

Relationship between Loneliness and Self-Efficacy Among Persons with Schizophrenia in Indonesia

ANANDYA DEWI LARASATI YUNANTO¹, EVA CHRISMA ANGELINA PANGGABEAN², SRI PADMA SARI³, ROZZANO C. LOCSIN⁴, HIROKAZU ITO⁵

¹Department of nursing Faculty of Medicine, Diponegoro University

²Department of nursing Faculty of Medicine, Diponegoro University

³Department of nursing Faculty of Medicine, Diponegoro University

⁴Institute of Biomedical Sciences, Tokushima University Graduate School, Tokushima University, Japan

⁵Institute of Biomedical Sciences, Tokushima University Graduate School, Tokushima University, Japan

Correspondence: Sri Padma Sari, Lecturer in Department of nursing Faculty of Medicine Diponegoro University, Jl Prof Soedarto SH Tembalang Semarang Semarang, Jawa Tengah Indonesia, E-mail: sripadmasari@fk.undip.ac.id, HP: +6285225197321

ABSTRACT

Background: Loneliness in persons with schizophrenia have shown associate with depression and promotes suicide among persons with schizophrenia. Individual and environmental factors are also recognized as related factors. The environmental factors are lack of social scope and support. While one of the individual factors is self-efficacy.

Objective: To determine the level of loneliness among persons with schizophrenia in Indonesia, and to evaluate the relationship of loneliness with sociodemographic characteristics and clinical factors, and to assess the modifying effects of self-efficacy.

Methods: This study was a correlational study with 132 respondents. Correlation analyses were performed to examine the relationship between loneliness and self-efficacy using The UCLA Loneliness Scale and General Self-Efficacy Scale (GSE) questionnaire to collect the data.

Results: This study found that the mean of loneliness among persons with schizophrenia score was 46.05 (SD = 7.16). There were no relationships between several sociodemographic characteristics and clinical factors to loneliness, however, there was a negative correlation between self-efficacy and loneliness among persons with schizophrenia ($\rho = -0.180$, p -value = 0.04).

Conclusion: There was a correlation between self-efficacy and loneliness among persons with schizophrenia. Therefore, it is recommended that mental health professionals provide sources of self-efficacy to minimize loneliness in this population.

Keywords: *loneliness; self-efficacy; schizophrenia, mental illness*

INTRODUCTION

Loneliness is interpreted as an emotional adversity experience that occurs from unsatisfying social relationships¹. Loneliness in persons with schizophrenia is represented by some negative conviction or cognitive processes, increased alertness for social threats, expectations of negative social interactions as a result of feelings of stress, enmity, pessimism, and inferiority². Loneliness reported could decrease the quality of life, but also encourages for depression³ and suicide among persons with schizophrenia⁴. In Indonesia, a prior study found that the prevalence of depression in persons with schizophrenia was 36.7%⁵. Persons with schizophrenia were reported to have a high level of loneliness². The prevalence shows that the loneliness' rate every year is increasing among persons with schizophrenia and other psychotic disorders from 76% to 80% or about 2.3 times higher than the general population⁶. Another study reported that 35.9% of persons living with schizophrenia have experience of being lonely¹, while other studies reported only 10.5%⁷.

Individuals with severe mental illnesses, especially those with psychotic disorders, may have a higher risk of loneliness. Both individual and environmental factors can influence loneliness in persons with schizophrenia. Individual factors include self-esteem and self-efficacy were related to loneliness in persons with schizophrenia^{2,8}. In terms of environmental factors, some persons with

schizophrenia only have a small social scope and do not sufficiently make use of social support and services⁹. The other environmental factors that also effect on loneliness in persons with schizophrenia are social participation in the community, living adjustments⁸, housing state, and social integration¹⁰.

One of the important factors that have an impact on loneliness in persons with schizophrenia is self-efficacy. Self-efficacy is defined as a person's beliefs about their abilities to produce indicated levels of performance that could influence their life¹¹. In persons with schizophrenia, the level of self-efficacy was lower than the general population¹². Self-efficacy reported being correlated with the low social functioning^{13,14}. The prior study shows that persons with schizophrenia who can increase their social self-efficacy may alleviate their feelings of loneliness⁸. Hence, the level of loneliness was affected by the level of self-efficacy².

The previous studies indicated that self-efficacy was significantly related to loneliness among persons with schizophrenia^{2,15}, but another study reported that loneliness in this population did not predict by self-efficacy⁸. Moreover, the existing evidence about self-efficacy as potential effect modifiers of the relationship with loneliness requires further investigation. Thus, the study aimed to determine the level of loneliness among persons with schizophrenia in Indonesia and to evaluate the relationship of loneliness with several sociodemographic characteristics

and clinical factors, as well as to assess the modifying effect of self-efficacy.

MATERIAL AND METHODS

Design: This research was a correlational study. The setting of this study was in one of the psychiatric hospitals in Indonesia. The sampling technique used in this study was accidental sampling, and the number of respondents was 135 persons with schizophrenia. The inclusion criteria in this study were: (1) persons with schizophrenia, (2) aged 18-60 years, (3) had no verbal communication disorders, and (4) were in a stable condition. The exclusion criteria in this study were persons with schizophrenia who were in the acute phase.

Measures: Sociodemographic Characteristics and Clinical Factors

The questionnaires were designed to obtain sociodemographic data (including age, sex, marital status, level of education, employment status, and living situation), and clinical factors (including age at first diagnosed with schizophrenia, cumulative years diagnosed with schizophrenia, history of psychiatry hospitalization, duration of being treated in a psychiatry hospital now, schizophrenia diagnose, and nursing diagnose).

UCLA Loneliness Scale Version 3

Loneliness was measured by using the Indonesian version of the University of California, Los Angeles UCLA Loneliness Scale Version 3¹⁶. The UCLA Loneliness Scale consist of 20 items and the answers scored as 'Never: 1', 'Rarely: 2', 'Sometimes: 3', and 'Always: 4'. The total UCLA questionnaire's score can range from 20 to 80, with higher scores indicating a higher level of loneliness. All the 20 items are reliable in the Indonesian version (Cronbach's Alpha= 0,6) and the validity of this scale has been constructed.

General Self-Efficacy Scale (GSE)

Self-efficacy was determined using the Indonesian version of the General Self-Efficacy Scale¹⁷. The General Self-Efficacy Scale (GSE) consists of 10 items and the answers scored as 'Not at all true: 1', 'Hardly true: 2', 'Moderately true: 3', and 'Exactly true: 4'. The total GSE questionnaire's score can range from 10 to 40, with higher scores indicating a higher level of self-efficacy. All the 10 items are highly reliable in the Indonesian version

(Cronbach's Alpha= 0,88) and the validity of this scale has been established.

Statistical analysis: Descriptive statistics were used for calculating the frequencies, percentages, mean, and SDs to represent the demographic characteristics. Bivariate analysis by using the Chi-square test and Spearman's rank correlation coefficient were used to examine the correlation between two variables. All analysis was conducted by using IBM SPSS for Windows version 23.0.

Ethics: This study was approved by the research ethics committee from the psychiatric hospital where this study has taken place (EC: 420/1/06074). Participants were informed that their participation was rigidly voluntary in the study, and written informed consent was obtained before the respondents filled the questionnaires. The questionnaires were anonymous so that no private information of any respondents would be recognizable. The respondents have completed the questionnaires by themselves or helped by the researcher.

RESULT

Among 135 questionnaires, 132 respondents filled the questionnaire. Three respondents gave no response to the GSE and UCLA questionnaire, thus, they were not available for analysis.

Table 1 shows the sociodemographic characteristics and clinical factors of the respondents. The mean age of the respondents was 34.4 years old (SD = 9.92). The majority of the respondents were male, not married, graduate from junior high school, not working, and living with family. The mean age at first diagnosed with schizophrenia was 29.3 years old (SD = 9.53), cumulative years of diagnosed with schizophrenia was 4.9 years (SD = 5.70), history of psychiatry hospitalization was 3 times (SD = 2.59), and duration of being treated in a psychiatry hospital was 11.2 days (SD = 6.91). Further, this study found no correlation between sociodemographic characteristics and clinical factors to loneliness.

Table 2 shows the relationship between self-efficacy and loneliness in people with schizophrenia. This study found that the mean of self-efficacy score was 28.34 (SD = 4.32) and the mean of loneliness was 46.05 (SD = 7.16). This study also found that self-efficacy was significant correlated to loneliness ($\rho = -0.180$, p -value = 0.04).

Table 1. The relationship between sociodemographic characteristics and clinical factors of the respondents to loneliness (n=132)

	n	%	ρ	χ^2
Age, mean 34.4 years (SD = 9.92)			0.97	
Sex				0.25
Male	93	70.5		
Female	39	29.5		
Marital status				0.49
Not married	76	57.6		
Married	46	34.8		
Divorced	10	7.6		
Educational status				0.36
Not schooling	11	8.3		
Elementary school	33	25.0		
Junior high school	45	34.1		
Senior high school	40	30.3		
College	3	2.3		

	n	%	ρ	X^2
Employment status				0.95
Not working	76	57.6		
Working	56	42.4		
Living situation				0.66
Own or rent house	9	6.8		
Family	123	93.2		
Age at first diagnosed with schizophrenia			0.96	
Mean 29.3 years (SD = 9.53)				
Cumulative years of diagnosed with schizophrenia			1.00	
Mean 4.9 years (SD = 5.70)				
History of psychiatry hospitalization			0.59	
Mean 3 times (SD = 2.59)				
Duration of being treated in a psychiatry hospital now			0.93	
Mean 11.2 days (SD = 6.91)				
Schizophrenia diagnoses				
Paranoid				
Hebephrenic				
Catatonic				0.87
Not detailed schizophrenia	51	38.6		
Simplex	3	2.3		
Nursing diagnoses	18	13.6		
Hallucination	59	44.7		
Violence risk	1	0.8		
Suicidal risk				0.80
Social isolation	56	42.4		
	59	44.7		
	5	3.8		
	12	9.1		
Total	132	100		

Note: ρ = Spearman's rank correlation coefficient, X^2 = Chi-square test

Table 2. Relationship between self-efficacy and loneliness (n=132)

	Min	Max	Mean	Std. Deviation	ρ	p -value
Self-Efficacy	16	40	28.34	4.32	-0.180	0.04
Loneliness	29	65	46.05	7.16		

Note: ρ = Spearman's rank correlation coefficient

DISCUSSION

This study aimed to investigate the level of loneliness, the influence of sociodemographic characteristics and clinical factors, and the correlation between self-efficacy and loneliness.

This study revealed that the mean loneliness score among persons with schizophrenia was 46.05 (SD = 7.16). This finding was quite similar to previous studies conducted in Japan² and the United States¹⁰ with the mean score of loneliness was 45.6 (SD = 11.2) and 46.12 (SD = 10.98), respectively. This result was lower than the prior study in Australia that had a mean of loneliness of 52.61 (SD = 9.30)¹⁸ and higher than the prior study in Israel that had a mean of loneliness of 43.7 (SD = 10.8)⁸. It is inferred that the level of loneliness among persons with schizophrenia in Indonesia was moderate if compared to other countries.

Related to the second aim of the study, the results found that there was no correlation between sociodemographic characteristics and clinical factors to loneliness. This study was in line with the previous study that sociodemographic characteristics did not correlate with loneliness, the only clinical factors that related to loneliness was the history of psychiatry hospitalization¹⁵. This finding did not support the view that sociodemographic characteristic has a role in explaining the various levels of loneliness among persons with schizophrenia.

This study has contributed to the existing research evidence in the relationship between self-efficacy and loneliness among persons with schizophrenia. The finding of this study found that self-efficacy was related to loneliness in persons with schizophrenia. The result of this study was supported by prior studies that showed the relationship between self-efficacy and loneliness^{2,10}, and other individual factors, such as self-esteem^{2,19}. Lower self-esteem may reduce the tendency to seeking support hence could lead to loneliness¹⁹. Persons with severe mental illness who asking help from others could receive social support that could protect them from loneliness²⁰. On the contrary, the result of this study was different from previous studies showing that self-efficacy was not correlated with loneliness in persons with schizophrenia^{8,15}.

The higher level of self-efficacy could reduce the level of loneliness². Self-efficacy plays an essential role in mediating the features of mental illness, such as negative symptoms, cognitive skills, and functioning¹³. Self-efficacy was associated with daily functioning in persons with schizophrenia through its relationship with negative symptoms and functional capacity. Individuals with higher self-efficacy have the capacity to deal with daily functioning in the real world. This may protect their impairments associated with social interactions, work, or responsibilities²¹. Further, a higher level of loneliness was related to the

negative social perception of others²² which can contribute to depression³ and suicide in persons with schizophrenia⁴.

CONCLUSION

The present study was found that the level of loneliness among persons with schizophrenia was at a moderate level of around 46.05 (SD = 7.16). There were no relationships between several sociodemographic characteristics and clinical factors to loneliness, however, there was a significant correlation between self-efficacy and loneliness among persons with schizophrenia. Therefore, it is recommended that mental health professionals especially psychiatric nurses provide interventions to enhance self-efficacy to minimize the loneliness in patients with schizophrenia. Further research is needed to develop a program that includes self-efficacy enhancement in persons with schizophrenia.

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