

The correlation between Caregiving Burden and Family Interaction Pattern of Patient with Mental Disorders at Home

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ABSTRACT

Families, as caregiver's patients with Mental Disorders, experience the burden of physical, emotional, and financial disturbances due to the patient's abnormal behavior, social dysfunction, and inability to support themselves. This study aimed to analyze the correlation between the caregiving burden and family of patients with mental disorders interaction patterns. The study design was cross-sectional. It conducted a total of 123 family caregivers of patients with mental disorders who visited the mental health polyclinic at the Menur General Hospital in Surabaya. The collecting sample used a consistent sampling technique. The data was obtained from the Zarit Caregiver Burden Questionnaire and the interaction pattern questionnaire. Data analyzed using the Spearman Rh correlation test. The results showed that there was a significant correlation between the caregiving burden and interaction patterns ($p=0.032$) at a significance value <0.05 . The correlation coefficient was $r=-0.194$, which meant a low relationship with a negative direction in order that the higher burden of care is, the lower interaction patterns experienced by family caregivers of patients with mental disorders feel. There is a low and significant correlation between caregiver burden and the family caregiver interaction pattern of Patients with mental disorders in a negative direction. It means the higher the caregiver burden felt by the caregiver, the lower the interaction pattern.

Keywords: caregiver, caregiving burden, interaction patterns, patient with mental disorders

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INTRODUCTION

The interaction patterns of the patient with mental disorders' families have a problem of nothing understanding. They do not try to provide opportunities for patients with mental disorders to interact with the environment or family in the house. When treating patients with mental disorders, the family has a burden of taking care of patients with mental disorders, which is an effect on disrupting the interaction between families and people with mental disorders, resulting in disruption on starting interactions with family (Ambarsari & Sari, 2012). Patients with mental disorders often cannot fulfill the expected role in the family and community; they have difficulties and need constant care and support from their families. Since most Patients with mental disorders live with their families who have the responsibility to provide care, it tends to have difficulty interacting with family members with mental disorders due to the many tasks (Bademli & Duman, 2014; Yunita, Yusuf, Nihayati, & Hilfida, 2020).

World Health Organization in the Republic of Indonesia Ministry of Health, 2016 stated that in the world there were 450 million people with the prevalence of mental disorders in 2016 showing that globally an estimated 35 million people were depressed, 60 million people suffered from the bipolar affective disorder, 21 million people suffered schizophrenia disorders and 47.5 million people in the world experience dementia (Kemenkes RI, 2016). Meanwhile, the prevalence of schizophrenia in Indonesia reached 10 per thousand people of all ages. Bali and Yogyakarta are the regions with the highest prevalence of schizophrenia, which is 10% (Kemenkes RI, 2018). (Palizgir, Bakhtiari, &

Esteghamati 2013) mentioned that there is a significant correlation between interaction patterns and patients with mental disorders. There is a negative correlation between conformity and depression orientation caused by patients with mental disorders who are afraid to communicate with the environment and family, who often let them not start social interactions.

The data and description of the problem above were reasons to analyze further how the burden of family care in treating patients with mental disorders and their interaction patterns at home. Researchers used the Theory of Roy, which stated that Roy's model focuses on human adaptation. The concepts of human nursing, health, and the environment are interrelated with adaptation as the central concept. Patients with mental disorders families experience environmental stimuli by now and then. In the end, the patient with mental disorders family responded, and adaptation ensued. This response can be either an adaptive response or an effective response. Adaptive responses enhance integrity in caring for the patient with mental disorders, namely to persist in caring for the patient with mental disorders and to provide opportunities for Patients with mental disorders to interact with the family. Ineffective responses fail to achieve these adaptation goals or even threaten the achievement of goals due to the higher burden of caring for patients with mental disorders, which makes patients with mental disorders families and patients less interacting. Nursing has a unique purpose of helping someone's adaptation efforts by managing their environment. The result is achieving someone's optimal level of well-being (Tomey & Alligood, 2006).

Based on the description above, the researcher will further analyze the information factor related to the correlation between caregiving burden and patient with mental disorders family interaction patterns at home, which treated before at Menur Outpatient Installation Surabaya.

MATERIALS AND METHODS

This study was a descriptive analysis with a cross-sectional approach, which meant that a type of study emphasized measuring time or observing independent and dependent variable data only once without follow up. This study population was comprised of families of patients with mental disorders who visited the Mental Health Polyclinic Menur General Hospital.

The inclusion criteria were families who had patients with mental disorders at the Mental Health Polyclinic of the mental hospital Menur Surabaya, by aged 18-60 years, lives with patients > 6 months. Exclusion criteria in this study were: respondents could not read and write. The sample size was determined using consecutively sampling a population of 180 people, a confidence level of 95%, an error rate of 5%, and 123 samples. The dependent variable was the patient with mental disorders family interaction pattern as measured by the Zarit Burden Interview (ZBI 22) interaction pattern questionnaire; the independent variable was the care load measured by the Zarit Burden Interview questionnaire (ZBI 22). The Spearman Correlation Test analyzed data. This study has passed the ethical test by the Health Research Ethics Committee (KEPK) Menur Mental Hospital of East Java Province with an ethics certificate number No 070/768/305/2019 on 18 November 2019.

RESULTS

This study was carried out at the Mental Health Polyclinic of the mental hospital. Surabaya Menur in October-November 2019.

Table 1. Demographic characteristics of the caregiver at the mental health polyclinic at the Surabaya Menur Hospital in October 2019

Caregiver Characteristics	Parameter	n	%
Gender	Male	66	53.7
	Female	57	46.3
Marriage Status	Married	79	87.8
	Single	38	9.5
	Divorce	6	2.7
Age	18-25 Years	23	18.7
	26-35 Years	37	30.1
	36-59 Years	63	51.2
Education	Primary	11	9.5
	Junior	9	27.9
	Senior	58	52.3
	Higher	45	10.4
Occupation	Self-employee	28	22.8
	Employee	79	64.2
	Unemployed	16	13.0
Salary in a month	< 1 million	18	14.6
	1 million - 2 million	23	18.7
	2 million - 3	41	33.3

Relationship with Patient	million		
	> 3 million	41	33.3
	Parent	40	32.5
	Sibling	49	39.8
	Child	17	13.8
	Wife/husband	5	4.1
	Wife/husband	5	4.1
	Sibling in law	10	8.1
Duration of taking care	Uncle	2	1.6
	0 - 6 hours	24	19.5
	7-12 hours	73	59.3
Another caregiver	>12 hours	26	21.1
	Yes	83	67.5
Relationship with another caregiver	No	40	32.5
	Father	11	8.9
	Mother	22	17.9
	Brother	42	34.1
	Sister	31	25.2
	None	17	13.8
Total		123	100

The majority of male respondents were 46.3%, and female respondents were 53.7%. Most respondents were married as many as 87.8% (79 people), while those who were not married were 9.5% (38 people), and others were divorce was 2.7% (6 people). Respondents were mostly in the age range 36-59 years (51.2%), some others in the age range 26-35 years, and 36-59 years. Based on the level of education, the majority of respondents were high school graduates totaling 52.3%, graduates of 10.4% (45 people), and others who graduated from junior high school and elementary school graduates. The family caregiver mostly worked as a self-employed was 64.2% (79 people), and others worked as employees and unemployed. Caregiver income per month was mostly between 2 million - 3 million IDR, which reached 33.3%. Others have income >3 million IDR as many as 33.3% (41 people), and more than 1 million IDR per month was 14.6% (18 people), while 1 million - 2 million IDR per month was 18.7% (23 people) (Table 1).

Table 2. Demographic characteristics of patient with mental disorders

Characteristics	Parameter	n	%
Age	<18 Years	15	12.2
	18-25 Years	41	33.3
	26-35 Years	34	27.6
	36-60 Years	28	22.8
	>60 Years	5	4.1
Marriage Status	Married	35	28.5
	Single	86	69.9
	Divorce	2	1.6
Disorders duration	6 months -1 Years	23	18.7
	1 -5 Years	66	53.7
	5-10 Years	13	10.6
	10-15 Years	7	5.7
	>15 Years	14	11.4
Symptoms	Talking alone	33	26.8
	talk non-interconnected	40	32.5

	Angry	38	30.9
	Leaving home	2	1.6
	Hurting others	4	3.3
	Hurting self	6	4.9
Psychiatric therapies (medicine)	Routine	123	100
	Un-routine	0	0
Financial	BPJS (National Health Insurance for low income)	45	36.6
	BPJS (National Health Insurance)	72	58.5
	Employee Insurance	1	0.8
	BPJS National Health Insurance for a civil servant)	1	0.8
	General	4	3.3
Therapy history	Psychiatry Hospital	122	99.2
	General MD	1	0.8
	Paramedics	0	0
Caregiving burden	None- low	32	26.0
	Middle - moderate	75	61.0
	Moderate - Severe	15	12.2
	Very Severe	1	0.8
Interaction Pattern	Less	4	3.3
	Sufficient	8	6.5
	Good	111	90.2
	Total	123	100

The majority of patient with mental disorders was in the early adult age range (18-25 years) amounted to 33.3%. Patients with mental disorders have the most unmarried status, 69.9% (86 people), and have suffered illness for 1-5 years at 53.7%. Based on the most prominent symptoms in patient with mental disorders was talk non-interconnected by 32.5% (40 people). Most of the respondents, as caregivers of Patients with mental disorders, showed care burden in the mild-moderate category. The objective burden had six questions in the mild-moderate category, namely questions 2, 5, 6, 7, 8, 9, and subjective burden had three questions in the mild-moderate category, namely questions 16, 17, 18. The total caregiving burden in the mild-moderate category was 61.0% (75 people), while those categorized as very severe caregiving were 0.8% (Table 2).

Some respondents, as caregivers of Patients with mental disorders, have interaction patterns in both categories where aspects of daily routine activities have three questions in both categories, namely questions 1, 4, and 5. Aspects of social relations do not have questions in either category, and environmental management aspects have 1 question in the good category, namely question 2. Based on the three aspects above, the pattern of Patients with mental disorders family interaction at home is in the good category where 90.2%, while those included in the category of less than 3.3%.

Table 3. Correlation between caregiving burden and patterns of interaction of Patients with mental disorders families at home in the mental health polyclinic at the Menur Hospital in Surabaya in October 2019.

Caregiving burden	Interaction Pattern			
	Less	Sufficient	Good	Total
None - Middle	1 (0.8%)	1 (0.8%)	30 (24.4%)	32 (26.0%)
Middle - Moderate	0 (0%)	5 (4.1%)	70 (56.9%)	75 (61.0%)
Moderate - severe	3 (2.4%)	2 (1.6%)	10 (8.1%)	15 (12.2%)
Very severe	0 (0%)	0 (0%)	1 (0.8%)	1 (0.8%)
Spearman Rho $r = -0.194$ $p = 0.032$				

Based on statistical analysis using the Spearman rho correlation test with a significance level <0.05 , the results obtained $p=0.032$. A p-value of less than 0.05 indicates that H1 is accepted, and H0 is rejected. There is a correlation between caregiving burdens and Patients with mental disorders, family interaction patterns at home. The correlation coefficient (r)= -0.194 , which means it shows a low relationship. The value of r is negative, which means that the heavier the burden of care is felt by the family, the lower the level of interaction patterns of Patients with mental disorders families at Home (Table 3).

DISCUSSION

The caregiving burden felt by caregivers in the psychiatric hospital of Menur polyclinic that the majority of study respondents experienced a mild-moderate category of care load where the objective load had six questions in the mild-moderate category, namely questions 2, 5, 6, 7, 8, 9. Families of Patient with mental disorders do not have enough time for themselves and is disrupted in conducting personal activities and reduced social relations in the community. This is consistent with the results of research by (Handi, Husada, & Gultom 2018), which stated that the burden of care in caring for patients with mental disorders could cause caregivers to experience anxiety, depression, loneliness, isolation, fear and easily disturbed in their activities. The subjective load has three questions in the mild-moderate category, namely questions 16, 17, 18, which patients with mental disorders families pay less attention to themselves when caring for patients with mental disorders at home and expect others to treat patients. Objective questions lead to the dependence of Patients with mental disorders on caregivers, and subjective questions lead to expect others to treat patients with mental disorders. According to (Handi et al. 2019), caregivers play an essential role in Patients with mental disorders conditions, although this sometimes causes emotional stress for the caregivers.

The interaction patterns experienced by family caregivers of patients with mental disorders that the majority have interaction patterns in both categories where aspects of daily routine activities have two questions in both categories, namely questions 1 and 4. Aspects of social relations do not have questions in either category, and environmental management

aspects have 1 question in the excellent category as many as question 2. Good condition is when Patients with mental disorders involved in activities at home and also conducts their activities independently. Research data also showed that none of them were in poor interaction patterns, and only a few family caregivers showed poor interaction patterns. The same thing was also found in the study (Bademli & Duman 2014) that caregivers of families of patients with mental disorders experience good interactions. According to (Zuardin, Razak, Maidin, Tamar, & Yani 2019) and (Amelia, Wahyuni, Ariga Felicia, & Preveena 2018), family support in the physical and moral form will make the subject feel cared for and loved, in order that interactions between caregivers and patient with mental disorders need to be maintained in order to stay good.

The correlation between caregiving burden and interaction patterns shows that there is a significant relationship $p = 0.032$ ($\alpha < 0.05$) with a strong negative relationship ($r = -0.194$) between caregiving burden and family caregiver interaction patterns of patient with mental disorders, which means that the higher caregiver burden experienced by caregivers has an impact on the lower level of caregiver interaction patterns of families of patient with mental disorders. The caregiving burden experienced by caregivers in the form of boredom in care, monotonous work that caused a lack of motivation, and individual capacity in care (Zulkifli, Ali, Pahlevi, & Taba, 2019). Working families also experience many conflicts and workloads at work (Amiruddin, 2019). They are thus reducing interactions with Patients with mental disorders. According to (Nenobais, Jatimi, & Jufriyanto 2019), another caregiver burden felt by families with patient with mental disorders is the emotional burden felt by almost all family members such as sadness and shame due to uncontrolled patient behavior, fear that the patient can be harmful to the environment and worrying about the patient's future (Yunita *et al.*, 2020). The caregiving burden experienced by Patients with mental disorders families is that Patients with mental disorders families do not pay attention to themselves but still establish good interactions with their Patients with mental disorders. The high burden of care and not resolved can reduce the level of attention to Patients with mental disorders, causing the interaction between caregivers and patients with mental disorders to decrease in order that families are expected to be able to adapt in Patients with mental disorders caregiving. According to (Suhita, Chatarina, Basuki, & Yusuf 2017), the adaptation of caregivers in caring for patients with mental disorders is influenced by family characteristics, namely community resources, self-efficacy, caregiver coping efforts, self-esteem and family caregiver's perception of the conditions experienced at this time. As a result, good coping and collaboration between family members and caregivers are needed in the care of patients with mental disorders rule of good coping and cooperation between family members and caregivers in the care of patients with mental disorders.

CONCLUSION

The caregiving burden experienced by the family caregiver of patients with mental disorders showed in the mild-moderate category that describes the feeling of

subjective and objective burdens of caregivers. The interaction patterns felt by caregivers of families of patients with mental disorders were in the category of good interaction patterns showing good conditions in daily routine activities, social relations, and environmental management. This means the higher the caregiving burden felt by the caregiver is, the lower the pattern of interaction using Roy's theory will. The adaptation of patient with mental families tend to be good, and patient with mental are able to carry out activities independently. Based on the results, it is deemed necessary to increase mental care services to families as caregivers of patient with mental needing to research the analysis of factors that affect patient with mental family interaction patterns; research on the correlation between patterns of interaction of family caregiver and the level of recurrence of a patient with mental.

CONFLICT OF INTEREST

None

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