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Association between Social Support and Three Types of Loneliness among Rural Older Adults in Johor, Malaysia

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Association between Social Support and Three Types of Loneliness among Rural Older Adults in Johor, Malaysia

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Abstract

Background: Social support plays a vital role in ensuring the well-being and quality of life of older people.

Methods: This cross-sectional survey was conducted among 380 older adults residing in a rural district in Johor, Malaysia. A proportional stratified random sampling was used to examine the relationship between social support and three types of loneliness. The data were collected using the Short-Form Social and Emotional Loneliness Scale for Adults and Lubben Social Network Scale-6, with $p < 0.05$ considered as statistically significant. Data analysis was performed using the Statistical Package for the Social Sciences Statistics 26.0 for Windows.

Results: More than half of the older adults in this rural area received social support from their family and friends. The results showed a significant relationship between family support and social ($p < 0.01$), emotional ($p < 0.001$), and family loneliness ($p < 0.01$). Multiple logistic regression analysis revealed that social support from friends ($p < 0.001$) and family ($p = 0.02$) predicted significantly social loneliness. Family support is a significant predictor of emotional loneliness ($p = 0.001$), and friend support is a significant predictor of family loneliness ($p = 0.001$).

Conclusions: The support from family members and friends is recommended to combat loneliness in older adults.

Keywords: elderly, loneliness, social support

INTRODUCTION

Social support is frequently categorized as a positive interaction or social exchange that involves various kinds of aid and care provided by social network members in times of need. This form of support plays an important role in people of all ages, including children, adolescents, or the elderly. For the elderly, social support comes as an interactive process in which they receive emotional, instrumental, financial, and physical supports from friends, family, and other people in individual networks.^{1–5} Social support influences the health and well-being of older adults in different ways.^{6–9}

Relationships with others almost certainly continue to play a critical role in boosting the quality of life of the elderly and shielding them from the negative effects of age-related challenges.^{10–12} Emotional and structural supports predict objective and subjective health indicators.¹³ Emotional support has been significantly associated with the quality of life compared with tangible or instrumental support, affectionate support, and possible social interaction.^{8,14,15} In Malaysia, older adults show a good relationship with their next-of-kin and

stable networking with their friends. Meanwhile, older women reported that they expect their children, especially their sons, to take care of them in old age.⁵

In a community-based nationwide cross-sectional study, Ahmad *et al.* reported that one-third of Malaysian older adults (30.8%) receive low to adequate social support.¹⁶ A national survey reported similar findings, that is, below 30% of the observed older adults, which were primarily female, with an income of less than RM1000, and have experienced limitations in daily living activities, had received low to fair level of social support.^{8,9} Ahmad *et al.* showed that older adults in Malaysia who live in a community and receive a low level of social support have a low quality of life score and are likely to be depressed.¹⁶

On the other hand, aging characteristics include a decline in interpersonal relationships and the narrowing of social networks. Low social relationships affect the mental health, behavior, physical health, and mortality of older adults.^{17–19} Wan Mohd Azam *et al.* reported the negative correlation of loneliness with social support. Moreover, older adults with less social support and who were unable to maintain social contacts experienced a higher level of loneliness.^{20,21} In addition, the level of loneliness increases during situations where the risk of isolation is high.⁶

Older adults, regardless of gender, stated that the cause of their loneliness was the feeling oppression, neglect, and occasional abuse, whether physically, socially, or

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emotionally, that they experience from their family members or people belonging to their social group.²²⁻²⁴ They are likely to be lonely and socially isolated when the communication network decreases. A significant proportion of older adults who live alone or who do not receive economic assistance from their children suffer from severe loneliness.^{5,25,26} Older adults still experience loneliness despite being surrounded by people with kinship ties or similar customs and traditions.²⁷ By contrast, no significant difference was observed between loneliness scores and social network size among seniors after considering the residential area characteristics, neighborhood factors, and social network size.^{25,27}

On the other hand, studies rarely focused on the connection between having social support and not feeling lonely among older adults living in rural Malaysia. Most previous research centered on the importance of social support for the quality of life of older adults.^{8,9} If any, studies examined the relationship between social support and loneliness among older adults living in institutional care facilities²⁸ and students.²⁹ The social support, loneliness, and factors that influence it among older adults must be examined to ensure that the elderly population has the best quality of life possible. Loneliness has a negative impact on mental and physical health, cognitive function degradation, and social health. Therefore, this study examined the relationship between social support and the three types of loneliness (social, emotional, and family) among community-dwelling older adults. The findings may facilitate the creation of evidence-based health promotion, particularly regarding loneliness issues among older people.

METHODS

This study was a community-based, cross-sectional survey of 380 participants aged 60 years and older in the smallest rural district of Johor, Malaysia and examined the relationship between loneliness and social support. This research used a proportional stratified random selection strategy to select the participants. In addition, the participants in this research were discovered through a door-to-door census, and their participation in the data collection process was entirely voluntary. Researchers conducted follow-up visits to potential older individuals who were not at home during the initial visit. However, for these potential participants, follow-up visits were made twice before deciding to drop them from participating in the study. All the data in this study were acquired through questionnaires.

The data collection process was performed continuously until the required samples have been reached. For the participants who could not read, the caregiver read the questionnaires aloud as they selected their response options, allowing the respondents to be more independent. Furthermore, most respondents required

approximately 20–30 min to complete a questionnaire and return it to the researcher either by hand or postal.

Survey instruments

The Social and Emotional Loneliness Scale for Adults (SELSA-S), which was established by DiTommaso and Spinner, was used to measure the different types of loneliness.³⁰ The scale has 15 parts and has been translated into Bahasa Malaysia. The translated version has an excellent internal consistency between 0.87 and 0.90. The SELSA-S has 15 items and scored on a 5-point Likert scale (from 1: strongly disagree to 5: strongly agree). The total score for each domain ranges from 1 to 25. In this study, the cutoff point was based on the data from translated instruments. A score of 14 or less indicates “No” loneliness, and a score of 15 to 25 implies “Yes” loneliness.

Part two consisted of the administration of a questionnaire that measured social support using the Lubben Social Network Scale-6 (LSNS-6). This instrument has two subscales: family and friendship social supports, with three items for each subscale. The LSNS-6 has a good internal reliability with a Cronbach α coefficient exceeding 0.92.³ Meanwhile, the LSNS-6 translated into Bahasa Malaysia has an internal reliability consistent with the value of Cronbach's α coefficient (0.87). This questionnaire has a choice of answers based on the 5-point Likert scale, starting from 1 (no support), 2 (one), 3 (two), 4 (three to four), 5 (five to eight), and 6 (nine or more). Each item was scored from 0 (no support) to 5 (nine or more support), and the total score for each subscale ranged from 0 to 15. A total score of ≥ 7 indicated social support for each subscale based on the original instruments. Meanwhile, scores from 0 to 6 showed that the person had no social support or was socially isolated.

Ethics, consent, and permission

The study was approved by the Ethics Committee of UKM (UKMREC Project code: FF-2013-300) and the Pontian District's Officer. All attempts were made to guarantee that the research complied with the highest standards of ethical practice in line with the principles of autonomy, well-being, confidentiality, and anonymity throughout the study's design, conduct, and reporting.

Data analysis

Data were collected and analyzed using SPSS Statistics (version 26.0) for Windows. The level of significance was set at $p < 0.05$. The distributions of sociodemographic characteristics were determined using descriptive analysis, and the association between groups was investigated using Chi-square test and multiple regressions.

RESULTS

Data sociodemographic

Table 1 summarizes the sociodemographic characteristics of the respondents in this study. The mean and standard deviation (SD) for age was 71.4 ± 5.75 years old. Malays accounted for the majority of respondents, followed by Chinese and Indians. A total of 257 (62.1%) respondents were women. For the level of education, 44.4% of the respondents had primary education, 22.2% reached secondary school, 15.2% received university-level education, and 18.2% did not go to school. Furthermore, 65.9%, 27.1%, and 8% of the respondents were married, widowed, and single, respectively. A total of 40.3% of the respondents lived with a partner, 36% lived with their children and grandchildren, and 23.7% lived alone.

Social support (family and friend) using LSNS-6 scale and level of loneliness

Table 2 shows that the total mean and SD were 21.1 ± 6.69 , for all six statements of the LSNS-6 scale. The study's analysis results showed that 178 (46.8%) respondents had no family social support. Meanwhile, 181 (47.6%) respondents reported no support coming from their friends. In this study, 237 (62.4%) respondents experienced social loneliness. Of the 380 respondents, 227 (59.7%) experienced emotional loneliness. Meanwhile, 89.2% of the respondents had experienced family loneliness.

TABLE 1. Sociodemographic (N = 380)

Variables	N	%
Age		
65–74 years	274	72.1
75–84 years	85	22.4
85 years and above	21	5.5
Gender		
Male	145	38.2
Female	235	61.8
Ethnic		
Malay	289	76.1
Chinese	88	23.2
India	3	0.8
Marital status		
Single	7	1.8
Married	252	66.3
Divorce/separate	17	4.5
Widow	104	27.4
Living Arrangement		
Alone	95	25.0
With husband/wife/partner only	155	40.8
With others (children/grandchildren and husband/wife or children/grandchildren only)	130	34.2

TABLE 2. Social support (family and friend) and level of loneliness (N = 380)

Variables	N (%)	Min (SD)
Social support		21.1 (6.6)
Family support		
No	178 (46.8)	
Yes	202 (53.2)	
Friend support		
No	181 (47.6)	
Yes	199 (52.4)	
Loneliness		
Social loneliness		16.6 (6.6)
Yes	237 (62.4)	
No	143 (37.6)	
Emotional loneliness		18.2 (5.9)
Yes	227 (59.7)	
No	153 (40.3)	
Family loneliness		11.9 (6.1)
Yes	339 (89.2)	
No	41 (10.8)	

Relationship between social support (family and friends) and loneliness (social, emotional, and family)

Table 3 shows that 57.3% of the respondents with no family social support experienced social loneliness, 93 (55.6%) experienced emotional loneliness, and 30 (51.1%) experienced family loneliness. Furthermore, the results of Chi-square test analysis showed a significant relationship between family support and social ($p < 0.01$), emotional ($p < 0.001$), and family loneliness ($p < 0.01$).

The study results also revealed that 57.4%, 45.3%, and 13.8% of the respondents who did not have friend support had experienced social, emotional, and family loneliness, respectively. In addition, the results of the Chi-square test analysis showed a significant relationship between friend support and social ($p < 0.001$), emotional ($p = 0.02$), and family loneliness ($p < 0.001$).

Multiple logistic regression

Table 4 shows the results of logistic regression analysis for Models 1 and 2, which were used to predict factors influencing social, emotional, and family loneliness. The results of logistic regression analysis showed that family (odds ratio (OR) = 1.88, 95% CI: 1.12–3.17; $p = 0.002$) and friend support (OR = 4.23, 95% CI: 2.50–7.17; $p < 0.001$) significantly influenced social loneliness. In Model 2 of the logistic regression analysis, friend (OR = 4.02, 95% CI: 2.25–7.20; $p < 0.001$) and family support (OR = 1.90, 95% CI: 1.10–3.30; $p = 0.020$) significantly predicted social loneliness. This analysis suggested that the absence of family and friend support was a predictor of social loneliness among respondents in this study.

In Model 1, the results showed that family support significantly influenced emotional loneliness (OR = 2.65, 95% CI: 1.60–4.40; $p < 0.001$). Meanwhile, in Model 2,

family support (OR = 2.48, 95% CI: 1.45–4.26; $p = 0.001$) remained a significant predictor of emotional loneliness. However, friendship support did not affect emotional loneliness. The findings of multiple regression analysis in Models 1 (OR = 3.92, 95% CI; 1.58–9.74; $p = 0.003$) and III showed that friend support is a significant predictor of

family loneliness (OR = 4.37, 95% CI: 1.87–10.25; $p = 0.001$). Moreover, the study results indicated that family support had no significant association with family loneliness.

TABLE 3. Relationship between types of loneliness with family and friend support (N = 380)

Types of social support	N	Social Loneliness		Emotional Loneliness		Family Loneliness	
		No N (%)	Yes N (%)	No N (%)	Yes N (%)	No N (%)	Yes N (%)
Family social support							
No	178	82 (42.7)	96 (57.3)	85 (44.4)	93 (55.6)	148 (48.9)	30 (51.1)
Yes	202	155 (84.6)	47 (15.3)	142 (78.7)	60 (21.3)	191 (72.3)	11 (27.7)
		$p < 0.001$		$p < 0.001$		$p < 0.001$	
Friend social support							
No	181	76 (42.6)	105 (57.4)	97 (54.6)	84 (45.3)	148 (86.2)	33 (13.8)
Yes	199	161 (80.9)	38 (9.1)	130 (67.3)	69 (32.7)	191 (96.0)	8 (4.0)
		$p < 0.001$		$p = 0.02$		$p < 0.001$	

TABLE 4. Results of multiple logistic regression analysis between social support and loneliness (social, emotional, and family) (N = 380)

Factor	Social support	MODEL 1				MODEL 2					
		Wald	Sig.	OR	95% C.I		Wald	Sig.	OR	95% C.I	
					Lower	Upper				Lower	Upper
Social loneliness	Family Support	5.67	0.02	1.88	1.12	3.17	5.32	0.02	1.90	1.10	3.30
	Friends Support	28.87	<0.001	4.23	2.50	7.17	22.11	<0.001	4.02	2.25	7.20
	<i>Cox & Snell R square</i>	[0.17]	-	-	-	-	-	-	-	-	-
Emotional Loneliness	Family Support	14.24	<0.001	2.65	1.60	4.40	10.90	0.001	2.48	1.45	4.26
	Friends Support	0.03	0.87	0.96	0.58	1.59	-	-	-	-	-
	<i>Cox & Snell R square</i>	[0.52]	-	-	-	-	-	-	-	-	-
Family Loneliness	Family Support	1.81	0.18	1.77	0.77	4.07	-	-	-	-	-
	Friends Support	8.63	0.003	3.92	1.58	9.74	11.51	0.001	4.37	1.87	10.25
	<i>Cox & Snell R square</i>	[0.06]	-	-	-	-	-	-	-	-	-

DISCUSSION

This study aimed to examine the relationship between social support and social, emotional, and family loneliness among older adults. Social supports in this study were divided into two parts, namely, family and friend support, and measured through LSNS-6. In this study, most older adults were Malays, women, married, had received primary education, and lived with their husband. About half of the respondents had social, family, and friendly support. Furthermore, more than half of the individuals with no family nor friendship support reported experiencing social, emotional, and family loneliness. This result is similar to that in previous studies in which older adults had a low level of social support.^{17,19} Several studies highlighted that limitation in social support was associated with high levels of loneliness among most frailty older adults¹ and older adults who lived in institutional or nursing homes.⁷ Similarly, the most significant indicators connected to perceived social support among Malaysian older individuals include a decline in daily living activities and living alone.^{8,9}

This study reported that social support (family and friends) was significantly related to social, emotional, and family loneliness. Family support was a predictor factor of social and emotional loneliness. In addition, friend support was a predicting factor of emotional and family loneliness in this study. Based on the results, differences in the types of social support had no effect on the incidence of loneliness among the elderly. In this study, a significant relationship was observed between family support and social and emotional loneliness up to the final stage of the regression analysis. This study's results are similar to those of Drennan *et al.*, who observed that the leading cause of increased family loneliness among the elderly was the limited contact with children and relatives.³¹

According to Wan Mohd Azam *et al.*, loneliness significantly predicts social support in an inverse manner, which means that when perceived social support decreases, the feeling of loneliness increases.¹⁹ A more extensive social network, more social contact, and better perceived social support offer protection against loneliness and poor well-being.^{6,18} From a social point of view, family functioning can influence the levels of loneliness, and the family has an important role in reducing the loneliness of the elderly, especially those who live with their children.⁵ The percentage of loneliness is low for seniors who live with family members or those who receive various help or support from their family members; an increase has been observed in the frequency of home visits and social contact over the telephone either from family members, relatives, or friends.^{5,25}

The type of social networks owned by older adults often influences the level of loneliness.^{7,17,24,27} According to Drageset, Kirkevold, and Espehaug, the voluntary support offered by friendships can reduce the loneliness experienced by older adults; however, this study reported a minimal effect on the relationship between friendship support and loneliness.²⁷ In their longitudinal study, Kohwal *et al.* highlighted that the level of loneliness decreased with contact visits from peers.²³ On the other hand, previous study results recorded that social support has no relationship with loneliness.^{25,27} The need for social relationships among human beings will not disappear, though, as people age.

Nevertheless, old age is associated with a decline in interpersonal relationships, which frequently shrink in existing social networks. As a person ages, they increasingly attempt to limit their involvement in social gatherings. Thus, the aging process has made the social space of the elderly increasingly smaller, which puts them at risk of experiencing physical movement difficulties and developing diseases.

This research has shortcomings, such as the use of cross-sectional data at a particular point in time, resulting in an additional challenge to determine the cause and effect. As a result, the findings of this study cannot be applied to elder Malaysians. The present study adds to the growing body of literature on the social support for older adults. Consequently, this research had its advantages. The categorization of loneliness into social, emotional, and family loneliness, as conducted in this study, may be necessary to enhance the intervention strategies that focus on specific types of loneliness. This research can also help nursing communities in developing more specialized nursing care for older people based on the types of loneliness they feel. Several suggestions for improvement are made based on the results of this study, including conducting studies with different designs, comparison studies, and single-intervention studies. Longitudinal studies strongly encourage the identification of patterns of loneliness at several stages over different periods.

CONCLUSIONS

In conclusion, more than half of older adults in this rural area had social support from family and friends. In addition, they have experienced low social, emotional, and family loneliness levels. Family support is a significant predictor of social and emotional loneliness among older adults. On the other hand, friend support significantly predicts social and family loneliness. The findings from this study add to the knowledge of the relationship between social support and three types of loneliness (social, emotional, and family).

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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