

Predictive Stressors of Schizophrenic Patients' Family

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Abstract: *Family stress is a type of response from a family living with schizophrenic patients, perceived as challenges and threats. Schizophrenia impacts not only the sufferers but also their family and community around them. Patient factors and family factors may become stress predictor of schizophrenic patients' families. Around 90% of schizophrenic patients living with their families will affect the family's socio- economic condition. Family stress is perceived as a threat because it may decline the quality of caring, while family stress as a challenge is perceived as whether it guarantees the stability of schizophrenic patients' condition. This study aimed to predict a stress model of schizophrenic patients' families in Ponorogo.*

The population was family with schizophrenic patients who undergo outpatient care in primary healthcare centers for mental health in Ponorogo. This study was cross-sectional, using a simple random sampling to select 30 respondents as the sample. The independent variable included stigma, family role, and adherence to taking drugs. Data were collected through questionnaires that were modified and tested for validity and reliability. Data analysis was done by using SMART PLS to identify a stress model of schizophrenic patients' families in Ponorogo.

Results show that family stress model involves stigma and adherence to drugs, but the family role does not show a significant value. The coefficient value of stigma on family stress is at 0.278, meaning that one higher point of stigma influences family stress at 0.278. Meanwhile, the coefficient value of adherence to drugs is 0.573, indicating that one higher point may incline family stress at 0.573. Further research may be done to identify a stress model of schizophrenic patients' families by scrutinizing the environment factor and health worker factor. Thus, it may lead to a more complex stress model.

Key words: *family stress, schizophrenia, stigma, adherence to drugs, family roles.*

I. INTRODUCTION

Schizophrenic patients who are relapsed give burdens for themselves, their caregivers, and society (Suzuki et al., 2014). Caregivers face memorable experiences since they deal with chronic diseases which have significant disability and need caregivers for help (Bolden & MN, 2008). However, the problems are that caregivers are not ready yet to serve schizophrenic patients (Murphy, Christian, Caplin, & Young, 2007; National Alliance for Caregiving, 2006). Even they cannot hold their roles on themselves, causing them exhausted (Center on an Aging Society, 2005). Symptoms of diseases are various which have a different burden to caregivers who feel depressed, anxious, and exhausted (Bolden & MN, 2008). The preliminary interview with SN Nurse for mental health in December 2018 showed that families rarely accompanied patients for the medication (non-adherence to medication) because they were stressed about the progress of patients' health. Stressed family tends not to support patients optimally.

An increase in the prevalence of mental illness will raise the number of caregivers at home (Hwang et al., 2011). Caregivers' skills in giving care to patients depend on the health status of the caregivers (Sadak et al., 2017). Nevertheless, caregivers often ignore their physical and mental health but are aware of patients' conditions instead (Fonareva & Oken, 2014). Chronic stress has been identified as a risk factor for caregiver's health status (Fonareva & Oken, 2014). Thus, some interventions are required to improve patients' condition and caregivers' quality of life (NAPA, 2016). Living with schizophrenic patients, caregivers will wholeheartedly take care of their spouses, parents, and beloved ones who suffer from schizophrenia (Sautter et al., 2015). Therefore, nurses view that the presence of caregivers at home in every medication that patients undergo is essential (Sautter et al., 2015).

Nearly 43.5 million Americans required caregivers for 19 hours per week (National Alliance for Caregiving, 2009). About 1% population of the United Kingdom were diagnosed with schizophrenia (Gupta, Isherwood, Jones, & Van Impe, 2015). Meanwhile, in Iran, about 7 million Iranians suffered from mental illness (Von Kardorff, Soltaninejad, Kamali, & Eslami Shahrbabaki, 2016). The prevalence of severe mental illness in Indonesia occurred to 1-2 people out of 1.000 Indonesian population or 1.7 per mile (Risikesdas, 2013a). To be more specific, the East Java Province has 1.4% of its population suffering from mental illness (Risikesdas, 2013a). Paringan Sub-District, Ponorogo in 2013 was identified to have 67 schizophrenia sufferers out of 5980 total population (Mashudi, Widiyahseno, & Priyoto, 2016). In Dukuh Mirah Sub-District, out of 750 population, 29 schizophrenia people could be identified in 2017 (data from Sampung Primary Healthcare Centers in 2017). The preliminary interview with nurses in Sampung Primary Healthcare Centers, only 3 schizophrenia people out of 29 regularly checked their health status. The preliminary identification of medication regularity in Dukuh Mirah Sub-District may show how patients' family in Ponorogo treat schizophrenic patients. Based on these data, there are more and more schizophrenic patients who do not get proper care from primary healthcare centers, resulting in recurrence. The recurrent disease not only affect patients, but also become a burden for their family (Von Kardorff et al., 2016). If this case occurs repetitively, family members might be in conflict. Mental illness does not cause deaths, while it might cause patients unproductive and challenging for family and society (Afifah, 2013). Mental illness tremendously affects society in terms of a large amount of funding, wasted productivity, and problems against law, such as physical harassment and oppression.

Moreover, consuming antipsychotic drugs without exercise will cause metabolic effects, such as obesity, Diabetes Mellitus, and hypertension (Cuerda, Velasco, Merchán-Naranjo, García-Peris, & Arango, 2014).

Schizophrenia occurs because of related susceptibility and stress. When susceptibility increases, but stress decreases, or vice versa, patients will be at risk of recurrence. Rational psychopharmacologic therapy does not always guarantee patients' recovery. Whereas, nonpharmacologic therapy without pharmacologic one will not be effective too. By that, nurses are supposed to combine pharmacologic and non-pharmacologic therapy. This combination may reduce susceptibility and stress, thus prevent the recurrence of schizophrenia. Schizophrenic patients, who consume antipsychotic drugs, need food and activity control program from nurses (National Institute of Health and Clinical Excellence, 2014).

Family support contributes to schizophrenic patients who undergo outpatient care at home. study shows that family support can minimize the number of recurrence and rehospitalization (Ross M.G.Norman, Ashok K.Mallab, Rahu , Manchandaa, Raj Harricharana, Jatinder Takhara, 2005) and get associated with an increase in mortality rate and medication (Stowkowy, Colijn, & Addington, 2013). Caregivers are the ones who quickly notice changes and identify the indicators of recurrence and crisis (Jackson & McGorry, 2009). Caregivers' response to patients' condition influences the disease status (Cechnicki, Bielańska, Hanuszkiewicz, & Daren, 2013). Caregivers have a huge burden of caring for schizophrenic patients and inadaptible coping mechanisms (Kuipers E, 2006).

The family stress model is a way to improve the family capacity to take care of schizophrenic patients. Family support for people with mental illness will give them proper mediation and home. Financial support, knowledge and psycho-social aids are required by those families with schizophrenic patients (Von Kardorff et al., 2016). Psychoeducation for a family not only declines

the burden of caregivers but also affects positively their behavior as a caregiver and reduces the ratio of recurrence as well as a dose of drugs (Ercolie R. Bossema, Cynthia A. J. de Haar, Willemijn Westerhuis . F. Beenackers, MSc, Bernadette C. E. M. Blom, Melanie C. M. Appels, 2011). Patients as a part of the closest member with family need family support.

II. METHOD

This study involved family members living with schizophrenic patients who undergo outpatient care in Primary Healthcare Center for Mental Illness in Ponorogo. This study was cross-sectional, using simple random sampling to select 30 respondents. The independent variables are stigma, family role, and adherence to drugs. By disseminating questionnaires, this study collected data on which validity and reliability were tested. The data were then analyzed with SMART PLS to find out the stress model of schizophrenic patients' families in Ponor go.

III. RESULTS

Outer Model

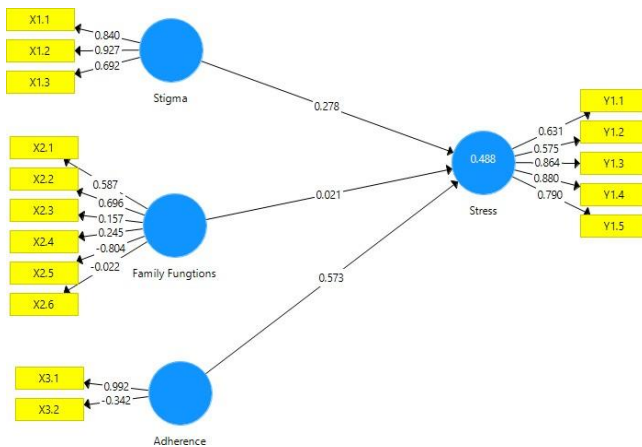


Figure 1. Coefficient Value of Family Stress Model

Figure 1 illustrates that the coefficient value of stigma towards stress was at 0.278, meaning 1 higher point of stigma can increase the value of stress at 0.278. Meanwhile, family role has a coefficient level of 0.021, meaning one higher point of the family role will increase family stress of 0.021. The coefficient value of adherence to drugs shows 0.573, meaning one more increased point of adherence will improve stress at 0.573.

The more severe the stigma experienced by the family, the more extreme the patient's behaviour, aggressive and withdrawn and the heavier the economic burden on the family's responsibility so that the impact on family health decreases. Javanese cultural values that pay attention to "*bibit, bebet, bobot*" provide a special effect for family members in getting a partner (Mashudi, S, Yusuf, Subarniati, 2020).

Inner Model

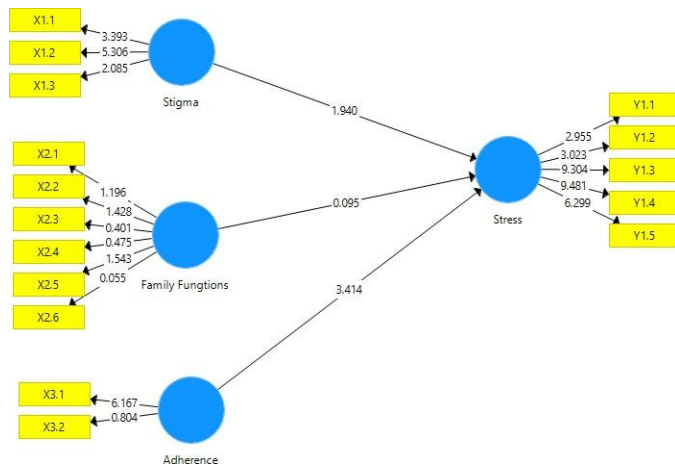


Figure 2. T-Statistic Value of Family Stress Model

Table 1. Relationship among Variables based on T-Statistic Value

riable	Statistic Value	tes ($\alpha=0.07$)
igma → Stress	1.940	there is an effect
amily Role → Stress	0.095	there is no effect
herence → Stress	3.414	there is an effect

Based on the model test, stigma and adherence to drugs affect stress, while family role does not.

DISCUSSION

Effect of Stigma on Family Role

Figure 5.1 shows the coefficient value of stigma is 0.278 and makes stress increase per one point at 0.278. T-statistic value of stigma at 1.940 means there is an effect on family stress, thus the hypothesis is accepted.

Besides stigma, stressors are formed from economic and interpersonal relationships (Mashudi. S, Yusuf, Subarniati, 2020). This is in accordance with the theory of caregiving and stress process (Pearlin, Mullan, Semple, & Skaff, 1990), that economic problems, interpersonal relationships and stigma are configurations of primary and secondary stressors that are interrelated and often appear in caregivers in the long-term care of family members who experience health problems.

Research aimed at determining stress predictors in schizophrenic families of ethnic majority backgrounds in Malaysia (Malay, Indian, and Chinese) shows that community rejection as a form of community stigma affects family stress. (Ong, Ibrahim, & Wahab, 2016). The results of research on various factors affecting the stress of schizophrenic family stress that female caregivers are more stressed than male caregivers (Mitsonis et al., 2012). Treating schizophrenics provides an experience of increasing stress (Mitsonis et al., 2012). Families need to understand that Schizophrenia is a disease that can be inherited. The risk of developing Schizophrenia according to (Sadock, 2007), if one parent suffers from Schizophrenia, even though the child is separated from the parent from birth, the risk of schizophrenia is 40%, monosigote twins 47%, while twins dizygote 12%. Schizophrenia will be reduced by 60-80% (Harrison, 2015), 64% to the offspring (Lichtenstein, Yip, Björk, & Pawitan, 2009). Therefore, understanding and responsibility are needed to find potential candidates based on quality, the Javanese term "*bibit, bebet, bobot*". Understanding of the quality of prospective companions based on "*bibit, bebet, bobot*", is expected to prevent the emergence of a generation that has schizophrenia. The concepts of *bibit* (heredity), *bebet* (wealth), and *bobot* (knowledge) determine a person's quality to be called *priyayi* (Untoro, 2017). *Bibit* refer to genealogy, *bebet* refers to family, relatives, and friends, and *bobot* refers to the loyalty of God, personality, lifestyle, and educational support of each partner (Rohmanu, 2016). Javanese cultural values that influence the decision-making stage of partner selection in addition to paying attention to the *weton* factor, home direction, the order of children in the family, and parental consent are *bibit, bebet* and *bobot* (Destiani, 2017). According to researchers *weton* criteria, direction of the house, and the order of children in the family is now experiencing a shift in values. Stigma is the most difficult stressor to bring down, giving the name "*Kampung G*" by the Ponorogo government a bad stigma to the people of the region. Local government participation is needed to give a better name for areas with mental disorders. Based on theoretical and empirical studies explained by the researchers above, it can be concluded that stressors affect the stress of schizophrenic families.

Family stress may occur because of stigma. The higher the stigma is, the more severe family stress is. Family stress can be seen when family members psych themselves up, feel nervous and angry, have reactive and impatient behavior. Reactive behavior contributes the most to family stress. Family stress occurs because of stigma which can be in the forms of stereotype, discrimination, and social withdrawal behavior. Discrimination is the most dominant factor in stigma. If that occurs, a high level of stigma greatly affects stress (Hernandez, Morgan, & Parshall, 2016). Since it becomes the main stressor for schizophrenic patients' families (Nicolas Rusch, Patrick W, Abigail Wassel, Patrick Michaels, Manfred Olszewski, Sandra Wilkinis, 2009).

Effect of Family Role on Family Stress

The coefficient value of family role on stress is at 0.021, indicating one more increased point of family stress will increase family stress of 0.021. The T-statistic value of family role on stress was at 0.095 which means there is no effect of family roles on family stress. Thus, the hypothesis is accepted.

Family stress is formed from treat and challenge indicators (Mashudi, Yusuf, Subarniati, 2020). This is in accordance with the theory of Stress, Appraisal, and Coping Lazarus and Folkman (1976), that family stress assessments are measured based on evaluations of treats, harms, and challenges. Treath means anticipation of the family before and after the danger caused by schizophrenia, Harm means the loss caused by schizophrenia, Challenge means the challenge of overcoming threats that can be overcome.

The family is stressful because of stressor, which continuously affects the level of stress based on their intensity. Family roles become a problem solution, ways of communication, roles, affection, and general functions. A stressor influences stress (Lazarus

R, 1984), but family roles as a predicted stressor does not influence family stress. Therefore, the hypothesis of this study is not accepted. Stress is a dynamic situation. While human interact with their surroundings, they can keep their balance, progress, and behavior which involve an exchange of energy and information between the surroundings and the individual to control a stressor (King, 1981).

Effect of Adherence to Drugs on Family Stress

Adherence to drugs shows a coefficient value of 0.573. It indicates that one more increased point of adherence to drugs can increase family stress of 0.573. The T-statistic value of adherence to drugs on stress is at 3.414. This value means that there is an effect of adherence to drugs on family stress. In other words, the hypothesis is accepted. Schizophrenic recurs because patients do not adhere to taking drugs. As a result, they may be hospitalized, and the family have more burden and turn out to be stressed (Chapman & Horne, 2013). Taking care of schizophrenic patients may result in increased stress (Mitsonis et al., 2012). Emotional reappraisal facilitates to reduces stress (Rabia Zonash, 2019). Selain stigma stresor yang dihadapi oleh keluarga dapat berasal dari perilaku ekstrim, menarik diri dan agresif, dan ekonomi. Keluarga merasa khawatir terhadap pandangan masyarakat pada penderita yang mengalami skizofrenia, Keluarga merasa khawatir terhadap perilaku penderita yang ekstrim, agresif, atau menarik diri, serta keluarga merasa khawatir terhadap pendapatan yang semakin tidak menentu semenjak penderita mengalami gangguan jiwa. Stres yang dialami individu disebabkan oleh stresor yang berasal dari lingkungan dan individu (S.Lazarus & Folkman, 1984). Persepsi pengasuh tentang kondisi keluarga dipengaruhi oleh stres, yang muncul pada stres keluarga karena stresor untuk merawat orang dengan skizofrenia, terutama perilaku agresif penderita skizofrenia (Byba M. Suhita, Hari Basuki, 2017).

IV. CONCLUSION

Based on the hypothesis and data analysis, it concludes that the family stress model consists of two important stressors, including stigma and adherence to drugs. Stigma and adherence to drugs affect the level of stress experienced by schizophrenic patients' families. To solve this problem, nurses need to provide psychoeducation for schizophrenic patients' families to decline the level of stress.

Conflict of Interest

There is not conflict of interest.

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