



ANALYSIS OF FACTORS AFFECTING FAMILY WHO LIVING WITH SEVERE MENTAL DISORDERS BY SELECTION TRADITIONAL TREATMENT

¹*Tien Aminah, ²Retty Ratnawati and ³Tina Handayani Nasution

¹Magister Nursing Student, Medical Faculty, Brawijaya University.

^{2,3}Lecturer Medical Faculty, Brawijaya University.

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Corresponding author: Tien Aminah

Magister Nursing Student, Medical Faculty, Brawijaya University.

ABSTRACT

Background: Mental disorder is a syndrome of behavior patterns or psychological person with clinical judgement, where the clinical symptoms cause distress such as pain, discomfort, discomfort, discomfort and organ dysfunction and disability in daily life activities for self-care and survival. Mental disorders do not caused death, but the severity of mental disorder can cause the inability and invalidity both in individually and in groups so it will inhibit the development of a country, and commonly the most of the mental disorder occur in productive age. Currently there are still many cases of mental disorder who late to get the handling of health workers, because the family or community try to found alternative treatment before come to health care services. After a long time it was unsuccessful heal and already spend a lot of cost, then the family's mental disorders come to the health center so often it was late and diagnosed in a state of severe mental disorders. Many factors were influence a person in choosing health care facilities, both conventional health services and traditional health services. **The objective:** The purpose of this study to analyzed the factors that influenced the families who live with severe mental disorders patient to take traditional treatment. **Methods:** The design of this study was observational analytic using cross sectional approach. 100 samples in this study were collected by proportional cluster random sampling technique. The data were collected by using questionnaires. **Results:** Chi square test results showed that there was an influence of health beliefs (p value 0.005), family resources (p value 0.022), social resources (p value 0.025), family needs (p value 0.013), and evaluation of achievement needs (p-value 0.013) to the selection of traditional treatment among families who living with severe mental disorders. Multiple logistic regression test showed that the most dominant variable was health beliefs with p value 0.007 with OR 0.258. **Conclusion:** Based on the result of this research, it can be concluded that there are influence of health beliefs, family resources, social / community resources, family needs, and evaluation of the achievement of family needs on the selection of traditional treatment among family who living with serious mental disorder and the most dominant factor is health beliefs. The implication of this study is the improving of health beliefs especially among family who living with severe mental disorders will be more positive so they can select the right treatment for their family members who have severe mental disorders.

KEYWORDS: Factors, selection, traditional treatment, mental disorders.

INTRODUCTION

Mental disorder is a syndrome of a pattern behavior or psychologic of person and clinically judgment that this symptoms cause distress and prformed pain, discomfort, unresful, unpeaceful, organ dysfunction and disability in daily life activities for taking care of them self and survival.^[1] Generally, mental disorders are divided into two major groups, namely: psychoses and non psychoses. Psychoses are characterized by two main symptoms: lack of self-understanding (insight) and

reality testing abilities (RTA). However, non psychoses (neurotic disorders) are characterized by both main symptoms (insight and RTA) are still good but their behavior can very disturbed but usually it still inline with social norms and personality remains intact. This causes people with mental disorders are unable to do naturally function and optimally in everyday life in the social environment either at home, school, or at work.^[2]

In Indonesia, based on Basic Health Research data in 2013 mentioned that the number of people with severe

mental disorders are 1.7 per mile, it mean that the number of severe mental disorders is 0.17% of the population in Indonesia (37,000 patients). While, the prevalence of emotional mental disorders (depression and anxiety) reached 6% (10 million inhabitants). East Java is fourth ranks with the highest number of people with mental disorders in Indonesia (0.22%) and only 62.6% of household who able to treatment their family member who has severe mental disorder. Moreover, only 27.5% of household who able to treatment their family member who has emotional mental disorders. The result of Basic Health Research Indonesia 2013 shows that in East Java there are still many mental disorders who did not received proper treatment as much as 37.4% for severe mental disorder and 72.5% for emotional mental disorder.^[3]

Mental disorders do not cause death directly, but the severity of mental disorder can cause inability and invalidity both individually and in groups that will inhibit the development of a country, furthermore most of the people who suffer mental disorders are at reproductive age.^[2]

Currently, there are still many cases of mental disorder who delay to get treatment by health workers, because commonly the family or community take an alternative treatment before coming to health services.^[4,5] and after a long time, the patient does not heal and spend a lot of cost, then they bring the patient to the health center so it was late and mostly they already diagnosed in a state of severe mental disorders. Many factors are influence a person's decision to choosing health care facilities, both conventional health services and professional health services.^[6]

This research is important to know how the influence of independent variables are predisposing factors (health beliefs variable), enabling factors (family resource variables and social / community resource variables), needs factors (family needs variables, and evaluation of family needs) to the dependent variable (the selection of traditional treatment) for people with severe mental disorders.

LITERATURE REVIEW

Alternative medicine was growing in abroad. Nearly 70% of the world's population were utilizes traditional health services as one of an effort to improve their health condition, both as a single therapy or additional therapy from conventional medicine. Most of the population in developing countries also utilizes alternative traditional medicine, such as in Canada (59-60%), the United States (62%), Singapore (76%), and Japan (50%) were use alternative traditional medicine at least once a year.^[7] In Pakistan, complementary alternative therapy was the primary selection for depression treatment, epilepsy, and infertility.^[8] Traditional medicine very famous in community, it is an alternative treatment option to solve health problems in both the village and the city.^[9]

Many factors were influenced the person to select health care facilities, both in conventional health services and modern health services.^[10,11]

MATERIALS AND METHODS

Study design

The design of this study was observational analytic with use cross sectional approach. Population of this research was all family who living with severe mental disorder and registered in Bantur's Primary Health Care Services (PHC), Malang District of East Java Province-Indonesia with the number 132 people. Moreover, 100 samples were taken by proportional cluster random sampling technique. Independent variables were health beliefs, family resources, social resources, family needs, and needs evaluation. While the dependent variable is the selection of traditional treatment. The data were collected by using questionnaires. Data were analyzed by using multiple logistic regression test.

Setting

This research was done at Bantur's Primary Health Care Services, Malang District, East Java Province-Indonesia.

Research subject

The sample of this study was 100 families who living with severe mental disorders in Bantur's Primary Health Care Services working area, Malang District-East Java, Indonesia.

Instruments

The instrument of this study was questionnaire to collect the data. The questionnaire to assess dependent variables are consist six parts, it are: Part A: questionnaire to assess health beliefs; part B: questionnaire to assess family resources; part C: questionnaire to assess social resources; part D: questionnaire to assess family needs; part E: questionnaire to assess the evaluation of family needs achievement and part F: questionnaire to assess the decision on taking traditional treatment.

Ethical consideration

The ethical clearance of this study was approved etic commission by health research of medical faculty of Brawijaya University, East Java-Indonesia. The number letter 160/EC/KEPK-S2/07/2018.

Data collection

The data were collected by using questionnaire. The questionnaire was filled in by respondent with accompanied by researcher or enumerator, if the respondent didn't understand or can't fill in the questionnaire so the researcher and enumerator will help them to fill in the questionnaire.

Data analysis

The univariate data were analyzed by using percentage, bivariate data were analyzed by using Chi-Square test and multivariate data were analyzed by using multiple logistic regression.

RESULTS AND DISCUSSION

Results

The characteristics of the family who living with severe mental disorders as respondents were found the mean of age was 47.4 years old, 94% were Javanese, 87% were Muslim, 67% were female, 74% were married, 47% were hold elementary school, 54% were farmer as their profession, 100% were got under UMR as their salary, only 29% of the participant mentined that they were have relation with patient as the mother, an average distance of their house to Primary Health Care Services was around 9 km and 92% of them to reach Primary Health Care Services by using their own transportation. However, an average distance of their home to traditional

treatment service was 9,2 km with and 48% of them reach it by their own transportation and 47% by rent the transportation.

Characteristics of patients who have severe mental disorder in work area of Bantur’s Primary Health Care Services in Malang District, East Java Province-Indonesia was in average 40 years old, 94% was Javanese, 87% was Islamic as their religion, 57% were female, 46% were unmarried, 48% were hold elementary school, and 46% were odd jobs, 100% of them were got income under the minimum, and in an average 6 years old suffering severe mental disorders.

Table 1: Distribution of frequencies of health beliefs, family resource, social resource, family needs, evaluation of achievement of needs variable and decision on taking traditional treatment variable.

Variable	Classification	f	%
Independent Variable			
Health beliefs	Negative	73	73
	Positive	27	27
Family resource	Inadequate	29	29
	Adequate	71	71
Social resource	Inadequate	31	31
	Adequate	69	69
Family needs	High of needs	30	30
	Low of needs	70	70
Evaluation of family needs achievement	Advanced of achievement	30	30
	Poor of achievement	70	70
Dependent Variable			
Decision on taking traditional treatment	Not take traditional treatment	49	49
	Take traditional treatment	51	51

From table 1 found that 100 respondents (family) of severe mental disorder, as many as 73 people (73%) have negative health beliefs and always looking for traditional medicine. Family resource variable found that 29 people (29%) were inadequate and 71 people (71%) said that family resources were adequate. Need family variable found mostly (70%) had low of family needs and only 30

respondents (30%) said that they had high family needs. This was describe that the lives of respondents were very simple and did not have a high desire for the needs of life, and they felt enough to their live. For social resources, as much as 69% of respondents said that got adequate social resources or supportive environments.

Table 2: Distribution of frequencies of kind of treatment, traditional product, practicing of herbal treatment among family who living with severe mental disorders.

Selection of treatment n=51	Yes		No	
	f	%	f	%
Kind of traditional healer				
Kyai (Religious leader)	38	75	13	25
Dukun (shaman)	20	40	31	60
Peramu obat herbal (herbalist)	11	22	40	78
Tukang pijat (massage therapist)	7	14	44	86
Tusuk jarum (akupunkturist)	5	9	46	91
Traditional Medicines Products				
Herbal medicine	21	42	30	58
Herb	22	44	29	56
Aromatheraphy	7	14	44	86
Gurah	5	10	46	90

Selection of treatment n=51	Yes		No	
	f	%	f	%
Practice of traditional treatment				
Doa-doa (supplication/ orison)	39	77	12	23
Mantra (spell)	23	45	28	55
Hipnoterapi (hypnotherapy)	8	15	43	85
Meditasi (meditation)	6	11	45	89
Prana	7	13	44	87
Tenaga dalam (inner power)	7	13	44	87

From table 2 found that 51 respondents who had selected traditional medicine, as many as 38 people (75%) selected kyai (religious leaders) as a kind of treatments to taking care of family members who have severe mental disorder, 20 people (40%) selected shamans, and only 5 people (9%) selected acupuncturist. In terms of

traditional medicines products, as many as 22 people (44%) selected herb, and 21 people (42%) selected herbal products. In terms of traditional medicine practice, 33 people (77%) selected practice prayers, followed by spells of 23 people (45%), and only 6 people (11%) selected meditation as their traditional medicine practice.

Table 3: The influence of independent variable to decision on taking traditional treatment among severe mental disorders.

Independent Variable	Selection of Traditional Treatment				p value	OR	CI 95%	
	Not select		Select				Min	Maks
	f	%	f	%				
Health Beliefs								
Negative	42	42	31	31	0.005	3.871	1.456	10.292
Positive	7	7	20	20				
Family resource								
Inadequate	9	9	20	20	0.022	0.349	0.140	0.872
Adequate	40	40	31	31				
Social resource								
Inadequate	10	10	21	21	0.025	0.366	0.150	0.893
Adequate	39	39	30	30				
Family needs								
High of needs	9	9	21	21	0.013	0.321	0.129	0.801
Low of needs	40	40	30	30				
Evaluation of family needs achievement								
Advanced of achievement	9	9	21	21	0.013	0.321	0.129	0.801
Poor of achievement	40	40	30	30				

Table 3 explained that the correlation between independent variables like health beliefs, family resources, social resources, family needs, and evaluation of family needs achievement have p-value <0.05. This means that all independent variables have an influence to

the dependent variable. While, OR values on health beliefs were the highest OR value than other variables this means that the correlation between health beliefs and the selection of traditional treatment variables was very strong.

Table 4: The results of bivariat variable which influenced the selection of traditional Treatment among family who living with severe mental disabilities.

Variable	p value*	Odd Ratio
Health Beliefs	0,005	3.871
Family resource	0,022	0.349
Social resource	0.025	0.366
Family needs	0.013	0.321
Evaluation of family needs achievement	0.013	0.321

* = p value < 0,05

Bivariate selection used to determine the variables in this study are capable to do multivariate test, so the researcher expects that the results are achieved. To determine whether the variable can go to the next stage

by using the comparison the value of omnibus test (p value) and in the spss table is 0.25. The criteria variable that can be continued to the next stage is the variable that has a value of Sig. in the block column is smaller than p

value and in this study found 0.25 (<0.25). From the next stages. above data found that all the variables can continue the

Table 5: Multivariate multiple logistic regression models.

Step	Variable	B	Sig.	Exp (B)	95 % C.I for Exp (B)	
					Lower	Upper
Step 1	Var 1	-22.620	0.999	0,000	0.000	
	Var 2	-21.205	0.999	0,000	0.000	
	Var 3	0.164	0.920	1.178	0.047	29.486
	Var 4	0,164	0.920	1.178	0.047	29.486
	Var 5	-0.447	0.721	0.640	0.55	7.409
	Constant	22.374	0.999	5.210		
Step 2	Var 1	-22.702	0.999	0,000	0.000	0.000
	Var 2	-21.203	0.999	0,000	0.000	
	Var 3	0.244	0.865	1.276	0,076	21.279
	Var 5	-0.450	0.719	0.638	0.055	7.386
	Constant	22.459	0.999	5.671		
Step 3	Var 1	-22.709	0.999	0.000	0.000	
	Var 2	-20.966	0.999	0.000	0.000	
	Var 5	-.457	0.715	0.633	0.055	7.323
	constant	22.473	0.999	5.759		
Step 4	Var 1	-22.253	0.999	0.000	0.000	
	Var 2	-20.948	0.999	0.000	0.000	
	constant	21.998	0.999	3.577		
Step 5	Var 1	-1.354	0.007	0.258	0.097	0.687
	constant	1.050	0.017	2.857		

From table 5 described five variables that enter into multivariate modeling, it have 3 variables are most dominant influenced dependent variable, it was health belief variable with p value 0,007 and OR value 0,258 (weak). This implies that a person who chooses traditional treatment can be caused by 25.8% due to his health beliefs, and 74.2% is explained by another variable which not examined.

The logistic regression obtained is:

$$Y = \text{Konstanta} + a_1X_1 + a_2X_2 + \dots + a_iX_i$$

$$Y = 1.050 + -1.354 (\text{health beliefs})$$

The results of this equation model can predict whether a person will choose a traditional treatment seen from his health beliefs. The meaning of the constant value is that if there is no trust value or the variable value so the person who will take traditional treatment is 1.05 times greater than the person who has positive's health beliefs.

DISCUSSION

The result of bivariate analysis with use chi square test showed that there was a statistically significant effect between health belief and decision to choose traditional treatment with p value 0,005 or less than 0,05. The value of OR obtained 3.871, this indicated that the direction of positive correlation with strong correlation was strength. This results explained that the more positive of person's health belief will increasing the choose of traditional treatment. The results of this study was accordance with

research conducted by^[12] where the researchers explained that the perception and mindset of a person related to health services and it will affect also the decision of a person to seeking health services. Another study also explained that negative behavior in this case is a behavior to found negative health care services and influence other person to find anternative healing. Complementary medicine and alternative treatments usually promise for quick healing and faster in getting cured.^[13]

From the facts and theories views then the researchers can draw the red thread that there is the pattern of seeking health services, especially in work area of Primary Health Care Bantur Malang Distric East Java Province-Indonesia which the people still holds customs and cultures, so difficults to believe in medical treatment if it takes a long time and commonly spend high cost. This can be indicated as a negative trust of health.

The influence of family resources was showed to be statistically significant (p = 0.022) with the decision to choose traditional treatment. The odd ratio of this variables is 0.349 where this value indicates that there is a sufficient and positive influence between two variables, it mean that if adequate of family resources so it will less to seeks traditional health service. This result was accordanced with a research conducted by Committee on Children with Disabilities which explained that the role of family in the treatment of family members (children with chronic illness) was important, so the support to looking for good health services is great.^[14] This

certainly will be inversely proportional to patients with severe mental disorders who have a family without sufficient resources so they looking for alternative treatment and this is becomes the main thing to be able to heal family members who suffer from severe mental disorders. Another reason why families choose traditional medicine was explained by^[15] where the families did not understand about the right treatment for mental disorders and the families feels frustration with the condition of their family member (patients) so they family thinngking that it will make use less if the patient hospitalization or good health services will make it not heal.^[15]

The effect of social resources was statistically significant ($p = 0.025$) on the decision to choose traditional treatment. The value of odd ratio between this variable is 0.366 where this value indicates there is enough and positive influence between these two variables, it is social resources / community more adequate so less people are looking for negative health services. This is consistent with research conducted by^[16] which explained good social support will provide a good alternative health option so patients and families avoid traditional treatment, and if social / community resources are inadequate in support as well as knowledge so commonly they will choose an alternative treatment rather than health care professional to solve the health problems.^[16] But it was different with the social community who still hold culture so even though they have enough social support so alternative medicine is first choose.

The influence of the perceived of family needs was statistically significant ($p = 0.013$) with the decision to choose traditional treatment. The odd ratio value between this variable is 0.321 where this value indicates there is enough and positive influence between these two variables, it mean the higher of family needs so high also perception of family to find an alternative treatment for family members who suffer severe mental disorder. This was in accordance with research conducted by^[17] which explains that a person's economic level affects his choice in making decisions to take health care services.^[17] This because of the priority is more to fulfill the needs of other family member so the funding which for treat severe mental disorders members will be not enough, so the promise of alternative treatment that promises to give quick healing and only need small funds will become the main choice. Another thing that influences this variables is the condition of patients with severe mental disorder, this like a chronic mental illness and they cant recover in one time, so it takes a lot of time and funds, of course this is one reason why families choose traditional treatment.

The effect of evaluation on achieving family needs was statistically significant ($p = 0.013$) with the decision to choose traditional treatment. The value of odd ratio between this variable is 0.321 where this value indicates

there is enough and positive influence between two variables, it means that if the family have enough achievement of family needs so it will make small families come to alternative treatment. This result was in accordance with research conducted by^[18] which explained that the family who had more achievement of family needs so it will make the family can do many things such as give right treatment for family member who have severe mental disorders. However, if the evaluation of family needs is insufficient so medical treatment is not priority and in the end traditional treatment is one of rasional decision to heal mental disorders patient.^[18]

Multivariate analysis with multiple logistic regression used to analyze the most influencing factor on the dependent variable. The researcher can make a model of the related between independent variable and dependent variable. Modeling can be used as a baseline to determine whether a person will choose or not relating traditional treatment

This model of influence is based on the reality in the field where a person has negative health beliefs or it means that a person is more belief to traditional treatmen so they will tend to choose traditional treatment. The research conducted by^[11] where in his research explained that the perception and the mindset of a person will influence the selection of health services. Another reason why health beliefs are the most influenced the factors described by^[19] in his Health Beliefs Model theory described that one's decisions are influenced by valence and subjective probability. Valence in the theory said that the value of a person influenced by their self, the family or the environment. This is the basic for how a person decides to choose a treatment. Another thing described are subjective probability, subjective probability is an expectation of someone which based on their experience or an expectation that can influence other people's value. This can base on their experience or other. This experience will affect the chances of someone to choosing a health service.^[10]

The result of multivariate analysis using logistic regression test obtained that health beliefs has p value 0.007 and OR 0,258, this explained that modeling of logistic regression result can predict 25,8% someone who will choose traditional service caused by trust health (health beliefs), where 74.2% is explained by other variables that are not examined.

CONCLUSION

Based on the result of this research, it can be concluded that there are influence of health beliefs, family resources, social / community resources, family needs, and evaluation of the achievement of family needs on the selection of traditional treatment among family who living with serious mental disorder and the most dominant factor is health beliefs.

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