Analysis Of Factors Affecting Occurrence Of Schizophrenia In Campurdarat Public Health Center

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ABSTRACT

Schizophrenia is one type of psychiatric disorder characterized by disruption of the ability to distinguish between real and imaginary nature. According to data from 2018, there is a total of 210 schizophrenic patients who seek treatment at the Campurdarat Public Health Center. Schizophrenia is caused by many factors, including genetic factors, trauma, family structure, family upringing, and tensions due to economic factors. The purpose of this study is to determine the factors that affect the incidence of schizophrenia and the most dominant factor. This research type used desriptive analytic with a case control design. With the entire population of schizophrenic patients aged over 17 years in the Campurdarat Public Health Center. The sampling technique used random sampling techniques. Bivariate data analysis used logistic regression statistical test and multivariate analysis used multiple logistic regression. Great influence among variables expressed in OR with 95% CI and p = 0.05. Based on bivariate analyzes influential factors were trauma (OR = 5.8, CI 95%; 1.011 to 33.922), family parenting (OR = 14.7, CI 95%; 2.311 to 93.570), and tension due to economic factors (OR = 5.9, 95% CI 1.060 to 32.935). Based on multivariate analysis, the most dominant factor was family parenting (OR = 12.3, CI 95%; 3.888 to 39.151). Highly pathogenic parenting affects the incidence of schizophrenia, so families need to improve family parenting. Non-pathogenic parenting can reduce the risk of the incidence of schizophrenia.

Keywords : Economic, Family Parenting, Schizophrenia, Trauma

INTRODUCTION

Healthy according to WHO definition is a state of well-being, perfect physical, mental, and social is not limited to freedom from disease and weakness only. This means that a person is healthy is not just freedom from disease, but the condition in which a person reaches the plenary wellbeing both physically, mentally and socially. According to WHO estimates regarding disability-adjusted life years (DALYs) in 2012 put Unipolar Depressive Disorders at 9 ratings of 20 major diseases, when compared with communicable diseases (communicable diseases) or non-communicable diseases (non-communicable diseases) others. That is, although the mental disorder / mental health has not been too considered a serious problem, but in fact can cause a great impact, which makes millions of people living with disabilities (RI, 2006).

Mental disorders is a clinical manifestation of a form of deviant behavior as a result of emotional distortions that found irregularities in behavior. Severe mental disorders, there are three kinds of schizophrenia, bipolar disorder and acute psychosis. The impact of mental disorders, according to WHO in 2013 estimated as many as 873,000 people commit suicide each year and more than 90% of suicides

Schizophrenia is a multifactorial neurodevelopmental disorder that is influenced by genetic and environmental factors and is characterized by positive symptoms, negative and cognitive. Psychotic symptoms characterized by abnormalities in the form and content of thought, perception, and emotions and behavior. Symptoms that may be observed in schizophrenic patients is the appearance and general behavior, speech disorders, behavioral disorders, affective disorders, impaired perception and thought disorder. Often precede cognitive symptoms of psychosis. Positive symptoms (real) include delusions, hallucinations, rowdy restless, strange behavior, hostility and formal thought disorder. Negative symptoms (cryptic) includes hard broach, flat effect, decreased motivation, decreased attention, passivity, apathy and social withdrawal and discomfort (Videbeck, 2008).

Based on data Riskesdas 2007 there were 11.6% of Indonesia's population aged over 15 years who experience emotional or mental disorders ranges from 19 million inhabitants. 0,46% of them even suffered severe mental disorder, or about 1 million inhabitants.

Riskesdas data in 2013 showed the prevalence of severe mental disorders (schizophrenia) about 400,000 people or 1.7 per mil, whereas in 2018 there was an increase to 7 per mile. In Indonesia, with a variety of biological, psychological and social diversity of the population; then the number of cases of mental illness continue to increase the impact on additional burden on the state and decline of human productivity in the long term. Provincy while in East Java in 2013 the prevalence of schizophrenia of 2.2 per mil, or as much as 83.612 souls who experience schizophrenia in East Java.

According Maramis, the root causes of mental disorders influenced by somatic, psychological factors and socio-cultural factors that constantly affect each other. The emergence of schizophrenia symptoms resulting from the change in the pattern of the environment, behavior and due to the biological condition of the individual. In the psychological development goes wrong immaturity or fixation that people fail to grow further in the next phase, and there are places that are weak (vulnerable). Individuals who are vulnerable when subjected to psychosocial stress such as low economic status, failed to achieve the ideals and protracted conflict, the death of a loved family and others may develop into a mental disorder schizophrenia.

Based on research conducted Utomo, among genetic, psychological, and sosiogenik, most associated with the incidence of schizophrenia is the psychological factor. It sikarenakan the many triggers of factors psychological such interaction is not good, competitive intelligence, family relationships, employment, loss of which leads to anxiety, depression, shame or guilt, self-concept (notion of identity itself opposed to the role of an erratic) skills, talents and creativity, patterns of adaptation and defense reaction to danger, the level of emotional development.

Based on the results of preliminary studies that have been conducted by researchers at the Campurdarat PHC in September 2018, the data obtained a total of 210 souls with schizophrenia. Based on information from the person in charge of mental health programs in Campurdarat PHC, factors that cause schizophrenia vary, the most common of which is heredity, poor family structure, trauma, and economic factors. With the existence of such data makes researchers want to determine the factors that affect the incidence of schizophrenia and how much influence each of these factors on the incidence of schizophrenia in Campurdarat PHC.

The purpose of this study was to determine how much influence the genetic factors, trauma factors, factors struktut family, family parenting, and the strain of economic factors on the incidence of schizophrenia. And to determine the most dominant factor.

Based on the problem above, the proposed hypothesis, among others, there is the influence of factors that influence the incidence of schizophrenia in outpatient health centers Campurdarat and the most dominant factor.

METHODS

This research is descriptive analytic type of case-control study. The population in this study are patients with schizophrenia and one member of the family (care giver) in Campurdarat PHC. Sampling was conducted by random sampling system is adjusted based on gender. Sample of 53 respondents, with a ratio of 1: 1 of each case and control groups. The dependent variable in this study was the incidence of schizophrenia. While the independent variable is genetics, trauma, family structure, family parenting, and tensions due to economic factors. The collection of primary data through interviews using a questionnaire. As for the secondary data obtained from the person in charge of the health center program Campurdarat. Descriptive data collection, analysis and multivariable analyzes bivariable by using multiple logistic regression.

RESULTS

1. Characteristics of Respondents

Tabel 1. Karakteristik Responden

Characteristics of Respondents	Frequency f	%
Gender		
Male	64	60.4
Female	42	39.6
Age Group		
≤ 29	10	9,4
$30 - 40$	41	38,7
$41 - 51$	34	32,1
$52 - 62$	17	16,1
≥ 63	4	3,7
Level of Education		
ES	41	38,7
JHS	49	46,2
SHS	16	15
Type of work		
Not working	15	14,2
House Wife	15	14,2
Farm laborers	49	46,3
Employer	26	24,6
Seller	1	0,9
Marital Status		
Single	25	23,5
Marriage	67	63,2
Divorce	14	14,2

Based on the above picture, the following are the characteristics of the respondents. Based on the gender of the respondent the most is male, which is 64 people (60.4%). For the age group the most respondents with the age group 30-40 years, which are 41 people (38.7%). The most education level of respondents is Junior High School (JHS) which are 49 people (46.2%). The most types of work of respondents are farm laborers which are 49

people (46.2%). And based on the marital status, the most of respondents was married, which are 67 people (63.2%).

2. Variable Characteristics

Table 1. Characteristics of Research Variables period 18 February to 15 March 2019 in Campurdarat PHC

Variables Independent	Schizophrenia		Non-Schizophrenia	
	f	%	f	%
Genetic				
Yes	13	24.5	53	100
No	40	75.5	0	0
Trauma				
Yes	40	75.5	16	30.2
No	13	24.5	37	69.8
Family structure				
Yes	30	56.6	13	24.5
No	23	43.4	40	75.5
Parenting Families				
Pathogenic	41	77.4	14	24.5
Non-pathogenic	12	22.6	39	75.5
Tension Due to Economic Factors				
Yes	38	71.7	16	30.2
No	15	28.3	37	69.8

Based on the table that the information obtained for genetic variables in the group with schizophrenia have problems amounted to 13 (24.5%). Variable trauma majority of respondents stated to have traumatized from schizophrenia group of some 40 people (75.5%). Family structure variables, most respondents stated that there are problems in family structure of schizophrenia group were 30 people (56.6%). Variable family parenting, most respondents stated to have parenting pathogenic namely from schizophrenia group number 41 (77.4) and variable tension due to economic factors, the majority of respondents declared to have economic problems, namely from schizophrenia group 38 people (71.7).

3. Statistic Test

a. Bivariate analysis

Table 2 Test Results Bivariate Statistical Analysis

Variables Independent	P - Value	OR	CI (95%)	R Square
Genetic	.997	0,000	-	
Trauma	0,049 *	5.857	1.011 to 33.922	
Family structure	.942	1,070	0.172 to 6.647	
Parenting Families	0,004 *	14.705	2.311 to 93.570	86%
Due tension Economic factors	0.043 *	5.908	1.060 to 32.935	

Based on the table it can be seen that the results of the bivariate analysis using logistic regression test known of the five variables of the study, there are three significant variables: trauma, family parenting, and tensions due to economic factors. Because of these three variables has a p-value less than 0.25, then the

three variables included in the multivariate analysis to determine the most dominant factor.

Of the three significant variables, odds ratio value obtained as follows, for the variable trauma OR 5.857, CI (95%) from 1.011 to 33.922 this indicates that respondents with the trauma of having a risk factor of 5.8 times greater incidence of schizophrenia than those not having trauma. Variable family parenting OR value of 14.705, CI (95%) 2,311 - 93,570atau OR> 1, this indicates that respondents with parenting pathogenic own risk 14.7 times greater incidence of schizophrenia than non-pathogenic parenting. And variable tension due to economic factors CI OR value of 5.908 (95%) 1,060 - 32,935atau OR> 1, this indicates that respondents with tension due to economic factors had a risk 5.9 times greater incidence of schizophrenia than those not having economic problems.

Then the value of R Square 86%, demonstrating the independent variables are able to explain 86 percent of dependent variable that is visible from the value of R Square of 0.86. While 14 percent can be explained by other factors beyond the independent variable.

b. **Multivariate Analysis**

Table 3. Test Results Multivariate Statistical Analysis

Variables Independent	P - Value	OR	CI (95%)
Trauma	0,000	10.239	3.211 to 32.649
Parenting Families	0,000	12.338	3.888 to 39.151
Due tension Economic factors	0,001	5.824	1.966 to 17.256

Based on the table it can be seen that the results of the multivariate analysis using logistic regression test multinomilal known of the three variables were entered, all significant. With the highest value in the variable OR Parenting Families in the amount of 12.338 CI (95%) from 3.888 to 39.151. So that the most dominant factor in the incidence of schizophrenia in the present study is family parenting.

DISCUSSION

1. **Influence Between Genetic Factors With Schizophrenia Genesis**

The results showed no influence of genetic factors in schizophrenia (p value = 0.997). The data in this study for genetic variables, as respondents in the non-schizophrenia group were family members of patients with schizophrenia, so that all respondents have a genetic problem that their own family members who suffer from schizophrenia.

The results are consistent with research conducted by Wahyudi that genetic or hereditary factors not associated with the incidence of schizophrenia with a p-value 0.772 (> 0.05 α) with OR 1.403 (95% CI; 0.446 to 4.406), which means it practical samples that have a history of risky descent occurs 1.4 times for schizophrenia compared with no history of descent. And in line with research Yati which concluded that the research results of genetic factors only becomes a risk factor and not the main cause of schizophrenia.

This is supported by the concepts put forward by Hawari, which states that schizophrenia is lowered due to the existence of recessive genes in a person. The

marriage between couples who have schizophrenia recessive gene produces 36% may be descended to his sonso that the role of genes in the incidence of schizophrenia is very complex and is influenced by other factors such as the condition while still in the womb.

2. **Influence Between Trauma Factors With Schizophrenia Genesis**

The results showed no effect between their trauma with schizophrenia incident with the results of the bivariate analysis, namely p value = 0.049 and OR 5.857 (95% CI; 1.011 to 33.922). While the results of the multivariate analysis showed that p value = 0.000 and OR 10.239 (95% CI; 3.211 to 32.649), which means practically the respondents who have had trauma to 10.2 times greater likelihood to suffer from schizophrenia compared with respondents who did not have a trauma.

The results are consistent with Salsabila that the trauma of the past research result of physical violence as much as 100 subjects with a percentage of 30.7%. The trauma of sexual violence, as many as 49 subjects with a percentage of 14.9%. And the trauma of bullying as many as 141 subjects or 55.7%. The results of this study are also consistent with research Sari[12], who found that psychological factors are most influential with the incidence of schizophrenia is trauma. And research from Kilian[13] which states that the trauma of the past is one of the risk factors of schizophrenia. This supports the concept expressed by Hawari[14] that the condition which can cause a psychiatric disorder (PTSD) among other natural disasters, riots, war, fire, rape, pregnancy out of wedlock.

Of conditions on the ground at the time of the study obtained information that some of the respondents have stated that the trauma of which have experienced violence in this case is the most common physical and verbal violence that makes one a trauma. As revealed by Sutiyono[15] that trauma is the soul or abnormal behavior due to mental stress or physical injury because of an incident that really made an impression that can not be overlooked. Physical violence in addition to usually leave scars on the body, also formed the inner wounds that are stored and potentially alter the behavior of doing positive things. The effect is a person's life can be not recorded properly and even became melancholy. Physical violence can lead to mental disorders due to a disturbance in brain neurons in a collision is very hard, so that it can interfere with the mindset and mental health of a person. Head trauma is usually cause of psychiatric disorders such as depression, anger, anxiety, confusion, and so on. If this is allowed to eat over time will pose a serious mental disorder.

As for the verbal abuse over the words that were not supposed to say, like giving a bad nickname, insult, scolding with a very rough, yell loudly, or even bullying. It can make a person self-confidence, feeling unappreciated and useless. So that someone does not want to meet or connect with other people. This solitude which then makes the time was filled by thoughts on the words that had he had heard about him, and over time will cause a psychiatric disorder. As in Marela[16] study that the victim of verbal abuse (bullying) greater risk of depression than those not experiencing bullying.

3. **Influence Between Family Structure With Schizophrenia Genesis**

The results showed no influence of their family structure issues with the incidence of schizophrenia (p value = 0.942).

This is in line with research Jamni[17] that there is no influence between family structure issues that are not good with the incidence of schizophrenia. Structure troubled family can be caused by several things as a split in the family, divorce of parents, adoption, death of a parent is one of the risk factors for the development of children, he said not only the separation itself but a long period of strife and the

number of disharmony that eventually led to disorders in children. The need for kinship in the community so that a child is still getting love from another family. In line with Erlina[18] showed that if the family structure is not good, that parting with parents (p value 0.34) and the presence of family conflict (p value 0,732).

This is because the structure of the troubled family still acceptable because of kinship in the community is still very tight, so that someone can still get love from another family. And each person has different capabilities in mengahadpi problem. If the family structure bermasaah, but other family members remain strong and protect each other there would be no problem. Because the family is needed is a sense of security and affection.

4. **Influence Between Family Parenting With Schizophrenia Genesis**

The results showed no effect between their family parenting with the incidence of schizophrenia with the results of the bivariate analysis, namely p value = 0.004 and OR 14.705 (95% CI; 2.311 to 93.570). While the results of the multivariate analysis showed that p value = 0.000 and OR = 12.338 (95% CI; 3.888 to 39.511), which means practically the respondents who have had the possibility of pathogenic parenting 12.3 times more likely to suffer from schizophrenia in comparison with respondents pattern foster non-pathogenic.

Pathogenic parenting is parenting that is not healthy, triggering the child shows deviant behavior. Several criteria pathogenic parenting, including protecting children excessively because coddle, protect children excessively (authoritarian), the discipline is too harsh, and so on.[19] Other studies that support is Novitasari[20] of pathogenic parenting tends to put pressure on the child and is closely related to psychiatric disorders and disorders of the interaction of one Reactive Attachment Disorder (RAD).

This is in line with research Blue[21] which showed a significant relationship between parenting parents with mental disorders incidence of schizophrenia with OR of 8.6. In line with the research Ferbriani[22] which states that there is influence between family parenting with the mental health of a person. And also in line with Erlina[18] showed that family parenting pathogenic effect terhdap incidence of schizophrenia with OR 4.533 (95% CI; 1.253 to 9.951).

It supports research Sanubari[23] which shows that good parenting is not significantly affect a person's emotions and behavior. In childhood parenting is a means to learn the values, norms, attitudes and ways of behaving that are typical of the community in which the child resides. Parenting itself comes up with a different way. In a different way of parenting will produce basic personality types different.[24]

Parenting is not appropriate or pathogenic is unhealthy parenting sparking children's show deviant behavior. There are several criteria for pathogenic parenting, such as protecting children in berebihan, rejection, harsh discipline teralu, parents excessive ambition and so on. As a result, children are easily distressed and trigger an imbalance of dopamine, which is the cause of schizophrenia. Poor parenting will result in low self-esteem. As a result, when adult children prefer to enter into the fantasy world than confront problems that burden.

5. **Influence of Tension Due to Economic Factors with Schizophrenia Genesis**

The results showed no effect between their parenting with the incidence of schizophrenia with the results of the bivariate analysis, namely p value = 0.043 and OR 5.908 (95% CI; 1.060 to 32.935). While the results of the multivariate analysis showed that p value = 0.001 and OR 5.824 (95% CI; 1.966 to 17.256). That is practically the respondents who have economic tensions have 6 times greater

likelihood to suffer from schizophrenia compared with respondents who do not have economic tensions.

This is in line with research Wahyudi[25] which shows the relationship between economic factors with the incidence of schizophrenia with OR = 3.657 (95% CI; 1.220 to 10.962). In line with the research Prihananto[26] which indicates a low level of economic risk factors sbesar 5.3 times the incidence of schizophrenia. And also in line with the research Saputri[27] stating the economic problems is one of the stressors of schizophrenia.

In accordance with the theory of Hawari[10], socio-economic conditions are not fulfilled can make a person depressed so that when a person's mental resilience can not endure it would be a risk for someone to emerge schizophrenia.

In modern society needs is increasing and competition is increasing and more stringent to improve the economic results of modern technology. Spur people to work harder in order to have it. The number of people who want to work larger than needed so that unemployment rises, so too urbanization increases, resulting into low wage. Factors of low salaries, poor housing, rest and gather with family is very limited and so is partly the result of abnormal development of personality. Quoted from Bappenas finance.com according to 2018 figures the poverty line in Indonesia reached Rp 401 220 per capita per month, meaning that at least one person has an income of around 400 thousand to make ends meet. While in the field conditions the average household income per month is one million, with the average number of family members is 4. So many of the respondents still said to be lacking in terms of income per capita.

It is then triggered spark people vulnerable and happening events that cause mental disorders. Someone will tend to feel less and think hard to find a way for the economic needs for themselves and their families can be fulfilled. The burden of thinking will lead to changes in the chemical (neurotransmitter) in the brain that cause schizophrenia.

6. Dominant Factors That Influence Schizophrenia Genesis

The results of this study menunnjukkan dominant factor affecting the incidence skiozfrenia in Campurdarat PHC is a factor family parenting. It is known from the results of the multivariate analysis test conducted on three variables: trauma, family parenting, and tensions due to economic factors. To factor family parenting had a p-value of 0.000 and OR = 12.338 (95% CI; 3.888 to 39.511).

This is in line with several studies conducted specifically to discuss family parenting, because of the impact of parenting is hit directly at kejiawaan disorder patients. As performed by Sanubari[23] which shows the relationship between parenting bermaknan with psychiatric disorders. Suryadi[28] said that demonstrates the application of good parenting and consistent can be uoaya preventive for disorders of schizophrenia.

Family parenting in the way that was first felt by a person in his life. Good parenting or nonpathogenic will give a good impact also for the development of one's psyche, whereas the pathogenic parenting will have a negative effect and create an atmosphere of pressure for someone. Personality and attitudes formed from parenting applied by the family or parents. Thus, the pattern of ash sngat ancestry is important to note because it will have a direct impact and affect a person's psychological long-term future.

CONCLUSIONS

Based on research findings conducted Campurdarat PHC can conclude there are factors that influence the incidence of schizophrenia is factor trauma, parenting, and tensions due to economic factors. While for the most dominant factor is the factor of family parenting. So families need to improve parenting applied.

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