

Relationship of Burden with Characteristic Sociodemographic Caregiver in Schizophrenic patients

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Abstract

Caregiver of person with schizophrenia experience high levels of burden. For caregivers, burden negatively affects caregiver's physical, emotional and economic status. The objective of the present study is to make relationship of family caregiver burden with characteristic sociodemographic (age, gender, education level, employment, marital status, economic status and kinship status) caregiver in schizophrenic patients. A total of 118 caregivers of patients (34 men and 84 women) with schizophrenic attending the outpatient in pempropso mental health hospital, using a sociodemographic data collection sheet in the Zarit Burden Interview (ZBI). There are significant differences related age ($p = 0,032$), sex ($p = 0,005$), kinship status ($p = 0,028$) and economic status ($p = 0,038$) with family caregiver burden. Significant value $P < 0,05$. There are not significant difference related employment ($p = 0,565$), education ($p=0,211$) and marital status ($p= 0,766$) with family caregivers burden.

Keywords: burden, caregiver, schizophrenia

1. Introduction

Family caregiver is the most important person who cares for persons with schizophrenia.(Rafiyah et al,2011; Yusuf et al, 2009, Caque-Urizar et al, 2006 ; Chien et al, 2007; Ennis et al, 2013, Darwin et al, 2013), Approximately 60 to 85 % of the disabled or impaired people are cared by the family caregiver. Caregiver usually help patient in performing their daily activities such as bathing, eating, cooking,dressing, taking drug and checking up. (Rafiyah et al, 2011; Lim et al,2003; Srivastava ,2005; Nasr et al,2009; Sefasi et al, 2002; li et al, 2007) However when care is provided for longer time, particularly for patients with schizophrenia, family caregiver can experience burden that leads to negative consequences.(Mittelman, 2005; Bastrawaus M, 2013; Carra et al, 2012, Chadda et al, 2007; Ganguly et al, 2010; Sadock and Sadock,2007; Adeosun, 2013).

2. Subject and Methods

This study was approved by the Research Ethics Committee of Medical Faculty University of Sumatera Utara. This study was performed in Mental Hospital of Province of North Sumatera, on the regulation of Medical Faculty of University of North Sumatera, from November 2013-January 2014. The criteria inclusion for subject were age 18-60 years old, It has been caring the patient at least one year.We exclude the organic mental disorder and having the other psychiatric disorders. Written informed consent was obtained from all participants after giving a full explanation of the study protocol. Further examination of the caregiver will follow Zarit Burden Interview used to measure caregiver burden of care, then the caregiver also be seen whether there is a relationship between gender, age, education, marital status, employment status, economic status and the status of kinship with the burden of care caregiver.

2.1 Assessment and Rating

Zarit Burden Interview was developed to assess caregiver burden in relatives of patients with schizophrenia. It is a twenty two item instrument that includes the factors most frequently mentioned by caregivers as problem areas in providing care for schizophrenia patients. The instrument has a possible score of 0-88, depending on the caregiver's responses. Responses are rated from 0-4 based on the level of distress. The ZBI scores were converted into categorical responses in this study. Scores ranging from 0 to 1 were regarded as negative, while scores ranging from 2 to 4 were regarded as positive. Zarit Burden Interview had been translated in Indonesian (Rahmat et al,2009)

2.2 Statistical Analysis

Univariate analysis was performed to describe each variable and was described by frequency table. Bivariate analysis was performed to analyze whether there are association between family caregiver's burden with age, gender, education level, status marital, employment status, economic status, kinship status in schizophrenia. To assess the association we used Chi square test and statistical analysis was performed using SPSS software (version 18.0). The probability level of $p < 0,05$ and confidence interval 95% was considered to be statistically significant. The results are significant will then be analyzed using multivariate logistic regression analysis to determine the strength of the relationship.

3. Result

Sociodemographic characteristics of 118 participants are illustrated in Table 1.

Table 1. Sociodemographic characteristics of 118 participants

Variabel		n	%
Age	18-40	28	23,7
	41-60	90	76,3
Gender	male	34	28,8
	female	84	71,2
Education level	Primary school or below	72	61,0
	Secondary school or university	46	39,0
Marital Status	married	62	52,5
	unmarried	56	47,5
Economic Status	higher	45	38,1
	Lower	73	61,9
Employment Status	employment	47	39,8
	unemployment	71	60,2
Kinship Status	parents	83	70,3
	others	35	29,7

From table 1 there are characteristic sociodemographic caregiver of schizophrenic patients were mostly in 41-60 years old group were 90 (76.3%), female group were 84 (71.2%), primary school or below group were 72 (61%), married group were 62 (52,5%), lower economic level were 73 (61,9%), unemployment group were 71 (60,2%) and parents group were 83 (70,3%).

Table 2. Bivariat analysis between the groups of age, gender, education level, marital status, economic status, employment status and kinship status with burden caregivers in schizophrenic

Variabel		Burden caregiver				P	OR	95 % Confidence Interval	
		Moderate to severe burden		No or little burden				Min	Max
		n	%	n	%				
age	18-40	25	28,7	03	9,7	0,032	3,763	1,048	13,509
	41-60	62	71,3	28	90,3				
gender	male	19	21,8	15	48,4	0,005	0,298	0,125	0,711
	female	68	78,2	16	51,6				
Marital status	married	45	51,7	17	54,8	0,766	0,882	0,387	2,009
	unmarried	42	48,3	14	45,2				
Economic status	higher	38	43,7	07	22,6	0,038	2,659	1,036	6,824
	lower	49	56,3	24	77,4				
Employment status	employment	36	41,4	11	35,5	0,565	1,283	0,548	3,004
	unemployment	51	58,6	20	64,5				
Education level	Primary school or below	56	64,4	16	51,6	0,211	0,590	0,258	1,354
	Secondary school or university	31	35,6	15	48,4				
Kinship status	parents	66	75,9	17	54,8	0,028	2,588	1,094	6,123
	others	21	24,1	14	45,2				
Total		87	100,0	31	100,0				

From table 2 there was significant difference between age ($p = 0,032$), gender ($p = 0,005$), economic status ($p = 0,038$) and kinship status ($p = 0,028$) with burden caregiver in schizophrenic. $P < 0,05$

Table 3. Multivariate analysis regression logistic between age, gender, education level, economic status and kinship status with burden caregiver in schizophrenic

Variable	Koefisien	P	OR(95 % confidence interval)
age	-1,239	0,080	0,290
gender	1,094	0,020	2,986
Economic status	-0,885	0,092	0,413
Kinship status	-1,068	0,027	0,344

From table 3 show variable treatment effect on caregiver burden in schizophrenic patients are age, gender, economic status and social status. Strength of the relationship can be seen from the OR. Strength of the relationship from the largest to the smallest are gender (OR = 2.986), economic status (OR = 0.413), social status (OR = 0.344) and age (OR = 0.290)

4. Discussion

Result showed that mostly caregiver who takes care for patient with schizophrenia feels burden. The study by Juvang, Lambert and Lambert in 2007 investigated relationship between demographic characteristic of caregiver's burden when providing care for a member with schizophrenia in China. When caregiver becomes older, they are worried about who will take care of their ill family member in the future. Older caregiver also cannot provide care well to the ill member. In addition, younger age of caregiver which has to provide caring ill member, result in increasing sense of life is worth living (Fujino and Okamura, 2009). Men and women may experience burden differently.

Result this study showed that there was a significant difference in gender in term of their burden. Women had higher score in caregiving, depression and burden compared with men. It can be explained by social gender role and hormonal factors. Related to social role, women were predominant in caregiving, in other word women spent more time in caregiving than men. In terms of hormonal, oxytocin hormone also contributed in distress and women's need to nurture. When caring for patient with schizophrenia, women experienced distress, her oxytocin level and nurture need will increase, but in the same time she had to pay more attention to the patient. Therefore women felt more burden than men (Schneider, Steele, Cadell and Hemsworth, 2010).

The education level has negative correlation with caregiver's burden. It was assumed that higher the level of education, higher the salary will be. High salary would decrease financial problem related to providing care for the ill member. Level education of the caregiver also tends to have more knowledge to deal with the stressful event. Therefore caregiver's education level influences burden of the caregiver (Juvang, Lambert and Lambert, 2007). Income may have influence on the burden of the caregiver. The study in Sweden to examine relationship between income, subjective health and caregiver's burden in people with schizophrenia. Finding showed that low income was associated with a higher degree of burden on the caregivers. Lower income was a stressor that influences stress feeling during providing care for ill member. Beside caregivers providing care for ill member, they also had to solve financial problem and find out source of money (Andren and Elmstahl, 2006). Finally, relatives who are employed out of home have a mean burden of 81.39 (SD = 12.33) , the rest of caregivers have a mean of 73.56 (SD = 6.52). these differences are significant (Caqueo and Gutierrez, 2006). Parents (mainly mothers) have a mean burden of 90.16 (SD = 11.99). parents have a higher burden degree than other relatives . most of the studies on burden show that the mother is who takes care of the patients with schizophrenia and they show the highest burden even if they share the task with other relatives (Caqueo and Gutierrez, 2006).

5. Conclusion and Limitation

The major limitations of this study are that it was cross-sectional, and the participants were not representative of the general population of schizophrenia caregivers in Indonesia, especially as only one family member was interviewed and taking the subject performed consecutive sampling. Data collection was also carried out by self rating is subjective. In addition, there are several factors that may affect the burden of care as a caregiver coping ability and the degree of impairment of patients.

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