Original Research Article

Quality of life on caregiver of schizophrenia client in outpatient installation of Tampan psychiatric hospital

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ABSTRACT

Background: The process of caring for a schizophrenic client creates a stressful situation; caregiver's unpreparedness in dealing with this problem has an impact on the deterioration of the quality of life. The decline in quality of life of caregiver is influenced by several factors such as caregiver's burden and characteristic of caregiver include age, gender, sex, marital status, education, income, and relationship with client. This study aimed to determine the relationship of burden and characteristic with the quality of life on the caregiver.

Methods: The design of this study was descriptive analytic with cross sectional study approach on 186 caregiver with convenient technique sampling. Data were collected by the Zarit Burden Interview questionnaire and the World Health Organization Quality of Life (WHOQOL-BREF).

Results: The results showed 99 (53.2%) caregivers had a low quality of life, 92 (49.5%) caregivers felt heavy burden. Chi-square statistical test proved a significant relationship between burden (0.001) and all characteristics caregiver include age (0.033), gender (0.033), sex (0.000) marital status (0.001), education (0.001), income (0.002), and relationship with client (0.000) with quality of life.

Conclusions: The result showed that test proved a significant relationship between burden and characteristics caregiver with quality of life of multivariate analysis showed that marital status was the most correlated with quality of life of caregiver. Suggestions for Tampan Psychiatric Hospital Pekanbaru are to improve mental nursing service comprehensively to client and family like health education program about how to improve quality of life.

Keywords: Quality of life, Burden, Caregiver, Schizophrenia

INTRODUCTION

Schizophrenia is a combination of distractions of thought. Perception, behaviour, affective disorder and inability to socialize.1 There are 450 million people worldwide experience schizophrenia.2 The prevalence of schizophrenia in Indonesia according to Primary Health Research in 2013 reached 1.7 per 1,000 population and in Riau was 0.9 per 1,000 population. Schizophrenia client shows long duration of illness, persistent symptoms, frequent relapse and causing disability. Therefore the client needs a caregiver. Most schizophrenia clients are treated in the community by caregivers. Caregivers are family, friends or other relationships that give care and physical, practical and emotional support to clients.3 Studies showed that in western countries about 25-50% of schizophrenia clients lived with caregivers. In Asia 70% of schizophrenia clients lived with caregivers.4 Caregiver caring of schizophrenia clients has a strong psychological stress and anxiety in caring for clients. Problems encountered are emotional problems, financial problems and physical health problems.5 Caregiver's unpreparedness in facing problems will affect mental health and declining quality of life.6 Quality of life is the
individual's perception of their position in life in the cultural context and values in which they live and in relation to their goals of life, hope, standard and attention. Measurements of quality of life are multidimensional including the dimensions of physical health, psychological, social relations and relationships with the environment.

The decline in quality of life in caregiver of schizophrenia clients is influenced by several factors. The most dominant factor is caregiver burden. Zarit et al (1985 in Chou et al 2009) describes burden as the level of emotional, physical, social and financial status that caregivers perceive as caring for ailing family. Burden include dimensions of financial burden, physical burden, mental burden and social burden. The results of Rafiyah’s study on 88 family caregiver having schizophrenia clients in the Outpatient installation of psychiatric hospital of West Java Province mentioned that there are 43.2% caregiver who feel moderate to severe burden.

Study from Kaur states that 50% caregiver of schizophrenia clients show a severe burden of care. Grover also conducted a study of caregiver burden and quality of life with 56% caregiver results reported high objective burden and had correlation with quality of life decline in caregiver. Kate et al found that all caregiver burden domains in caring for schizophrenia clients have a relationship with quality of life that poor and high psychological morbidity. Winahyu found that the burden felt by caregiver of schizophrenia clients in Indonesia has a significant negative relationship with quality of life.

Tampan Psychiatric Hospital is a referral Pekanbaru; is the center of reference for mental disorders and the center of mental nursing development in Riau province. Based on medical record data, schizophrenia is on the first rank for medical diagnosis of clients. Outpatient visit numbers rise continuously and more than hospitalization. This proves the number of schizophrenia clients who are cared for by families in the community.

The general purpose of this research is to know the relationship between burden and quality of life on caregiver of schizophrenia client in outpatient installation of Tampan Psychiatric Hospital Pekanbaru. Another purpose is to determine the relationship of characteristics caregiver’s characteristics with the burden and quality of life.

METHODS

This study used descriptive analytic design with cross sectional study approach; conducted on 186 caregivers at the outpatient installation of Psychiatric Hospital Pekanbaru in June-July 2015 with an inclusion criteria of family caregiver aged 18-65 years old, caring for clients with a medical diagnosis of schizophrenia that has been able to function in a society with stable; have been caring for client for 6 months, able to read and write and agree to be a respondent.

Burden was assessed with the Zarith Burden Interview questionnaire translated with back-links for cross-cultural research by Rafiyah and quality of life was assessed by the World Health Organization Quality of Life (WHOQOL-BREF) questionnaire by Skevington et al. Both of these questionnaires had been tested for validity and reliability and had stated valid and reliable. The respondent characteristic data include age, gender, marital status, education, income and relationship with client.

This study takes into the basic principles of research ethics that include autonomy, beneficence, maleficence, anonymity and justice. Data was analysed in univariate, bivariate and multivariate. Univariate view the distribution of burden frequency, quality of life and characteristics of caregiver. Bivariate with Chi-square identified the relationship between characteristics with burden and quality of life. Multivariates with logistic regression to identify which variables influence the quality of life of caregiver.

RESULTS

The results of the study of 186 caregivers of schizophrenia client showed that most of the respondents were female (62.9%), middle adult age (35.5%), married (67.7%), junior high school (38.2%), (67.2%) earnings under the minimum wage (70.4%) and parents of schizophrenic clients (33.9%) (Table 1).

Table 2 about the distribution of burden frequency and quality of life of caregiver. The result showed that more respondents feel severe burden as much as 92 people (49.5%) of respondents and more than half of respondents express the feeling of low quality of life as much as 99 people (53.2%) of respondents.

Table 3 showed that 61 people (66.3%) of respondents who feel severe burden have a low quality of life and Chi-square statistical test proved a significant relationship (p value 0.001) which means there was a relationship between the load with quality of life in caregiver of schizophrenia clients.

Table 4 showed that there was a relationship between all caregiver’s characteristics include age (0.033), gender (0.033), sex (0.000) marital status (0.001), education (0.001), income (0.002) and relationship with client (0.000) with quality of life where p value <0.05 in degree of confidence 5% on all variables.

Table 5 about multivariate analysis showed that related factor with quality of life on caregiver were burden, marital status, and working status, relationship with client, while the education level is confounding variable.
The final multivariate modeling results also showed that caregivers who were not married had a 20 times chance to have a lower quality of life compared to married caregivers, caregivers who did not work had a 0.1 chance to have a lower quality of life compared to caregivers who worked and caregiver who has a relationship of caregivers as parents has a 1.5 times chance to have a lower quality of life compared to caregivers who have other relationships such as spouse, child or brother. Marital status has the highest OR value so it can be concluded that marital status is the most influential variable in the relationship between burden and quality of caregiver life of schizophrenic clients.

The result of analysis showed that most of respondents feel severe burden and have low quality of life. The distribution of respondents' burden frequency and quality of life is shown in Table 2. The caregivers who experienced severe burden have low quality of life compared to caregivers who have other burden level. caregiver’s characteristic with quality of life is shown in Table 3. The result of analysis showed that caregiver’s marital status, working status, education level, caregiver-client relationship, and burden are factors affecting caregiver’s quality of life. The final multivariate modeling about caregiver’s quality of life is shown in Table 4. The result of analysis showed that caregiver’s marital status, working status, education level, caregiver-client relationship, and burden are factors affecting caregiver’s quality of life. The final multivariate modeling about caregiver’s quality of life is shown in Table 5. The result of analysis showed that caregiver’s marital status, working status, education level, caregiver-client relationship, and burden are factors affecting caregiver’s quality of life.

### DISCUSSION

The result of analysis showed that most of respondents feel severe burden and have low quality of life. These results are supported by Kate et al which found that all caregiver burden domains in caring for schizophrenia clients are associated with poor quality of life and high psychological morbidity. Winahyu also mentioned that the burden felt by caregiver has a significant negative relationship with quality of life. 

### Table 1: Characteristics of respondents.

| Variable                | Category     | f  | %   |
|-------------------------|--------------|----|-----|
| Age                     | Early adult  | 65 | 34.9|
|                         | Middle adult | 66 | 35.5|
|                         | Late adult   | 55 | 29.6|
| Sex                     | Male         | 69 | 37.1|
|                         | Female       | 117| 62.9|
| Marital status          | Married      | 126| 67.7|
|                         | Not married  | 60 | 32.3|
| Education level         | Elementary school | 38 | 20.4|
|                         | Junior high school | 71 | 38.2|
|                         | Senior high school | 53 | 28.5|
|                         | Bachelor     | 24 | 12.9|
| Working status          | Employee     | 61 | 32.8|
|                         | Unemployed   | 125| 67.2|
| Income                  | Under minimum wage | 131| 70.4|
|                         | Above minimum wage | 55 | 29.6|
| Caregiver-client relation | Partner    | 39 | 21.0|
|                         | Parent       | 63 | 33.9|
|                         | Child        | 54 | 29.0|
|                         | Relatives    | 30 | 16.1|

### Table 2: Distribution of respondent’s burden frequency and quality of life.

| Variable                  | Category         | f  | %   | 95% CI     |
|---------------------------|------------------|----|-----|------------|
| Burden of caregiver       | Little or no     | 17 | 9.1 |            |
|                           | Mild to moderate | 38 | 20.4|            |
|                           | Moderate to severe | 39 | 21.0|            |
|                           | Severe           | 92 | 49.5|            |
| Caregiver’s quality of life | Low             | 99 | 53.2|            |
|                           | High             | 87 | 46.8|            |

### Table 3: Relationship of burden with caregiver’s quality of life.

| Burden of caregiver | Caregiver’s quality of life | P value |
|---------------------|----------------------------|---------|
|                     | Low | High |       |
|                     | f   | %    | f     | %    |
| Little or no        | 6   | 35.3 | 11   | 64.7 |
| Mild to moderate    | 11  | 28.9 | 27   | 71.7 |
| Moderate to severe  | 21  | 53.8 | 18   | 46.2 |
| Severe              | 61  | 66.3 | 31   | 33.7 |
| Total               | 99  | 53.2 | 87   | 46.8 |

### Table 4: Relationship of caregiver’s characteristic with quality of life.

| Characteristic of respondent | Caregiver’s quality of life | P value |
|------------------------------|----------------------------|---------|
|                              | Low | High |       |
|                              | f   | %    | f     | %    |
| Age                          | 17  | 53.1 | 15   | 46.9 |
| Sex                          | 12  | 54.5 | 10   | 45.5 |
| Marital status               | 16  | 53.3 | 14   | 46.7 |
| Education level              | 16  | 53.3 | 14   | 46.7 |
| Working status               | 18  | 52.9 | 16   | 47.1 |
| Income                       | 20  | 52.6 | 18   | 47.4 |

### Table 5: Final multivariate modeling about caregiver’s quality of life.

| Variable                      | B     | Wald  | P value | OR    | 95% CI     |
|-------------------------------|-------|-------|---------|-------|------------|
| Burden                        | -0.23 | 3.837 | 0.049   | 0.977 | 0.952-1.000|
| Marital status                | 3.005 | 27.467| 0.000   | 20.193| 6.564-62.121|
| Education level               | -0.813| 7.806 | 0.05    | 0.455 | 0.141-1.468|
| Working status                | -2.007| 13.855| 0.000   | 0.134 | 0.47-0.387 |
| Caregiver-client relationship | 0.426 | 23.294| 0.000   | 1.531 | 0.439-5.336|
The process of caring for schizophrenia clients brings problems to the caregiver. The problem is better known as caregiver burden. Caregiver feels the problems continuously in a long period will have an impact on decreased physical health, increased symptoms of psychological stress, negative stigma and limited time to socialize. This impact is part of the domain of quality of life, so it can be concluded that caregivers experiencing severe burden will impact on quality of life.\(^5\)

White et al revealed that there are three factors that influence the quality of life of caregiver: the situation of caring client such as the burden of care, caregiver factors include characteristics and environmental factors including family support.\(^6\) The decline in the quality of life of caregiver of schizophrenia clients is influenced by weight of burden, lack of social support, prolonged history of disease and family relationship problems.\(^8\)

The analysis of the relationship between the characteristics of respondents with caregiver burden obtained that all characteristics of respondents had significant relationship with caregiver burden. Further analysis at alpha 5% showed significant relationship between age (p=0.003), sex (p=0.032), marital status (p=0.004), education level (p=0.032), working status (p=0.002), income (p=0.000) and caregiver-client relationship (p=0.000) with caregiver burden.

Magana et al stated that severe burdens that are felt in the late adult caregiver and lower caregiver education levels.\(^1\) Older caregivers feel a higher burden because they have a greater obligation to care for family members with schizophrenia. Marital status is also associated with burden. Kate et al said that caregivers with single, unmarried, widow or single parent statuses feel a greater burden than caregivers who have a partner. This is related to the social support that caregiver receives.\(^11\)

The higher family burden is felt by caregivers who have low levels of education by Juvang et al.\(^15\) Low education will tend to be difficult to get a job. Caqueo et al suggest that unemployed caregivers experience higher levels of burden as this is also related to the income level of the caregiver family.\(^8\) In addition parents, especially mothers also experience a greater burden because parents are responsible for most aspects of daily client care.

The result of analysis, the relationship between characteristics of respondents with caregiver’s quality of life obtained that all characteristics of respondents have significant relationship with caregiver burden. Further analysis at alpha 5% showed significant relationship between age (p=0.033), sex (p=0.033), marital status (p=0.000), education (p=0.001), work status (p=0.001), income (p=0.002) and caregiver-client relationship (p=0.002) with caregiver quality of life.

The caregiver’s quality of life was associated with caregiver psycho-social factors as older caregivers and female caregivers with lower socio-economic status were found to be associated with poor quality of life Zamzam et al.\(^19\) Chan found that the quality of life in caregiver of schizophrenia clients are associated with female gender, unemployed and long-standing clients suffering from the disease.\(^4\)

The results of Chan’s et al study found that married men and women have a higher quality of life. This is influenced because of the social support of the couple.\(^4\) Juvang et al in his study also said that quality of life is significantly associated with caregiver education where quality of life tends to be higher in caregivers who have higher education.\(^18\)

Lower educated caregivers are less likely to have unfavorable jobs. They will have low income, financial and social resources shortages resulting in lower quality of life Wongm et al, Awadalla et al showed that parents of clients with mental illness had a lower quality of life compared to other relationship categories.\(^20,21\) Gutierrez et al also found that the kinship status between caregiver schizophrenia clients was identified as a significant predictor of the caregiver’s subjective burden associated with quality of life.\(^22\)

**CONCLUSION**

The result of multivariate analysis showed that marital status was the most correlated with quality of life of caregiver with OR=20.193 (95% CI: 6.564-62.121). This suggests that unmarried caregivers are 20 times more likely to have a lower quality of life than married caregivers after being controlled by caregiver burden variables, work status and caregiver-client relationships. In addition, caregivers are likely to have a low quality caregiver who is a parent of schizophrenia clients. Caregivers who feel the severe burden, caregiver who does not work after being controlled by caregiver education level factor.

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