is a significant increase in the average ability of respondents in caring for family members who have mental disorders before and after being given education with a simulation model ( $p$ -value  $< 0.05$ ).

Education with a simulation model is recommended to be carried out on the record of health services in the community as a form of health services for families who have family members who experience mental disorders. As well as being the basis for consideration and thought in As well as being the basis for consideration and thought in developing and implementing therapy.

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