ISSN 1978-6743
E-ISSN 2477-3948
Jurnal Ilmiah Kesehatan
(Journal of Health Science)
Fakultas Keperawatan dan Kebidanan | Universitas Nahdlatul Ulama Surabaya

Exploring the Determinant Factors Affecting Families' Ability to Care for People with Schizophrenia

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ARTICLE INFORMATION

Received: December 18, 2024
Revised: January 15, 2025
Available online: February 2025

KEYWORDS

Ability, care, family, schizophrenia patients

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A B S T R A C T

Families often lack knowledge about schizophrenia care, which hinders their ability to provide adequate support. This study explores the factors affecting families' ability to care for people with schizophrenia. It was quantitative research using a cross-sectional approach method. There were 130 samples through the purposive sampling technique. The independent variables were knowledge, behavior, motivation, health service utilization, and social support. The dependent variable was families' ability to care for people with schizophrenia. The Authors had been tested and declared the instrument valid and reliable, with a Pearson correlation value of <0.5 and a Cronbach's alpha value of >0.6. Data analysis used a multiple logistic regression test with a confidence level of 95% (α=0.05). The results found that all independent variables, knowledge (p=0.014), behavior (p=0.042), motivation (p=0.031), health service utilization (p=0.029), and social support (p=0.017), showed a p<0.05. In addition, the largest OR (Exp B) was social support, 13.288. Thus, all independent variables significantly affect the families' ability to care for people with schizophrenia. Furthermore, the most dominant factor was social support. Good social support was 13 times more likely to improve families' ability to care for people with schizophrenia. In conclusion, there is a significant influence of knowledge, behavior, motivation, health services utilization, and social support on the families' ability to care for individuals with schizophrenia. In addition, the most dominant factor affecting families' ability to care for people with schizophrenia is social support.

INTRODUCTION

The level of dependence of individuals with schizophrenia on their families is relatively high, especially in fulfilling their needs. This issue is because they experience changes in their ability to think, communicate, feel, and behave appropriately (Tamizi *et al.*, 2020; Commey, Ninnoni and Ampofo, 2022). Individuals with schizophrenia have experienced a decrease in cognitive function since the onset of the disease (Rantala *et al.*, 2022). Thus, their families are responsible for fulfilling their needs (Asgari *et al.*, 2023; Sawab *et al.*, 2023). Lack of knowledge and skills among families of schizophrenic persons potentially leads to tricky situations and increases the family's physical, emotional, and financial burden (Punaglom *et al.*, 2022). The role of the family in the caring management of individuals with schizophrenia is not only in maintaining their long-term remission but also in their caring for physical and mental functions along with improving their quality of life and recovery (Mamnuah, 2021). The main focus of schizophrenia care is to maximize the quality of life and adaptive functioning and assist patients in achieving life goals in work, family, and personal relationships (Widiyawati *et al.*, 2020).

The World Health Organization (WHO) noted that the number of people with mental disorders, including schizophrenia, was estimated at 450 million worldwide (Babicki *et al.*, 2021). The prevalence of severe

https://doi.org/10.33086/jhs.v18i01.6843

mental illness in Indonesia was seven percent of the households, meaning seven families per 1000 households live with people with mental illness (Dumpratiwi, Cahyadi and Ardani, 2023). The families caring for individuals with schizophrenia in Indonesia experience significant challenges in building resilience (Lesmana and Wirawan, 2023). Schizophrenia affected approximately 0.45% of the adult population, leading to a large number of families' roles as schizophrenia caregivers (Nudhar *et al.*, 2023). The experiences of families of people with schizophrenia vary. Many of them face considerable stress due to the nature of the illness and the long-term commitment to treatment. Research showed that many families strive to maximize their ability to care for schizophrenic persons through counseling, training, and socialization of care, as well as involvement with activities from Public Health Centers or other health facilities (Agustini, Karimah and Sajogo, 2021). The efforts significantly improved their caregiving ability (Indah Iswanti *et al.*, 2023).

A study found that 61.3% of families showed high resilience in caring for schizophrenia people (Rindayati *et al.*, 2023). Resilience is crucial for managing stress and challenges. Training in emotional regulation and self-efficacy can help families cope better with the challenge of caregiving (Chase *et al.*, 2021). However, families often lack knowledge about schizophrenia care, which hinders their ability to provide adequate support (Sawab *et al.*, 2023). Thus, Providing comprehensive knowledge about schizophrenia care to families and explaining families' responsibilities to schizophrenic persons can empower and improve caregiving effectiveness (Issac *et al.*, 2022; Asgari *et al.*, 2023). A study indicated a significant correlation between the burden on families and their caregiving ability; a higher burden led to decreased caregiving ability (Ee *et al.*, 2020). Thus, addressing family burden through support and resources is critical to improving the quality of care (Upasen and Saengpanya, 2022). Prior research also showed that family-centered counseling significantly increased families' skills in caring for mentally disordered people, with 88.9% reporting good skills post-intervention (Sharif *et al.*, 2020).

Various factors, including resilience, intentions, access to information, and perceived caregiving burden, influence families' ability to care for individuals with schizophrenia (Rindayati *et al.*, 2023). Although many families face challenges in caring for patients with schizophrenia, targeted interventions and support systems can improve their ability and resilience, ultimately leading to better patient outcomes (Toledano-Toledano and Luna, 2020). Families should provide support, security, and affection for people with schizophrenia. Families can actively involve people with schizophrenia who enter remission status in various activities or jobs that are suitable for their abilities. Providing opportunities to socialize with the surrounding community also can support them in recovery (Chase *et al.*, 2021; Cahaya *et al.*, 2024). Thus, community-based mental health support in empowering families is crucial (Iswanti *et al.*, 2024). Recovery from schizophrenia will be possible if there is good behavior from the family to provide optimal care.

Previous research showed that family perceptions of their efforts still had not brought results or changes as expected. It resulted in family fatigue, so they could not utilize their existing potential. The family was in a helpless condition in caring for people with schizophrenia (Hsiao, Lu and Tsai, 2020; La Barbera and Ajzen, 2020). Strategies to build and optimize families' ability to care for people with schizophrenia on an ongoing basis are essential. This study explores the factors affecting families' ability to care for people with schizophrenia.

METHOD

This paper was quantitative research using a cross-sectional approach method. It was conducted in September 2024 at Menur Mental Hospital, East Java Province. The population was 173 families who cared for people with schizophrenia and carried out routine controls. There were 130 samples through the purposive sampling technique. Inclusion criteria include the closest family caring for schizophrenia patients, aged over 21 years, living with patients, and being able to communicate in Indonesian. The independent variables were knowledge, behavior, motivation, health service utilization, and social support. The dependent variable was families' ability to care for people with schizophrenia. The instruments were questionnaires modified by the authors. The Authors had been tested and declared the instrument valid and reliable, with a Pearson correlation value of <0.5 and a Cronbach's alpha value of >0.6. Data analysis used SPSS version 22. Descriptive analysis was done by evaluating median, standard deviation, minimum, and maximum values for each variable. The inferential analysis was a multiple logistic regression test with a confidence level of 95% (α=0.05). Determination of the most dominant variable affecting families' ability to care for people with schizophrenia was by evaluating the OR value contained in the Exp (B) value in the multiple logistic regression test of all variables with a significant value or a p<0.05. This study has received approval from the Research Ethics Committee of Menur Mental Hospital, East Java Province, with certificate number 0009.2/6813/102.8/2024.

RESULT

Table 1. shows that out of 130 respondents, 46 families of schizophrenia people are in the adult age range, 31-40 years (35.4%). In addition, 76 respondents are male (58.5%), 120 are Muslim (92.3%), 122 are Javanese (93.8%), and 63 are graduated from Junior High School (48.5%). Furthermore, 79 are entrepreneurs (60.8%), 86 have income more than the regional minimum wage (66.2%), and 40 schizophrenia people were fathers or mothers (34.4%).

https://doi.org/10.33086/jhs.v18i01.6843

Table 1. The characteristics of the respondents (n=130)

The characteristics of the respondents	Frequency (n)	Percentage (%)
Age		
Age 21-30 Years Old	26	20.0
Age 31-40 Years Old	46	35.4
Age 41-50 Years Old	33	25.4
Age 51-60 Years Old	18	13.8
> 61 Years Old	7	5.4
Sex		
Male	76	58,5
Female	54	41,5
Religion		
Islam	120	92.3
Other	10	7.7
Ethnic group		
Javanese	120	92.3
Madurese	10	7.7
Education		
Not going to school	2	1.5
Elementary School	28	21.5
Junior High School	63	48.5
Senior High School	32	24.6
University	5	3.8
Profession		
Unemployment	26	20.0
Civil Servant	5	3.8
Entrepreneur	79	60.8
Other	20	15.4
Income		
Less than the regional minimum wage	44	33.8
More than the regional minimum wage	86	66.2
Patient's status in the family		
Father/ Mother	40	30.8
Spouse	33	25.4
Child	26	20.0
Sibling	17	13.1
Other	14	10.7

Table. 2 indicates that 67 respondents have moderate knowledge (51.5%), 72 have moderate behavior (55.4%), 59 have moderate motivation (45.4%), 60 have moderate health service utilization (46.2%), and 66 have moderate social support (50.8%). In addition, 63 families have moderate ability to care for people with schizophrenia (48.5%). Multiple logistic regression analysis found that all independent variables, knowledge (p=0.014), behavior (p=0.042), motivation (p=0.031), health service utilization (0.029), and social support (0.017), showed a p<0.05. Thus, all independent variables significantly affected the families' ability to care for people with schizophrenia.

https://doi.org/10.33086/jhs.v18i01.6843

Table 2. The determinant factors affecting families' ability to care for people with schizophrenia (n=130)

Independent variables	Families' Ability to Care for People with Schizophrenia						Total		*p*
	Less		Moderate		Good				
	n	%	n	%	n	%	n	%	
Knowledge									
Less	6	4.6	9	6.9	5	3.8	20	15.4	
Moderate	9	6.9	26	20	32	24.6	67	51.5	0.014
Good	0	0	24	18.5	19	14.6	43	33.1	
Total	15	11.5	59	45.4	56	43.1	130	100	
Behavior									
Less	4	3.1	7	5.4	3	2.3	14	10.8	
Moderate	7	5.4	55	42.3	10	7.7	72	55.4	0.042
Good	0	0	21	16.2	23	17.6	44	33.8	
Total	11	8.5	83	63.8	36	27.6	130	100	
Motivation									
Less	18	13.8	24	18.5	9	6.9	51	39.2	
Moderate	9	6.9	28	21.5	22	16.9	59	45.4	0.031
Good	1	0.8	6	4.6	13	10	20	15.4	
Total	28	21.5	58	44.6	44	33.8	130	100	
Health Service Utilization									
Less	14	10.8	12	9.2	20	15.4	46	35.4	
Moderate	9	6.9	32	24.6	19	14.6	60	46.2	0.029
Good	0	0	8	6.2	16	12.3	24	18.5	
Total	23	17.7	52	40	55	42.3	130	100	
Social support									
Less	12	9.2	13	10	3	2.3	28	21.5	
Moderate	23	17.7	35	26.9	8	6.1	66	50.8	0.017
Good	4	3.1	15	11.5	17	13.1	36	27.7	
Total	39	30	63	48.5	28	21.5	130	100	

The multivariate analysis determines the most dominant factor. The dominant factor is the factor that has a $p<0.05$ and has the largest OR (Exp B). Table 3 exhibits that the largest OR (Exp B) is social support, 13.288. Thus, the most influencing factor affecting families' ability to care for people with schizophrenia was social support, with Exp B=13.288. Good social support was 13 times more likely to improve families' ability to care for people with schizophrenia.

Table 3. Multiple logistic regression test results

Independent variables	*p*	Exp (B)	95% C.I For Exp (B)		Description
			Lower	Upper	
Knowledge	0.014	11.603	2.318	113.089	Significant
Behavior	0.042	5.343	1.197	10.513	Significant
Motivation	0.031	9.892	1.513	82.475	Significant
Health Services	0.029	6.713	1.247	78.943	Significant
Social Support	0.017	13.288	2.693	175.755	Significant

DISCUSSION

The Influence of Knowledge on Families' Ability to Care for People with Schizophrenia

This study's results showed that family knowledge affected their ability to care for people with schizophrenia. Most of the family's knowledge in this study was moderate. Families contribute to the rapid recovery of people with mental disorders during the rehabilitation and treatment process, both medical and psychological (Hsiao, Lu and Tsai, 2020). Family knowledge influences the process and effectiveness of

https://doi.org/10.33086/jhs.v18i01.6843

healing schizophrenia patients. Mental illness concerns holistic issues regarding an individual's physical, psychological, social, and spiritual health (Campbell, 2021). Thus, clear concepts and understanding are crucial in understanding schizophrenia patients. A study showed that family knowledge affected the optimization of the recovery of schizophrenia patients (Hsiao, Lu and Tsai, 2020). It is in line with this research. Increasing information to the family will help patients increase self-strengthening, self-confidence, and positive coping and can also provide emotional support (Adams, Gringart and Strobel, 2022). Knowledge from health educational exposure and various sources will improve the family's ability to care and increase their positive coping skills (Issac *et al.*, 2022). The active role of all family members in seeking information related to the care of schizophrenia patients, decision-making, relapse prevention, and routine for schizophrenic people living everyday life is critical (Mamnuah, 2021). It is because one of the factors affecting the family's ability to care for schizophrenia patients is family knowledge.

The Influence of Behavior on Families' Ability to Care for People with Schizophrenia

This research showed that family behavior influenced the families' ability to care for people with schizophrenia. Most respondents had behavior at moderate levels. The family function in caring for patients with psychological problems is vital. Family members carry out roles and responsibilities for patients with health problems and care for them (Chase *et al.*, 2021). Families have an essential role for schizophrenia patients during the long-term rehabilitation process. They must assume many responsibilities that make them experience significant changes or complex personal burdens (Toledano-Toledano and Luna, 2020; Rindayati *et al.*, 2023). The negative consequence of this burden is stress. It can change the family's emotional state and behavior in caring for schizophrenic patients (Sharif *et al.*, 2020). Good family behavior will have an impact on excellent families' ability to care for people with schizophrenia. Family members will have compassion for sick family members due to personal relationships between family members. Previous research showed that good family behavior manifested in bringing family members with mental disorders to health services for treatment, meeting their daily needs, and encouraging them to socialize (Iseselo and Ambikile, 2020; Killaspy *et al.*, 2022). At the same time, a study indicated that less family behavior manifested in confined schizophrenic patients at home because the family was ashamed that their family had mental disorders (Subu *et al.*, 2023). Family should have a better understanding of what they should do to a family member with schizophrenia. It must also play a role and act actively as the primary support for patients. Thus, people with schizophrenia will improve their adjustment abilities and are no longer vulnerable to the influence of psychosocial stressors.

The Influence of Motivation on Families' Ability to Care for People with Schizophrenia

This paper found an effect of motivation on the family's ability to care for schizophrenia patients. Family motivation is one of the causes of the family's ability to care for and overcome relapses in schizophrenia patients. It is a factor that directs and energizes. It has biological, cognitive, and social aspects. Good

motivation from the family indicates that there is a desire to be able to care for schizophrenia patients at home, as well as to take patients to undergo regular treatment (Huang *et al.*, 2020; Jameel *et al.*, 2020). The treatment of schizophrenia patients must involve the participation of the family. The family's inability to care for schizophrenia patients will increase the relapse rate because schizophrenic patients are not regular in taking medication and do not carry out routine controls. The reasons for less family motivation are the family feeling bored taking the client to a health facility and giving medicine daily. The lack of encouragement or motivation from the family to the individuals with schizophrenia can impact drug withdrawal (Indah Iswanti *et al.*, 2023). In addition, the family still has less motivation and considers there is no problem if schizophrenia patients do not disturb the surrounding community. They tend to be apathetic and do not take good care of schizophrenic patients at home. Whereas untreated schizophrenia patients potentially have difficulty in health development. Thus, family motivation is a vital factor in the family's ability to care for schizophrenia patients, particularly giving daily medication (Ahmad *et al.*, 2024). Families should always guide and direct schizophrenic patients to take their medication correctly and regularly.

The Influence of Health Service Utilization on Families' Ability to Care for People with Schizophrenia

This investigation results showed that health services utilization affected the family's ability to care for individuals with schizophrenia. Health services are essential to improve the health development of schizophrenia patients (Koschorke *et al.*, 2021). Health services involve nursing care, availability of health services, access to health services, and health teams that support families to determine treatment success (Aass *et al.*, 2022). Previous studies explained several factors that affected healthcare utilization, including their health status, socio-demographic characteristics, and ability to access health services (Windarwati *et al.*, 2023). Therefore, understanding what facilitates the use of health services and what influences individuals to determine health services is critical. The health team should provide services to families and schizophrenia patients to help them have a better quality of life (Ye *et al.*, 2023). The health worker's role is to provide information and assistance to families receiving care from the hospital. In addition, they provide self-management support, counseling, problem-solving, and action planning for schizophrenia patients. Health services have had adequate infrastructure. Still, if the family has less health service utilization, they will have difficulty in caring for schizophrenic patients at home.

The Influence of Social Support on Families' Ability to Care for People with Schizophrenia

In this study, social support was the most dominant factor affecting the families' ability to care for individuals with schizophrenia. Social support comes from family, relatives, peer groups, and the community. It is the support that is essential for families in caring for schizophrenic patients at home (Punaglom *et al.*, 2022). It causes the family to feel less alone and remain resilient in caring for individuals

with schizophrenia (Rindayati *et al.*, 2023). The community also can contribute significantly to the family's comfort in living in the society (Upasen and Saengpanya, 2022). Some people are still unable to accept the existence of schizophrenia patients and have a negative stigma. The focus of some research and innovation needs to pay attention to this issue so that people can consider that schizophrenia patients are not scary people and have the right to live with the community (Ye *et al.*, 2023). The impact of stigma and discrimination on families of schizophrenia patients will result in families having poor emotional coping, resulting in families focusing more on stigma than on the recovery of schizophrenia patients (Babicki *et al.*, 2021). Thus, social support from family, relatives, peers, and the community can provide confidence and motivation to families in caring for individuals with schizophrenia.

CONCLUSION

There is a significant influence of knowledge, behavior, motivation, health services utilization, and social support on the families' ability to care for individuals with schizophrenia. In addition, the most dominant factor is social support. The higher the social support, the higher the families' ability to care for people with schizophrenia. It is because social support provides reinforcement, confidence, information, and motivation so that families can optimize the treatment of schizophrenia patients.

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