

The Relationship between Family Burden and Coping Strategies in the Caregiver of Patient with Schizophrenia in Community

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Abstract--- Schizophrenia is severe mental disorder which placed considerable burden on the caregivers. Family experienced a lot of physical, emotional, and financial distress due to a patient abnormal behaviour. Family caregiver schizophrenia patients face a variety of challenges that have a significant impact on mental health and physical health. The complexity faced by family caregiver requires skill in overcoming the burden experienced or also known as coping strategy. Individuals who more often use problem-focused coping more able to deal with stress situations compared with the use of emotion-focused coping that improve the quality of life. By understanding the relationship between caregivers burden and coping strategies of the caregiver family, will have a positive impact on the clinical outcome of schizophrenic patients. Therefore, it becomes important to examine the relationship between caregiver burden and coping strategies in the caregiver family of schizophrenic patients. Objective To know the relationship between family burden and coping strategy among family caregiver of patient with schizophrenia in community. This was an observational analytic study (non-experimental) with cross-sectional design. The subject of this study was 100 family caregiver of patients with schizophrenia in the community Special Region of Magelang District Central Java. Caregiver Burden was assessed by using Zarit Burden Interview (ZBI) and Coping strategies were assessed with the Indonesian version of the Family Coping Questionnaire (FCQ) instrument which was previously tested for validity and reliability by the researchers.. Statistical analysis was performed with Pearson correlation test. The significance level of the statistical test was defined at $p < 0,05$. The results of this study shows that the majority of participant are female and having caring more than 5 year. The study showed that 20% of the family caregivers reported having a severe level of burden, and the majority (44%) reported having moderate level of burden and 36 % reported having mild level of burden. The bivariate analysis showed a significant relationship between family burden and family coping ($r = 0.0951$, $p = 0.006$). There is a significant correlation between family burden with coping strategy in family caregiver of schizophrenia patient at community Special Region of Magelang, Central Java.

Keywords--- Caregiver Burden, Coping Strategy, Family Caregiver, Schizophrenia.

I. INTRODUCTION

Schizophrenia is a clinical syndrome that is mostly accompanied by distinctive hallucinations and delirium, through cognitive, emotional, behavioural and other functional disorders and progresses in time mostly with relapses (Ataa & Doğan, 2018). Schizophrenia is severe mental disorder which causes considerable burden on the family

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caregiver (DeTore et al., 2018). Caregivers' responsibility for caring for mentally ill people has increased in the last three decades, mainly due to the deinstitutionalization of mental health care to community based psychiatric services. Therefore, Family members play a significant role in providing care and support for relatives who are suffering schizophrenia. The burden includes multiple responsibilities such as financial costs, physical care of the patient and compromises on the personal freedom and leisure activities, and has been reported to affect the course of illness (Caqueo-Urizar et al., 2016). Family experienced a lot of physical, emotional, and financial distress due to a patient abnormal behaviour (Fitryasari et al., 2018). Family caregiver schizophrenia patients face a variety of challenges that have a significant impact on mental health and physical health (Mora-Castañeda et al., 2018). It could have resulted in higher levels of stress and family conflicts, further exacerbating this condition. It was reported that families who care for a member with schizophrenia have to deal with a high level of burden and distress (Bademli et al., 2017).

The complexity faced by family caregiver requires skill in overcoming the burden experienced or also known as coping strategy (Rahmani et al., 2019). Lazarus and Folkman define 'coping' as a process that address show the individual responds and acts both when experiencing stress and when the level of exposure to stress increases (Lazarus RS; Folkman S, 1985). According to their theory, coping strategies can be classified as emotion-focused vs. problem-focused. Emotion-focused coping involves effortful strategies that a person utilizes to minimize the negative emotional outcomes of stress. Problem-focused coping is aimed at resolving the stressful situation directly using problem-solving or removing the source of stress. Additionally, individuals can react to stressful situations using adaptive or maladaptive coping strategies. Individuals who more often use problem-focused coping more able to deal with stress situations compared with the use of emotion-focused coping that improve the quality of life (Magliano et al., 2000). By understanding the relationship between caregivers burden and coping strategies of the caregiver family, will have a positive impact on the clinical outcome of schizophrenic patients. Therefore, it becomes important to examine the relationship between caregiver burden and coping strategies in the family of schizophrenic patients.

This study aimed to assess the relationship between the family caregiver burden and coping strategies among family caregivers of patient schizophrenia in the community.

II. RESEARCH METHOD

Design of the Study

This was an observational analytic study (non-experimental) with cross sectional design. The subject of this study was 100 family caregiver of patients with schizophrenia in the community Special Region of Magelang Distric Central Java.

Sample Size

The sample size was determined as 100 family caregiver by the sample size formula. Other parameters were as follows : confidence interval of 95%, power of 80%. A purposive sampling method was used for recruitment of participant as caregivers of schizophrenia patient for the following inclusion criteria : family as *caregiver* yang

written informed consent was obtained. Caregiver lives with a patient. Caregiver can read and write and taking care patient with schizophrenia more than 1 year.

Measurement

The data were collected using the Zarit Burden Interview (ZBI) and the Family Coping Questionnaire (FCQ). Additionally a family caregivers' demographic and patients characteristic was to gather data about age, gender, level of education, marital status, employment status, relationship with the patients, duration of caregiving. Patients characteristic included : gender, age, level of education, duration of illness, having physical illness, obedience to take medicine, side effect of treatment, the substance abuse, having relapse.

The Zarit Burden Interview (ZBI) is a popular caregiver self- report measure with 22 items asking family caregivers questions about physical health, psychological well-being, financial status and interpersonal relationships that cause them stress and strain. The cut offs points for the ZBI were as follows: 0-20 (little or no burden), 21-40 (mild to moderate burden), 41-60 (moderate to severe burden), and 61-88 (severe burden).

Family Coping Questionnaire (FCQ) is a 34-item, 11-factor (information, positive communication, patient's social involvement, dan talking with friends, coercion, avoidance, resignation, collusion, maintenance of social interest, alcohol-drugs, dan spiritual help is used and self-administered questionnaire to measure family coping skill.

Ethical Consideration

This survey was approved by Medical and Health Research ethics Committee (MHREC) Faculty of Medicine, Public Health and Nursing, the University Gadjah Mada – Dr Sarjito General Hospital Yogyakarta. (MHREC No: KE/FK/016/EC/2020). The participants were assured that their engagement was voluntary, and that anonymity, privacy, and confidentiality of the data were guaranteed. Furthermore, they were informed about the purpose and the method of the study before signing a written informed consent. The questionnaires were distributed to eligible participants at the public health center, and respondents were asked to complete and return them in the same time.

Data Analysis

Data were entered into SPSS for analysis. The Kolmogorov-Smirnov test was used to examine the distribution of the quantitative variables. The distribution of the total scores of the ZBI and FCQ were normal. The Pearson correlation coefficient was used to evaluate the association between the scores of family caregiver burden and family coping strategies. Statistical significance for all tests was set at $P < 0.05$.

III. RESULT

Demographic Characteristic of Caregivers

In this study, 100 family caregivers of patients with schizophrenia in the community, were studied. The majority of age of the caregivers was more than 35 years. It was noted that 56% were female, 45% studied in the university and 79% were married. Of these caregivers, 38% were parents. Duration of caregiving in 60.89% of caregivers was more than 5 years. The majority of patients' age was more than 35 years. The majority duration of illness was more than 35 years and having more relapse (61%). (Table 1 and 2).

Table 1: Demographic for Caregivers Schizophrenia as Participants (n=100)

<i>Characteristic</i>	<i>Category</i>	<i>n (%)</i>
Age	≤35 years old	26 (26%)
	>35 years old	74(74%)
Gender	Male	44 (44%)
	Female	56 (56%)
Education status	No formal education	1 (1%)
	Elementary	13 (13%)
	Secondary	5 (5%)
	High school	36 (36%)
	University	45 (45%)
Marital status	Married	79 (79%)
	Unmarried	15 (15%)
	Divorced	6 (6%)
Employment	Unemployed	6 (6%)
	Civil employer	27 (27%)
	Military/police force	3 (3%)
	Trader	32 (32%)
	Farmer	20 (20%)
	Laborer	9 (9%)
	Others	3 (3%)
Patient's relationship status	Parents	38 (38%)
	Partners	33 (33%)
	Siblings	13 (13%)
	Child	16 (16%)
Duration of caregiving	2-5 years	41 (41%)
	>5 years	59 (59%)

Demographic Characteristic of Patients

Table 2: Demographic for Patients who was Cared by Caregiver Schizophrenia as Participants (n=100)

<i>Patient's characteristic</i>	<i>Category</i>	<i>f (%)</i>
Age	≤35 years old	28 (28%)
	>35 years old	72(72%)
Gender	Male	48 (48%)
	Female	52(52%)
Education status	Elementary	7 (7%)
	Secondary	6 (6%)
	High school	67 (67%)
	University	20 (20%)
Duration of illness	2-5 years	37(37%)
	>5 years	63(63%)
Physical illness	Yes	3(3%)
	No	97 (97%)
Medicine's obedience	Yes	66 (66%)
	No	34 (34%)
Drug's side effect	Yes	5 (5%)
	No	95 (95%)
Narcotics consuming	Yes	1 (1%)
	No	99 (99%)
Relapse	Yes	61 (61%)
	No	39 (39%)

The Relationship between Caregiver Burden and Family Coping

The study showed that 20% of the family caregivers reported a severe level of burden, and the majority (44%) reported moderate level of burden and 36 % reported mild level of burden.

In addition, the results showed that family coping collusion 12.03 ± 3.77 and majority family by asking spiritual help 3.23 ± 0.75 . Furthermore, the study showed that there was relationship between the family burden with the family coping by $r 0.951$ and $p 0.006$.

It can be shown in table 3.

Table 3: The score of each subscale of family coping strategies

<i>No</i>	<i>scale</i>	<i>Mean ±SD</i>
1.	Collusion	12.03 ± 3.77
2.	Patient's social involvement	8.52 ± 1.67
3.	Resignation	8.55 ± 1.62
4.	Avoidance	3.75 ± 1.08
5.	Coercion	14.99 ± 2.68
6.	Maintenance of social interests	14.58 ± 2.96
7.	Positive communication	18.29 ± 2.63
8.	Information	5.20 ± 1.01
9.	Alcohol-drugs	1.06 ± 0.31
10	Talking with friends	2.32 ± 0.63
11.	Spiritual help	3.23 ± 0.75

IV. DISCUSSION

This study showed 44 % of respondent reported having moderate burden. This finding was supported by previous research that showed that The majority of research studies show that caregiver of people with schizophrenia suffer from high level burden (Mora-Castañeda et al., 2018). The results showed various types of family burdens, they are confusion about the illness, emotional, physical, financial, time and social burden. The findings of this study are consistent with some previous investigations of families caring for chronic and schizophrenic patients which are subjected to both subjective and objective burdens, and can be physical, psychological or emotional, social and financial (Fitryasari et al., 2018). Family members feel a burden during caring because schizophrenia is a chronic disease and takes a long time for treatment (Cw Lam et al., 2013). In this study shows that the majority patients on this study have suffered more than 5 years, so can cause more burden for their family. Duration of care that prevents the caregiver to fulfill the responsibilities to own self might be challenging. In our study, burden on the unemployed cases was found to be more than that of the employed ones. The fact that the employed caregivers can find other fields of satisfaction in the professional life whereas the unemployed caregivers has to spend more time with the patient and take more responsibilities about caring the patient could be an explanation of this situation. In Indonesian Culture if the member of family have sick, so the family will take responsibility to take care.

Studies found caregivers' burden score was negatively correlated with their household income. Families with lower socioeconomic status experienced higher level of burden (Caqueo-Urizar & Gutiérrez-Maldonado, 2006) (Ozlu et al., 2015). Burden of illness positively associated with patient impairment in occupational and social

functioning, and negatively associated with education level. This study showed that the majority participant have high education, so it can cause the caregiver asking any help from mental health professional to minimize burden. Beside that In Indonesian culture, family have strong bonding attachment. Every family has a close relationship, taking care and being responsible for each other. The extended family is still the usual life style for most Indonesian families (Wiguna et al., 2015).The supportive system of extended family work in emotional expression. It means that the family will look after and care for their problems and can reduce the burden as whole.

Problem-focused coping is aimed at resolving the stressful situation directly using problem-solving or removing the source of stress. Additionally, individuals can react to stressful situations using adaptive or maladaptive coping strategies. Individuals who more often use problem-focused coping more able to deal with stress situations compared with the use of emotion-focused coping that improve the quality of life.

Majority of this study used the spiritual help to cope the problems. A sound spiritual, religious, or personal belief system positively affects active and adaptive coping skills in patients with schizophrenia during remission, thus helping the individual to cope with illness related stressors (Das et al., 2018)..

This study reported that there is a statistically significant relationship between the caregivers' total burden score and total coping ($r= 0.951$ and $p= 0.006$). This study supported by some studies that family burden, especially tension is related to the use of maladaptive coping strategies, poor quality of life and higher level of psychological morbidity in caregivers (Kate et al., 2013). (Magliano et al., 2000) And other study revealed by understanding the relationship between caregivers burden and coping strategies of the caregiver family, will have a positive impact on the clinical outcome of schizophrenic patients (Magliano et al., 2000).

V. CONCLUSION

The results of this study indicated that the majority of family caregivers have moderate burden and some demographic factors of family caregivers are the strongest predictors of coping in family caregivers of patients with schizophrenia. So the recommendation are :

- a. Family as caregiver must be involved in giving nursing care in both hospital and community setting.
- b. Nurses and health care professionals should consider family caregivers' needs especially in caring with schizophrenia in community due to deinstitutionalization.
- c. Nurses and other healthcare professionals could do psychoeducation sessions in the hospital and also in the community that is hold by nurses in the public health center.

ACKNOWLEDGEMENT

The author wish to appreciate all family caregivers whose contributions enables the production of this article in te journal and some doctors and nurse in Public Health Center who help researcher.

FUNDING

This study is funded by the researcher

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

REFERENCES

- [1] Ataa, E. E., & Doğan, S. (2018). The Effect of a Brief Cognitive Behavioural Stress Management Programme on Mental Status, Coping.pdf. *Archives of Psychiatric Nursing*, 32, 112–119.
- [2] Bademli, K., Lök, N., & Kılıc, A. K. (2017). Relationship Between Caregiving Burden and Anger Level in Primary Caregivers of Individuals With Chronic Mental Illness. *Archives of Psychiatric Nursing*, 31(3), 263–268.
- [3] Caqueo-Úrizar, A., & Gutiérrez-Maldonado, J. (2006). Burden of care in families of patients with schizophrenia. *Quality of Life Research*, 15(4), 719–724.
- [4] Caqueo-Úrizar, A., Urzúa, A., Jamett, P. R., & Irrazaval, M. (2016). Objective and subjective burden in relatives of patients with schizophrenia and its influence on care relationships in Chile. *Psychiatry Research*, 237, 361–365.
- [5] Cw Lam, P., Ng, P., & Tori, C. (2013). Burdens and psychological health of family caregivers of people with schizophrenia in two Chinese metropolitan cities: Hong Kong and Guangzhou. *Community Mental Health Journal*, 49(6), 841–846.
- [6] Das, S., Punnoose, V. P., Doval, N., & Nair, V. Y. (2018). Spirituality, religiousness and coping in patients with schizophrenia: A cross sectional study in a tertiary care hospital. *Psychiatry Research*, 265(April), 238–243.
- [7] DeTore, N. R., Ventura, J., Subotnik, K. L., & Nuechterlein, K. H. (2018). Family burden predicts functional outcome in the early course of schizophrenia beyond psychiatric symptoms and baseline functioning. *Schizophrenia Research*, 202, 328–332.
- [8] Fitriyari, R., Yusuf, A., Nursalam, Tristiana, R. D., & Nihayati, H. E. (2018). Family members' perspective of family Resilience's risk factors in taking care of schizophrenia patients. *International Journal of Nursing Sciences*, 5(3), 255–261.
- [9] Kate, N., Grover, S., Kulhara, P., & Nehra, R. (2013). Relationship of caregiver burden with coping strategies, social support, psychological morbidity, and quality of life in the caregivers of schizophrenia. *Asian Journal of Psychiatry*, 6(5), 380–388.
- [10] Lazarus RS; Folkman S. (1985). *Stress, Appraisal, Coping*. Springer.
- [11] Magliano, L., Fadden, G., Economou, M., Held, T., Xavier, M., Guarneri, M., Malangone, C., Marasco, C., & Maj, M. (2000). Family burden and coping strategies in schizophrenia: 1-Year follow-up data from the BIOMED I study. *Social Psychiatry and Psychiatric Epidemiology*, 35(3), 109–115.
- [12] Mora-Castañeda, B., Márquez-González, M., Fernández-Liria, A., de la Espriella, R., Torres, N., & Borrero, Á. A. (2018). Clinical and demographic variables associated with coping and the burden of caregivers of schizophrenia patients. *Revista Colombiana de Psiquiatría (English Ed.)*, 47(1), 13–20.
- [13] Ozlu, A., Yildiz, M., & Aker, T. (2015). Burden and burden-related features in caregivers of schizophrenia patients. *Dusunen Adam*, 28(2), 147–153.
- [14] Rahmani, F., Ranjbar, F., Hosseinzadeh, M., Razavi, S. S., Dickens, G. L., & Vahidi, M. (2019). Coping strategies of family caregivers of patients with schizophrenia in Iran: A cross-sectional survey. *International Journal of Nursing Sciences*, 6(2), 148–153.
- [15] Wiguna, T., Ismail, R. I., Noorhana, S. R., Kaligis, F., Aji, A. N., & Belfer, M. L. (2015). Family responses to a child with schizophrenia: An Indonesian experience. *Asian Journal of Psychiatry*, 18, 66–69.