



Original Research

THE RELATIONSHIP DISEASE MANAGEMENT AND PARENTING STRESS ON FAMILIES' ABILITY TO CARE FOR SCHIZOPHRENIA

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ABSTRACT

Introduction: The inability of families to care for schizophrenia is caused by minimal knowledge and not having sufficient training or formal support. Families are frustrated and make it a burden to care for schizophrenia. The research aimed to determine the relationship between disease management and Parenting stress on the family's ability to care for schizophrenia.

Method: Quantitative design with a cross-sectional approach was used. The sample size was 135 families caring for schizophrenia using a purposive sampling technique. The independent variable was disease management and parenting stress, and the dependent variable was the family's ability to care for schizophrenia. The disease management questionnaire was based on the concept of family empowerment by Zhou and Budi Anna Keliat. The parenting stress management questionnaire was developed from the neurobiology of stress concept from Murison, and the family ability questionnaire to care for schizophrenia uses the parenting Tasks in Caring for an Adult with Mental Illness Scale (CTiCAMIS). Data analysis used the Chi-square test with a level of 95%.

Results: There was a relationship between disease management (p-value = 0.002 (<0.05)) and parenting stress (p-value = 0.000 (<0.05)) with the family's ability to care for schizophrenia patients.

Conclusions: Disease management ability and parenting stress are closely related to the family's ability to care for schizophrenia. Efforts from mental health workers to provide education, training, and assistance are needed through family empowerment programs development to increase the family ability.

Keyword: Caring ability; Disease management; Parenting; Schizophrenia; Stress management

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1. INTRODUCTION

Schizophrenia patients require a long period of treatment and recovery, which depletes supportive abilities and becomes a burden on the family (Herdman, Kamitsuru & Takao Lopes, 2021), such as difficulty providing for necessities, frustration when Schizophrenia refuses treatment and food (Ntsayagae, Poggenpoel & Myburgh, 2019). Families also face difficult situations in getting along and

satisfaction with life together (Campos, Cardoso & Marques-Teixeira, 2019; Bai *et al.*, 2020). The main factor that causes families not to care for Schizophrenia optimally is that information about Schizophrenia care for families is still minimal (Bai *et al.* 2020; Mohr *et al.* 2018) and families do not have sufficient formal training or support (Ashcroft *et al.* 2018)

There are 21 million cases of schizophrenia worldwide, with a prevalence of 0.24 cases per 1000 population (Benjamin James Sadock 2017). The prevalence of schizophrenia in Indonesia increased from 1.3 cases to 7 cases per 1000 population in 2018 (Ministry of Health of the Republic of Indonesia 2018b). Meanwhile, in Central Java, from 2.3% (2013) to 9% (2018) (Ministry of Health of the Republic of Indonesia 2018a) and in Semarang City, it is quite very high, namely 0.79 per 1000 population in 2018 (Agency of Health Research and Development 2018). Data rekam medik RSJD Dr. Amino Gondohutomo Provinsi Jawa in 2022, there will be 890 Schizophrenics undergoing treatment with a 39% re-admission rate within 0 days. This is due to many factors, and one of them is the inability of families to care for Schizophrenia (Kandar 2017).

The family's ability to care for schizophrenia is poor at 46.1% (Patricia, Rahayuningrum & Nofia, 2019) and the resilience of families to care for schizophrenia is also still low at 48.2% (Iklima 2021). Most families experience fatigue and suffering (Upasen & Saengpanya, 2022). Families have poor knowledge about psychosis and are a source of high expression of emotions in the living environment ($P < 0.05$) and 97% (Ahmad et al. 2017). The impact of the family's inability to treat schizophrenia includes the family experiences of chronic stress (Fitryasari et al. 2018), sleep problems, higher levels of depression, and a lower quality of life (Zhou et al. 2020). high Parenting burden can manifest high emotional expression toward patients and increase the risk of relapse (Chien et al. 2020).

Factors that influence the family's ability to care for schizophrenia, such as education, knowledge, Parenting history, and socio-economics, which influence the management of schizophrenia. Apart from that, internal vulnerabilities, resources, and family emotional expressions also influence the stress management of family Parenting for schizophrenia patients (Ahmad et al. 2017; Zhou et al. 2020). The family's ability to cope with the burden and stress experienced by the family when caring for schizophrenia will affect the way the family manages the patient's treatment. Disease management skills include knowledge of family health tasks, skills to overcome treatment problems, communication with patients, and awareness of advocacy and treatment (Budi Anna Keliat 2020). The disease management provided by the family will increase caring knowledge and adaptive coping skills in dealing with the stress of caring for schizophrenia (Fitryasari et al. 2018). Meanwhile, Parenting stress management includes cognitive behavioral techniques, physical exercise (sport), relaxation, and social and spiritual support (Murison 2016). The ability to manage illness and parenting stress is predicted to directly influence the family's ability to care for schizophrenia (Indah Iswanti et al. 2023), so this research aims to analyze in more detail the relationship between illness

management and parenting stress on the family's ability to care for schizophrenia.

2. MATERIALS AND METHODS

2.1 Design

Quantitative descriptive research using a cross-sectional approach.

2.2 Population and sampling

A population of 1,711 families caring for schizophrenia patients in the city of Semarang was taken from 135 respondents using a purposive sampling technique with inclusion criteria, such as Nuclear family (father/mother/child) aged 20-60 years who live in the same house with schizophrenia, providing schizophrenia care while at home every day, have experience treating schizophrenia for at least one year, have family members with schizophrenia who have undergone treatment more than three times and re-controlled at RSJ Dr. Amino Gondohutomo, Central Java Province. Meanwhile, exclusion criteria include families who cannot read and write and those who experience mental disorders or other chronic illnesses.

2.3 Variable

The research's independent variables are disease management and family Parenting stress management, while the family's ability to care for schizophrenia patients is the dependent variable.

2.4 Instrument

There are three questionnaires in this study: The disease management questionnaire was developed according to the concept of (Zhou et al. 20 20) and (Budi Anna Keliat 2020), including knowledge of family health tasks, skills to overcome treatment problems, communication skills with schizophrenia patients, awareness advocacy and treatment. The questionnaire consists of 12 statements on a 4-point Likert scale (1=never to 4=Always) with a score of 12-48. The results of the validity test on r count 0.539 - 0.740 > r table (0.361) with Cronbach alpha 0.830. The Parenting stress management questionnaire was developed according to the concept (Murison 2016), including cognitive behavioral techniques, physical exercise (sport), relaxation, and social and spiritual support, consisting of 5 statements on a 4-point Likert scale (1=never to 4=Always) with score 5-20. The results of the validity test on r count 0.614 - 0.856 > r table (0.361) with Cronbach alpha 0.882.

2.5 Procedure

Data was collected directly by distributing questionnaires to families willing to become respondents by filling out informed consent at the outpatient clinic of RSJ Dr. Amino Gondohutomo, Central Java Province. Data was collected for 13 days from September 20 – October 3, 2022. The researcher explained the purpose and benefits of the study and willing respondents were asked to sign informed consent. There were some families who refused to become respondents due to the limited time the family had and rushed home to work. Of the 145

families met during the data collection process, 135 accepted to be respondents. Each day the researcher takes 5 hours and on average gets 8 - 10 family respondents who take schizophrenia control to the outpatient clinic. where each respondent fills out the questionnaire for 15-20 minutes accompanied by the researcher.

2.6 Ethical Clearance

This research has passed ethical review from KEPK Universitas Airlangga number 2637-KEPK and the Ethics Committee of RSJ Dr. Amino Gondohutomo Central Java Province Number 420/12375.

3 RESULTS

Characteristics of families who care for schizophrenic patients at the Dr. RSJD Outpatient Polyclinic. Amino Gondohutomo, Central Java Province, is predominantly male (50.4%), middle adulthood (51.1%), high school/vocational education (38.5%), and private employees (37.8%). Families have income < minimum wage in Semarang City (65.9%), 95.6% use BPJS to treat schizophrenia patients, and are the patient's siblings (39.3%). Below is a description of each variable and an analysis of the relationship between the independent and dependent research.

Table 1 Description of Disease Management (n=135)

Indicator	Category	Frequency (f)	Percentage (%)
Knowledge of family health tasks	Poor	3	2.2
	Medium	32	23.7
	Good	100	74.1
	Total	135	100.0
Maintenance problem solving skills	Poor	12	8.9
	Medium	52	38,5
	Good	71	52.6
	Total	135	100.0
Communication skills with patients	Poor	19	14.1
	Medium	74	54.8
	Good	42	31.1
	Total	135	100.0
Advocacy awareness	Poor	6	4.4
	Medium	32	23.7
	Good	97	71.9
	Total	135	100.0
Treatment	Poor	2	1.5
	Medium	31	2.0
	Good	102	75.6
	Total	135	100.0

Table 1 explains the ability of family disease management to care for schizophrenia patients at the Dr. RSJD Outpatient Polyclinic. Amino Gondohutomo, Central Java Province, is mainly in the good category for knowledge of family health tasks (74.1%), skills

for dealing with health problems (52.6%), advocacy awareness (71.9%), and treatment (75.6%). Meanwhile, most communication skills with patients (54.8%) were still medium category.

Table 2 Description of Parenting Stress Management (n=135)

Indicator	Category	Frequency (f)	Percentage (%)
Cognitive behavioral technique	Poor	7	5.2
	Medium	53	39.3
	Good	75	55.6
	Total	135	100.0
Physical exercise	Poor	16	11.9
	Medium	81	60.0
	Good	38	28.1
	Total	135	100.0
Relaxation	Poor	24	17.8
	Medium	72	53.3
	Good	39	28.9
	Total	135	100.0

Indicator	Category	Frequency (f)	Percentage (%)
Social support	Poor	13	9.6
	Medium	83	61.5
	Good	39	28.9
	Total	135	100.0
Spirituality	Poor	5	3.7
	Medium	27	20.0
	Good	103	76.3
	Total	135	100.0

Table 2 Explains the stress management abilities of families caring for schizophrenia at the Dr. RSJD Outpatients Polyclinic. Amino Gondohutomo, Central Java Province, is primarily good at using cognitive behavior techniques (55.6%) and spirituality

(76.3%). Meanwhile the use of physical exercise/sport (60.0%), Relaxation (53.3%), and social support (61.5%) were mostly still in the medium category.

Table 3 Description of the family's ability to care for schizophrenia patients (n=135)

Indicator	Category	Frequency (f)	Percentage (%)
Meeting ADL needs	Poor	48	35.6
	Medium	50	37.0
	Good	37	27.4
	Total	135	100.0
Helps social interaction	Poor	72	53.3
	Medium	47	34.8
	Good	16	11.9
	Total	135	100.0
Helps Productive skills	Poor	66	48.9
	Medium	38	28.1
	Good	31	23.0
	Total	135	100.0

Table 3 explains the family's ability to care for schizophrenic patients at the Dr. RSJD Outpatient Polyclinic. Amino Gondohutomo Central Java

Province is mainly able to meet ADL needs (37.0%) but still needs to improve in helping with social interaction (53.3%) and productive skills (48.9%).

Table 4 Analysis of the relationship between disease management and Parenting stress on the family's ability to care for schizophrenia patients (n=135)

Independent variable	Category	Family ability to care for schizophrenia				p-value
		Not enough	Enough	Good	Total	
		F	f	f	f	
Disease Management	Poor	19	9	1	29	0,002
	Medium	28	35	13	76	
	Good	6	14	10	30	
	Total	53	58	24	135	
Parenting stress management	Poor	20	11	3	34	0,000
	Medium	30	28	6	64	
	Good	3	19	15	37	
	Total	53	58	24	135	

Table 4 shows that the management of schizophrenia is adequate, primarily with the ability to care for schizophrenia patients still sufficient. While Parenting stress management is adequate primarily, the ability to care for schizophrenic patients is adequate. The results of statistical tests show that there is a relationship between disease management and Parenting stress with the family's ability to care

for schizophrenia patients with p-value = 0.002 (<0.05) and p-value = 0.000 (<0.05), respectively.

4 DISCUSSION

The family's ability to manage the illness of schizophrenia patients is mostly still in the adequate category based on knowledge of family health duties, awareness of advocacy and treatment, skills in dealing with health problems, and communication

skills with patients. This means that families are not optimal in caring for schizophrenia patients. The lack of formal care information, training, and support for families of schizophrenia patients can cause this. In addition, the characteristics of families who still have elementary education, are pre-elderly and have no income contribute to influencing the family's ability to manage schizophrenia. Families experience a scarcity of treatment information regarding schizophrenia, especially from mental health service providers (Mohr et al. 2018). Mental health service providers need to provide education on how families can manage schizophrenia well. Disease management skills are critical for families to improve their ability to care for schizophrenia patients, such as meeting ADL needs, helping with social interactions, and developing productive skills (Indah Iswanti et al. 2023). Family disease management skills that are still lacking, especially in family communication skills with schizophrenia and those that are good and need to be maintained, namely providing treatment to mental health services.

Most of the family's Parenting stress management is still in the adequate category based on cognitive behavioral techniques, physical exercise/exercise, relaxation, and social support. The family is unfamiliar with several stress management techniques, such as cognitive behavioral and relaxation techniques. Families who care for schizophrenia patients will face various stressors and make them a burden. This is supported by several research results that families experience difficulties in their role as caregivers, such as patient behavior that is unacceptable to the social environment, causing the family to be isolated, psychologically experiencing depression and anxiety, traumatic experiences in caring for patients, and lack of social resources. , uncertainty about recovery, and conflict in relationships between family members (Hahlweg and Baucom 2022). The family burden of caring for schizophrenia patients is the strongest predictor of family stress (Beta = 0.619) (Fitryasari et al. 2018). Families tend to use physical exercise/exercise techniques, hiking through gardening or walking, and utilize social support from family members and the surrounding community. Families with good mental health and psychological well-being will increase their strengths and find new resources to provide optimal care to schizophrenia patients (Iswanti, Nursalam, et al. 2023).. Where the average family has an adequate level of education, is mature and productive and is the biological mother of a schizophrenic patient.

The family's ability to care for schizophrenia is still in the sufficient category to meet ADL needs. However, most cannot help with social interactions and productive skills according to the patient's hobbies. Schizophrenia patients have withdrawal behavior (Budi Anna Keliat 2020) so it is quite difficult for the family to communicate with the

patient and bring the patient into social contact with the environment around him. The family's focused attention on patient care at home makes them less aware of the patient's preferred hobbies, so the family is less able to fulfill productive skills. Mental health nurses must educate and empower families to communicate with patients, and patients can start conversations when meeting others. The family's abilities are enhanced through training and education to help the patient's productive skills by providing tools and needs according to their hobbies.

There is a relationship between disease management and Parenting stress with the family's ability to care for schizophrenia patients. Families familiar with health problems, have good knowledge, communication skills, and awareness of patient advocacy and treatment, and can manage the stressors and burdens experienced when caring for patients will give the family enough resources to increase their ability to care for patients. The resources owned by the family are the most vital factor influencing the family's ability to care for schizophrenia patients (Iswanti, N. Nursalam, et al. 2023). This is reinforced by the theory that family resilience increases family capability by 13.4% through stress management by controlling burdens and stigma so that families can survive, grow more robust, and better care for schizophrenia patients (Fitryasari et al. 2021).

The role of mental health nurses in psychiatric hospitals and primary care is to increase the family's ability to manage illness and the stress of caring for schizophrenia through training and family empowerment programs by conducting home visits. Nurses also need to involve mental health cadres to encourage families to increase their knowledge of caring for schizophrenia patients, coping skills to overcome Parenting stress, and utilize mental health services available in their area. It is hoped that this will help families improve their ability to care for schizophrenic patients so that they receive appropriate care and treatment and are not neglected at home. The limitation of this study is that data collection is only limited to families who come to the outpatient clinic and cannot be done simultaneously at one time because it adjusts the routine control schedule of schizophrenia patients to the mental hospital.

5 CONCLUSION

Good disease management and adaptive Parenting stress management can improve the family's ability to care for schizophrenia patients. Mental health workers must provide education, training, and assistance through family empowerment programs involving mental health cadres in their area.

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