Original Research

Open Access

Belitung Nursing Journal
Volume 9(1), 69-78

https://doi.org/10.33546/bnj.2334

Social support and associated factors among family caregivers of older people in North-East Peninsular Malaysia

Aniawanis Makhtar[1]*, Nor Nadiya Ab Ghani[2], Sharifah Munirah Syed Elias[1], and Salizar Mohamed Ludin[3]

[1]Department of Special Care Nursing, Kulliyyah of Nursing, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia
[2]Hospital Kuala Krai, 1800 Kuala Krai, Kelantan, Malaysia
[3]Department of Critical Care Nursing, Kulliyyah of Nursing, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia

Abstract

Background: The negative health results associated with the family caregivers of older people can be alleviated with social support, which is considered a valuable resource. Hence, the factors contributing to social support need to be understood.
Objective: This study aimed to evaluate the social support associated with the family caregivers of older people.
Methods: A cross-sectional study was conducted among 231 family caregivers of older people conveniently selected from two districts in Kelantan, a state in the North-East Region of Peninsular Malaysia. Data were gathered between June to December 2021 using a Multidimensional Scale of Perceived Social Support (MSPSS) questionnaire. Descriptive statistics were used to summarize the data in frequencies and percentages. Independent *t*-test and one-way analysis of variance were used to examine correlations among variables.
Results: The mean scores of social support for family caregivers were significantly higher among their family (Mean ± SD; 5.44 ± 0.969) and other important people (5.25 ± 1.123) compared to their friends (4.84 ± 1.094). Caregivers' gender and duration of caregiving were significant factors associated with social support (p <0.05).
Conclusions: The family caregivers received maximum support from their family and other important people, but they were less supported by their friends. This study also observed that the perceived social support of the caregivers of older people was affected by several factors, such as gender and duration of caregiving. This finding gives nurses and other healthcare workers the basic information they need to enhance nursing interventions and promote social support among those who care for older people, which can positively impact caregiving.

Keywords

caregivers; social support; older people; demographic variables; Malaysia; nurses

***Corresponding author:**
Aniawanis Makhtar, RN, PhD
Department of Special Care Nursing, Kulliyyah of Nursing, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia
Email: aniawanis@iium.edu.my

Article info:
Received: 29 September 2022
Revised: 27 October 2022
Accepted: 18 January 2023

E-ISSN: 2477-4073 | P-ISSN: 2528-181X

Background

By the year 2030, Malaysia's older population will have increased by 15%, thereby increasing the needs of the aged population simultaneously (Nor & Ghazali, 2021). With increasing life expectancy and aging populations, the global prevalence of chronic diseases and the requirement for long-term care for people with comorbidities are rising. The National Health and Morbidity Survey (NHMS) 2019 conducted by the Ministry of Health (MOH) discovered that a total of 1.7 million adults, or 8.1% of Malaysia's adult population, are prone to diabetes, high cholesterol, and hypertension, and these non-transmissible diseases usually required long-term care (Zhao et al., 2018), severe, and associated with decreased functional abilities (Yilmaz et al., 2012), and thereby increasing health care needs (Liu et al., 2013). In addition, older adults are more likely to have multimorbidity, which may increase the burden on their caregivers.

In Malaysia, most older people live in communities and depend on their family members for caregiving. Family support is also essential in countries like Malaysia, where long-term care insurance and social security benefits are unavailable (Goh et al., 2013). Most aged patients in Malaysia rely on their family members for informal care (Ghazali et al., 2015). Very few Malaysian families can afford paid caregivers, whether trained or untrained (Goh et al., 2013). Furthermore, in Malaysia, the view is that family members should take responsibility for caring for the elderly as an expression of the cultural value of "filial piety" (Canda, 2013). They respect their older relatives with the most respect and honor, so taking care of them is a natural responsibility and a commitment to the people who care for them (Chappell & Funk, 2012). The

cultural obligation to provide care for older people may prevent caregivers from seeking help outside the home.

Caregivers play a great role in providing adequate care and needs for older people. However, being a caregiver is demanding, and the lives of caregivers and their families are often restricted. Family caregivers occasionally encounter some difficulties while caring for recipients. In Malaysia, Abu Bakar et al. (2014) highlighted the adverse effects of caregiving responsibilities on caregivers' emotional, financial, social, and physical well-being. A study on long-term care for care recipients by Michalík and Valenta (2012) reported that caregivers experienced fatigue, depression, hopelessness, and an inability to enjoy leisure time.

Concerning care provided to older people, the caregivers also need support. Social support refers to "family members, friends and others (neighbors and community members) who are available in times of need to give psychological, physical, financial or other support" (Amoah, 2019). The stress and burden of caregivers can be relieved by adequate social support from family and the community, which enables them to engage in social activities. Studies have reported that social support can positively influence family caregivers' well-being (del-Pino-Casado et al., 2018; Díaz et al., 2019; Perkins & LaMartin, 2012). For instance, social support is one resource that may alleviate caregiving pressure among caregivers in Shanghai, China (Leung et al., 2020). However, a recent meta-analysis of 56 studies revealed a moderately negative relationship between social support and the caregivers' subjective burden (r = - 0.36) (del-Pino-Casado et al., 2018).

To enhance the effectiveness of interventions to improve the perceived social support of caregivers, it is arguably important to identify associated factors that contribute to caregiver social support. The demographic factors that affect social support are significant in caregivers of older people. A study on family caregivers in India revealed a significant positive relationship between perceived social support and good caregiver-patient association (Maheshwari Preksha & Kaur, 2016). Research conducted among caregivers of dementia patients found a positive correlation between social support provided and participants' race and gender (Miller & Guo, 2000). In a study conducted in Spain, compared to male caregivers, female caregivers were found to perceive less social support (del Río Lozano et al., 2017).

In this context, it is clear that social support is an essential factor affecting older people's caregiving. The perception of social support is also influenced by cultural factors. Cultural and religious norms in Malaysia create intense family relations and support systems, which serve as a crucial source of elderly care (Ahmad Ramli et al., 2022). Malaysia is widely known as a multicultural country, with the main ethnic groups consisting of the Malays, Chinese, and Indians (Lai & Tey, 2021). The multi-ethnic populations can provide insights into understanding demographic variables associated with social support for older caregivers in Malaysia. To date, no study has attempted to investigate the influence of caregivers' demographic factors and the provision of social support. Meanwhile, the findings from other nations may not be applicable to the local population. Hence, the present study aims to evaluate the perceived social support among family caregivers of older people.

This study examined the connection between social support and demographic factors, such as race, age (Yurtsever et al., 2013), gender, race, household income, occupation, underlying medical illness, assistance from others, association with older people (Maheshwari Preksha & Kaur, 2016), educational level (Thirumoorthy et al., 2016), years spent in caregiving (Munoz-Bermejo et al., 2020), caregivers' present perceived health (Winahyu et al., 2015), caregiving for others (Ang & Malhotra, 2018), and caregiver training received (Boonyathee et al., 2021). More information is expected to be obtained from the study. This data can help health professionals to take into account key factors when planning interventions for family caregivers.

Methods

Study Design

This study utilized a descriptive cross-sectional design by recruiting family caregivers from two districts: Kota Bharu and Pasir Mas in Kelantan, Malaysia. Kelantan is a state located in the North-East Region of Peninsular Malaysia. These two districts in Kelantan recorded the highest proportion of older people from urban to rural localities, which served as the justification for selecting both districts. Thus, it is expected that the rise in the number of older people has also increased the demand for caregiving in these districts.

Samples/Participants

The sample size was computed using the single population proportion formula (Naing et al., 2006).

Sample size, $N = \frac{Z2P(1-P)}{d2}$

Z = Z value (1.96 for 95% confidence level)

P = proportion in population expressed as a decimal

d = 0.05

In this study, the sample size was calculated to be 138 using Z= 1.96, P = 95.2% (Bassah et al., 2018), and d = 0.05. Considering the issues of missing data, potential dropouts, and unusable questionnaires, this study aimed for a sample size of 10%, which was more than 138. Finally, the total sample size was 152. In this study, participants were selected using convenience sampling through advertisements shared on social media platforms. Altogether 231 participants answered the survey. Five inclusion criteria were as follows: 1) being a primary family caregiver for an older person aged ≥ 60, 2) being responsible for the care of older people for at least six months, 3) aged ≥18 years old, 4) living in the same household as the older people, 5) not being paid for the care provided. The exclusion criteria included: 1) unable to read, speak and understand English or Malay.

Instruments

The study instrument was self-administered by the researcher. The first section covered demographic characteristics such as age, race, gender, marital status, job, education status, number of children, health status (record and type of medical illness), caregivers' present perceived health, household income, relationship with older people, the total of years spent in caregiving, caregiving for others, assistance from others, and caregiver training records.

Age was categorized into three-year groups (18–32 years, 33–45 years, and 45 years and above). Gender was grouped into male and female. Race was originally classified as Malay, China, Indian, and others (e.g., Malaysian Siamese). Unfortunately, no Chinese caregivers were willing to participate in this study. Marital status included single, married, divorced/separated, and widowed. The number of children was categorized into three-year groups (none, 1 – 3, and 4 and above). The occupation was grouped into six categories: full-time work, part-time work, retired, unemployed, student, and housewife. Education level was classified into primary, secondary, certificate/skill, and college/university. Underlying medical illness was assessed as yes or no.

Firstly, the caregiver's self-rated perceived health was categorized into "very good," "good," "fair," and "poor" (Aman et al., 2020). However, no participants perceived themselves as "poor" in this study. Relationship with older people was grouped as a spouse, son/daughter, son-/daughter-in-law, siblings, and others (e.g., niece and grandchildren). Household income was categorized into three-year groups: <RM1000, RM1000 - RM4999, and >RM5000. The caregiving period was divided into four categories: <1 year, 1 - 5 years, 5 - 10 years, and >10 years. Assistance from others was asked with received or did not receive assistance. Finally, caregiving for others and receiving caregiver training were assessed by yes or no, respectively. Content validity for the demographic characteristics was obtained in terms of accuracy and appropriateness for the healthcare context in Malaysia. The content validity experts consisted of two gerontology nursing lecturers and two medical-surgical nursing lecturers, and no modifications were required.

The second section examined participants' social support. To assess the perceived social support from family, friends, and other important personalities, the Multi-dimensional Scale of Perceived Social Support (MSPSS) was utilized (Zimet et al., 1988). It has 12 items. Each item receives a 7-point rating (ranging from 1 to 7). The total scores ranged from 12 to 84, with the highest score indicating high social support. The scale's alpha coefficient ranged from 0.85 to 0.91, indicating strong internal consistency (Zimet et al., 1988). The study utilized a validated Malay version with a Cronbach's Alpha coefficient of 0.89, considered acceptable (Ng et al., 2010). The original developer approved the formal usage of this instrument via email before commencing the study. A high Cronbach's Alpha coefficient of 0.95 was attained in this study. A questionnaire with Cronbach's Alpha coefficient value of 0.70 or higher indicated that the questionnaire demonstrated satisfactory reliability (Nunnally & Bernstein, 1994).

Data Collection

Data were collected by a research assistant who was trained to conduct the study procedures so that the variability in the data collection method was minimized. The study was conducted between June to December 2021. Firstly, bulk emails were sent to the researchers through their social media contacts (WhatsApp). After that, other eligible participants also began to receive the messages. Those who wished to be involved in the study were directed to the researchers. Eligible participants have been briefed on the research objectives and given an information sheet containing the procedures and details of the study. Next, the participants were physically instructed to either circle or tick their most preferred options. Then, they were told to contact the researcher if they had any questions and to provide their own answers. The research assistant ensured that participants were not rushed, distracted, or talking with other people while filling out the questionnaire. The participants took about 15 to 20 minutes to complete the questionnaires.

Data Analysis

The caregivers and the perceived social support characteristics were reported using descriptive statistics. Frequencies and percentages were used to define the categorical data, while means and standard deviations represented the continuous variables. The normality test was achieved using a skewness and kurtosis value. For data to be considered normal, the value ranged from -2 to +2 of skewness and -7 to +7 of kurtosis (Byrne, 2010). A skewness and kurtosis value for MSPSS were 0.085 and - 0.186, respectively. Hence, this can be concluded that the data were normally distributed. The relationship between social support and demographic variables was assessed using independent *t*-tests and one-way analysis of variance (ANOVA) depending on the number of groups. A *p*-value of less than 0.05 was considered statistically significant. IBM SPSS Statistics was employed to examine all the gathered data (version 25).

Ethical Considerations

Ethical approval for this study was obtained from the International Islamic University Malaysia Research Ethics Committee (IREC) (reference number: IIUM/504/14/11/2/IREC 2021- 083) on 20 April 2021. The participants were approached with an information sheet, and informed consent was obtained before data were collected. The participants' involvement in the study was voluntary, and their confidentiality was protected. In order to preserve participant privacy and anonymity, the researchers kept the data confidential. Therefore, identifiers like names or identity card numbers were not used in the questionnaires.

Results

Demographic Characteristics of Participants

Table 1 summarizes the descriptive outcome of the participants and their demographic characteristics. This study involved 231 participants whose mean age was 39.2 ± 12.6 years. Most participants were females (74.0%), married (61.0%), and Malay (98.3%). The mean number of children was 2.48 ± 2.35. Over half of the participants had completed tertiary education (58%). Most of them worked full time while they provided care for older people (55.4%) with a monthly household income between RM1000 - RM4999 (49.4%). The family caregiver perceived their health as good (52%) and had no underlying medical illness (67.1%). The relationship between the caregivers and older people was parent-children, either son or daughter (61.5%). The years of caregiving ranged from 1-5 years (39.4%). Unfortunately, slightly over half of the caregivers did not receive assistance from others (53.2%), and a majority did not carry out caregiving for others (61%). Meanwhile, most did not receive any caregiver training (90.5%).

Table 1 Demographic characteristics of the participants

Variable	f	%	Mean ± SD (Range)
Age			
18 – 32 years	79	34.2	
33 – 45 years	72	31.2	
46 years and above	80	34.6	
Age in years (average)			39.24 ± 12.66 (18-75)
Gender			
Male	60	26.0	
Female	171	74.0	
Race			
Malay	227	98.3	
India	1	0.4	
Others	3	1.3	
Marital status			
Single	69	29.9	
Married	141	61.0	
Separated / Divorced	9	3.9	
Widow / Widower	12	5.2	
Number of children			
None	77	33.3	
1 – 3	81	35.1	
4 and above	73	31.6	
Number of children (average)			2.48 ± 2.35 (0-10)
Occupation			
Full-time work	128	55.4	
Part-time work	18	7.8	
Retired	8	3.5	
Unemployed	7	3.0	
Student	33	14.3	
Housewife	37	16.0	
Level of education			
Primary	5	2.2	
Secondary	56	24.2	
Certificate / Skill	36	15.6	
College / University	134	58.0	
Underlying medical illness			
Yes	76	32.9	
No	155	67.1	
If you have an illness, tick at the list of illnesses below			
Heart Disease	2	0.9	
Cancer	3	1.3	
High Cholesterol	12	5.2	
Diabetes	25	10.8	
Kidney Disease	0	0.0	
Thyroid Disease	10	4.3	
Inflammation of Joint	13	5.6	
High Blood Pressure	36	15.6	
Others	31	13.4	
Current perceived health of the caregiver			
Very good	85	36.8	
Good	122	52.8	
Fair	24	10.4	
Relationship with older people			
Spouse	15	6.5	
Son/daughter	142	61.5	
Son-/daughter-in-law	22	9.5	
Siblings	6	2.6	
Others	46	19.9	
Household income			
<RM1000	86	37.2	
RM1000 - RM4999	114	49.4	
>RM5000	31	13.4	
Years of caregiving			
Less than 1 year	29	12.6	
1 - 5 years	91	39.4	
5 - 10 years	44	19.0	
More than 10 years	67	29.0	

Table 1 (Cont.)

Assistance from others		
Received	108	46.8
Did not receive	123	53.2
Caregiving for others		
Yes	90	39.0
No	141	61.0
Received caregiver training		
Yes	22	9.5
No	209	90.5

Social Support Sources among Family Caregivers

The caregivers were advised to receive social support from three main sources: family members, friends, and significant others. **Table 2** shows the mean score of social support sources in detail. Resultantly, the family caregivers perceived the highest support from family and significant others (Mean = 5.44, SD = 0.969 and Mean = 5.25, SD = 1.123, respectively) but received less support from friends (Mean = 4.84, SD = 1.094). Regarding support from family, the item "I can talk about my problems with my family" recorded a mean of 5.26, which is considered low. Meanwhile, the item "My family is willing to help me make decisions" recorded the highest mean score (5.52).

As for receiving support from significant others, the item "there is a special person who I can share my joys and sorrows with" recorded the highest mean of 5.31. On the other hand, the item "I have a special person who gives me comfort" recorded the lowest mean of 5.20. Lastly, as for support from friends. The item "I have friends who I can share my joys and sorrows with" recorded the highest mean of 5.01, while the item "I can rely on my friends when things go wrong" recorded the lowest mean of 4.77.

Table 2 Social support sources among family caregivers

No	Item	1	2	3	4	5	6	7	Mean	SD
Significant Others										
1	There is a special person who is around when I am in need.	2 (0.9)	1 (0.4)	19 (8.2)	20 (8.7)	109 (47.2)	28 (12.1)	52 (22.5)	5.27	1.244
2	There is a special person with whom I can share joys and sorrows.	2 (0.9)	0 (0.0)	16 (6.9)	20 (8.7)	113 (48.9)	29 (12.6)	51 (22.1)	5.31	1.193
3	I have a special person who is a real source of comfort to me.	2 (0.9)	0 (0.0)	23 (10.0)	23 (10.0)	104 (45.0)	35 (15.2)	44 (19.0)	5.20	1.232
4	There is a special person in my life who cares about my feelings.	2 (0.9)	0 (0.0)	18 (7.8)	28 (12.1)	105 (45.5)	31 (13.4)	47 (20.3)	5.23	1.214
								Overall	**5.25**	**1.123**
Family										
1	My family really tries to help me.	0 (0.0)	0 (0.0)	12 (5.2)	11 (4.8)	111 (48.1)	41 (17.7)	56 (24.2)	5.51	1.071
2	I get the emotional help & support from my family.	0 (0.0)	0 (0.0)	12 (5.2)	13 (5.6)	110 (47.6)	44 (19.0)	52 (22.5)	5.48	1.063
3	I can talk about my problems with my family.	1 (0.4)	1 (0.4)	14 (6.1)	24 (10.4)	114 (49.4)	36 (15.6)	41 (17.7)	5.26	1.123
4	My family is willing to help me make decisions.	0 (0.0)	0 (0.0)	10 (4.3)	14 (6.1)	111 (48.1)	37 (16.0)	59 (25.5)	5.52	1.071
								Overall	**5.44**	**0.969**
Friends										
1	My friends really try to help me.	0 (0.0)	3 (1.3)	32 (13.9)	24 (10.4)	122 (52.8)	24 (10.4)	26 (11.3)	4.91	1.152
2	I can count on my friends when things go wrong.	1 (0.4)	14 (6.1)	20 (8.7)	32 (13.9)	122 (52.8)	18 (7.8)	24 (10.4)	4.77	1.245
3	I have friends with whom I can share my joys and sorrows.	0 (0.0)	3 (1.3)	20 (8.7)	29 (12.6)	125 (54.1)	27 (11.7)	27 (11.7)	5.01	1.085
4	I can talk about my problems with my friends.	3 (1.3)	4 (1.7)	28 (12.1)	33 (14.3)	112 (48.5)	25 (10.8)	26 (11.3)	4.84	1.238
								Overall	**4.84**	**1.094**

Note: 1 = very strongly disagree, 2 = strongly disagree, 3 = disagree, 4 = Neutral, 5 = agree, 6 = strongly agree, 7 = very strongly agree

Relationships between Social Support and Demographic Variables

There was a significant difference in social support and demographic characteristics (**Table 3**). The results revealed that social support was significantly different according to gender (p = 0.006). That is, males had statistically significantly higher mean social support scores compared to females. Also, the mean social support scores were statistically significantly different across study participants among the four levels of the duration of caregiving (p = 0.001). Tukey HSD post hoc test indicated a significant difference between the below 1-year caregiving group and the 1 - 5 years caregiving group (p = 0.045). Furthermore, a significant difference was observed between the below-1-year caregiving group and the over 10 years caregiving group (p = 0.000). This finding suggests that the individuals in the below 1-year caregiving and 1 - 5 years

caregiving groups scored significantly lower mean social support scores than the over 10 years caregiving group.

Finally, no significant difference was identified between social support and race; marital status; occupation; level of education; underlying medical illness; current perceived health of caregiver; relationship with older people; household income; assistance from others; caregiving for others; received caregiver training; age and the number of children.

Table 3 Relationships between social support and demographic variables

Variables		Mean	SD	*t/F*	*p*-value
Age[2]	18 – 32 years	5.63	2.321	0.195	0.823
	33 – 45 years	6.67	2.455		
	46 years and above	6.75	2.173		
Gender[1]	Male	5.47	0.869	2.774	0.006*
	Female	5.10	0.905		
Race[1]	Malay	5.19	0.909	0.835	0.404
	India and others	4.80	1.510		
Marital status[2]	Single	5.12	0.937	1.658	0.177
	Married	5.27	0.851		
	Separated/Divorced	4.66	1.514		
	Widow/Widower	5.06	0.781		
Number of children[2]	None	6.05	2.328	1.829	0.163
	1 – 3	6.12	2.477		
	4 and above	6.89	2.196		
Occupation[2]	Full-time work	5.30	0.911	1.082	0.371
	Part-time work	5.16	0.971		
	Retired	4.71	1.137		
	Unemployed	5.24	0.568		
	Student	5.05	1.045		
	Housewife	5.07	0.713		
Level of education[2]	Primary	5.60	1.450	0.609	0.609
	Secondary	5.13	0.659		
	Certificate/Skill	5.30	1.158		
	College/University	5.17	0.907		
Underlying medical illness[1]	Yes	5.04	1.080	-1.617	0.109
	No	5.27	.806		
Current perceived health of caregiver[2]	Very good	5.24	1.006	0.204	0.816
	Good	5.17	0.848		
	Fair	5.14	0.881		
Relationship with older people[2]	Spouse	5.34	1.272	0.821	0.513
	Son/daughter	5.14	0.877		
	Son-/daughter-in-law	5.36	0.776		
	Siblings	5.67	1.033		
	Others	5.16	0.923		
Household income[2]	<RM1000	5.15	0.825	1.093	0.337
	RM1000 - RM4999	5.17	0.940		
	>RM5000	5.42	1.011		
Duration of caregiving (years)[2]	Less than 1 year	4.68	0.803	6.098	0.001*
	1 - 5 years	5.17	0.878		
	5 - 10 years	5.11	0.953		
	More than 10 years	5.50	0.865		
Assistance from others[1]	Received	5.29	1.028	1.482	0.140
	Did not receive	5.11	0.785		
Caregiving for others[1]	Yes	5.25	0.927	0.756	0.451
	No	5.16	0.899		
Received caregiver training[1]	Yes	5.36	0.956	0.903	0.368
	No	5.18	0.905		

Note: India was grouped with others in light of the small number of participants | [1] t-test for the independent group | [2] ANOVA with Tukey HSD post hoc test |
*Significant at p <0.05

Discussion

The study aimed to evaluate the factors associated with perceived social support among family caregivers of older people. According to the results, family caregivers were highly supported by their family members and significant others, but they received less support from friends. In addition, caregivers' gender and duration of caregiving were significant factors associated with social support.

Demographic Characteristics of Participants

The current study involved a total of 231 caregivers for older people. The mean age of the participants was 39.24 years, manifesting a relatively young group of people taking care of their older people. The results showed that most of the participants were female (74%), consistent with the studies by Aman et al. (2020) and Vun et al. (2020). This is common in Malaysia, an Asian country where women are frequently responsible for caring for the young and the old while men do the earnings to support the family. The findings revealed that

most of the caregivers were Malay (98.3%), which may be due to the study location, Kelantan state in Malaysia, with a high population of Malay (Department of Statistics Malaysia, 2020). Hence, it explains why Malay is the ethnicity with the highest percentage of participants.

Traditionally, in Asia, children are responsible for caring for older people. In this study, most caregivers were either the sons or daughters of older individuals (61.5%), consistent with previous local studies (Ahmad Zubaidi et al., 2020; Ghazali et al., 2015). Nevertheless, this result is expected since Malaysian children have been bred to care for their aged or sick parents. As a result, adult children are always responsible for caring for their parents. Apart from that, most of the participants were married (61%), full-time workers (55.4%), and university graduates (58%). The results showed the potential conflict when caring for older people as they had other commitments to be fulfilled.

The findings of the current study also showed that almost half (49.4%) of the participants had a monthly income between RM1000 - RM4999; just over half (52%) perceived their health as good; approximately two-thirds (67.1%) had no underlying medical illness; just over a third (39.4%) spent caregiving from 1-5 years; over a half (53.2%) did not receive any assistance; almost two-thirds (61%) did not do any caregiving for others, and a significant majority (90.5%) did not receive any caregiver training. These reports are similar to prior research on caregivers of older persons in Malaysia, reporting that the majority of caregivers receive a monthly income of RM 1000 to RM 4999 (Ahmad Zubaidi et al., 2020). The latter study also revealed that most caregivers were unqualified to care for older people, while one-third had no chronic medical condition (Ahmad Zubaidi et al., 2020). The majority of 166 caregivers had good health and had been providing care to older people for more than two years; however, most of them had assistance in caregiving (Ghazali et al., 2015), and the majority of the 128 caregivers did not receive any caregiver training (Tan et al., 2020).

Social Support Sources among Family Caregivers

Caregivers received maximum support from family and significant others but perceived less support from friends. This result is supported by several studies in which caregivers received less social support from friends and other social network members (Akosile et al., 2018; Haya et al., 2019; Yu et al., 2013). Similar to this study's results, the caregivers reported that they perceived the support was mainly from family members. This is much expected, as most caregivers in Malaysia were children of older people. The studies mentioned above depicted that caregivers are expected to care for their parents, regardless of their income or any associated factors that may affect this caregiving responsibility. Contrasted to the western country, a lack of nursing homes in the respondents' areas creates a heavier burden for family caregivers.

Moreover, it is an abomination in Malaysia to send the elderly to nursing homes (Jantan & Hussin, 2015). As a result, caregivers are obliged to fully provide their parents with the support they require. According to the data on the caregivers' characteristics, the caregivers in this study have had 1 – 5 years of experience in caregiving for older people. This experience has exposed the caregivers to a variety of stressors on a daily basis, training them to be responsive and provide the best response. Furthermore, the caregivers' success in providing care and support for 1 – 5 years has fueled their desire to continue providing their older people with the best support to achieve the best health and quality of care.

Furthermore, many people hold a cultural belief in the concept of filial piety, whereby children are expected to respond to the needs of their family by sacrificing their own interests physically, financially, and socially for the benefit of their parents (Kristanti et al., 2021). In many Asian countries, including Malaysia, children must take care of their parents, especially those suffering from chronic medical illnesses. Regarding filial piety and gaps in caregiving, Makhtar and Samsudin (2020) explored the association between loneliness and filial piety expectations among older people in Kuantan, Pahang. The study's results showed that older people typically have very high expectations for their children's filial piety. This can be interpreted that the older people in this study believed and expected that they should be well taken care of by their children and other family members. Filial piety is the behavior of respecting and affection to parents, carrying out responsibilities, supporting the family, paying debts, and making other sacrifices.

Besides the concept of filial piety, the majority of the participants were Malays, who are Muslims. Therefore, accepting their role as caregivers and the challenges that come with it is consistent with the Islamic philosophy of faith in predestination (Qada Wa Qadar) (Abu Bakar et al., 2014). It urges Muslims to be content and happy even in the face of hardship and adversity. According to this teaching, Allah has predestined each person's lifespan and happiness or unhappiness (Abu Bakar et al., 2014). Therefore, believers must accept the decision of their God.

Relationships between Social Support and Demographic Variables

A significant difference was detected between social support and two demographic variables: years of caregiving and years. According to the literature, male caregivers are less likely than female caregivers to accept help from friends, family, or community organizations. However, the results indicated that males received more social support than females from family and friends because of the broad diversity of the male caregivers' networks. A possible explanation is that women work outdoors less often and are more likely to stay at home, which should not result in a "higher number of good friends." Another possibility is that, in Asian society, women are typically regarded as natural caretakers born with caring traits and raised or nurtured to be caring, compared to men. Men, therefore, appear to find it easier to seek assistance from those in their close social circles, whether they be co-workers, friends, or neighbors. Additionally, they see this support as legitimate because they fill an unprepared role (Rodríguez-Madrid et al., 2019).

There was a significant difference in caregivers' years of caregiving on the social support scores, as caregivers whose caregiving of more than 10 years received higher social support than others whose caregiving was less than 1 year and between 1 - 5 years. This indicates that the caregivers received a higher amount of social support with a longer duration of caregiving. Indeed, most caregivers have become used to the caregiving duties incorporated into their daily

activities. In addition, the caregivers received more social support from family and friends because of the broad diversity of the caregivers' networks.

Most caregivers in this study were daughters or sons of older people. As mentioned earlier, all cultures in the Malaysian population still adhere strictly to filial obligations and the societal norm that families should be given the duty of caring for older people who are in need of assistance (Aman et al., 2020). In contrast, no significant relationship was observed between social support and the gender of caregivers for older people.

Additionally, the educational level of caregivers was not associated with social support in this study, contradicting the result from a cross-sectional study conducted in Bangalore (Thirumoorthy et al., 2016). This result is thought to be related to the fact that the majority of caregivers in this study graduated from college or university. Therefore, caregivers with higher education levels are likely to have been more active in participating in caregiving activities. In addition, they are more willing to learn new and appropriate caregiving knowledge and gain information about elderly care services. Thus, they were more aware of the available resources and knew how to use these resources to support their caregiving role.

In addition, this study found no significant difference between social support and race, marital status, occupation, underlying medical illness, current perceived health of the caregiver, household income, assistance from others, caregiving for others, received caregiver training, age, and the number of children. This could be because the current study's sample size is smaller than that of other research. Additionally, the homogeneity of the study participants' backgrounds, including their marital status, occupation, and race, may have contributed to the study's insignificant findings.

Implications for Nursing Practice

Family caregivers are often the primary caregivers for older adults, and they endure a huge responsibility. These caregivers have encountered challenges when performing various caregiving chores (Giovannetti et al., 2012). Adequate and sufficient support must be offered to older adults as well as to the people who care for them. Although the findings in this study indicated caregivers rated that they had received high support from family, this support may not fully help the caregivers deal with some crises in the caregiving of older people. Nurses are advised to assess the family's community-based resources to provide a social network that may help alleviate the caregivers' burden and challenges.

The current study also explains the association of perceived social support with gender and duration of caregiving. With this information, nurses should be able to recognize potential risk factors for caregivers who do not receive adequate social support. Additionally, it will help in deciding when intervention might be required. Such an intervention should specifically focus on addressing caregiver stress, burden, and a lack of knowledge and skills in providing care for older persons. Thus, nurses must be aware of the significance of social support as a strategy and care plan that may be used to enhance the quality of life and reduce the burden on the caregiver.

Limitations and Recommendations for Future Studies

This study has some key limitations that might have affected the results. First, overall, the present findings are insufficient to make any causal inference since the study employed a cross-sectional design. Second, the COVID-19 outbreak may have influenced the result as changes in participants' behaviors and lifestyles. Third, the sample size in this study might have a bias in the data collection process. It is due to the lack of cooperation from participants from other races. The final limitation was the use of convenience sampling, which limits the generalizability of the study and increases the risk of bias. Furthermore, using a qualitative research approach might produce more robust results and enable researchers to gain a broader knowledge of the caregivers' emotions and experiences. Future research should expand the number of the sample to gain generalization by using the probability sampling method and increasing the number of settings to gain a better insight into family caregivers of older people.

Conclusion

In conclusion, family and significant persons rendered more support to the caregivers than support from friends. This study also observed that the perceived social support of the caregivers of older people was affected by several factors, such as gender and duration of caregiving. Therefore, the study's conclusions may thus assist nurses and other healthcare professionals in better understanding the factors influencing social support. The reports from this study can provide solutions that would improve social support among caregivers of older people.

Declaration of Conflicting Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

Funding

This research was partly supported by IIUM (International Islamic University Malaysia) Flagship Research Initiative Grant Scheme (IRF19-009-0009).

Acknowledgment

The authors would like to express our thanks to the caregivers who participated in this study by generously lending their time to complete this survey.

Authors' Contributions

All the authors have made a substantial contribution from conception to the finalization of this study. AM was involved in the conception of the study, data collection, design of the study, analysis, interpretation of data, and revising the article for important intellectual content. NNAG was involved in the conception of the study, the collection of data, the design of the study, and the analysis and interpretation of data. SMSE and SML were involved in revising the article for important intellectual content. All authors have read and agreed to the published version of the manuscript.

Authors' Biographies

Aniawanis Makhtar, RN, PhD is an Assistant Professor at the Kulliyyah of Nursing, International Islamic University Kuantan, Pahang, Malaysia.
Nor Nadiya Ab Ghani is a Master of Nursing student at the Kulliyyah of Nursing, International Islamic University Kuantan, Pahang, Malaysia.
Sharifah Munirah Syed Elias, RN, PhD is an Assistant Professor at the Kulliyyah of Nursing, International Islamic University Kuantan, Pahang, Malaysia.

Salizar Mohamed Ludin, RN, PhD is an Associate Professor at the Kulliyyah of Nursing, International Islamic University Kuantan, Pahang, Malaysia.

Data Availability

The datasets generated during and analyzed during the current study are available from the corresponding author upon reasonable request.

References

Abu Bakar, S. H., Weatherley, R., Omar, N., Abdullah, F., & Mohamad Aun, N. S. (2014). Projecting social support needs of informal caregivers in Malaysia. *Health & Social Care in the Community*, *22*(2), 144-154. https://doi.org/10.1111/hsc.12070

Ahmad Ramli, F. Z., Tilse, C., & Wilson, J. (2022). The impact of culture and religion on pathways of help seeking and support among family carers of older adults with mental illness. *International Journal of Care and Caring*, *6*(3), 425-440. https://doi.org/10.1332/239788221X16415750758531

Ahmad Zubaidi, Z. S., Ariffin, F., Oun, C. T. C., & Katiman, D. (2020). Caregiver burden among informal caregivers in the largest specialized palliative care unit in Malaysia: A cross sectional study. *BMC Palliative Care*, *19*(1), 1-15. https://doi.org/10.1186/s12904-020-00691-1

Akosile, C. O., Banjo, T. O., Okoye, E. C., Ibikunle, P. O., & Odole, A. C. (2018). Informal caregiving burden and perceived social support in an acute stroke care facility. *Health and Quality of Life Outcomes*, *16*(1), 1-7. https://doi.org/10.1186/s12955-018-0885-z

Aman, Z., Liew, S. M., Ramdzan, S. N., Philp, I., & Khoo, E. M. (2020). The impact of caregiving on caregivers of older persons and its associated factors: A cross-sectional study. *Singapore Medical Journal*, *61*(5), 238-245. https://doi.org/10.11622/smedj.2019100

Amoah, P. A. (2019). The relationship between functional health literacy, self-rated health, and social support between younger and older adults in Ghana. *International Journal of Environmental Research and Public Health*, *16*(17), 3188. https://doi.org/10.3390/ijerph16173188

Ang, S., & Malhotra, R. (2018). Expressive social support buffers the impact of care-related work interruptions on caregivers' depressive symptoms. *Aging & Mental Health*, *22*(6), 755-763. https://doi.org/10.1080/13607863.2017.1317329

Bassah, N., Ubenoh, U. S., & Palle, J. N. (2018). An exploratory study of the knowledge and practices of family caregivers in the care of the elderly at home in the Buea Health District, Cameroon. *Journal of Gerontology & Geriatric Research*, *7*(473), 1000473. https://doi.org/10.4172/2167-7182.1000473

Boonyathee, S., Seangpraw, K., Ong-Artborirak, P., Auttama, N., Tonchoy, P., Kantow, S., Bootsikeaw, S., Choowanthanapakorn, M., Panta, P., & Dokpuang, D. (2021). Effects of a social support family caregiver training program on changing blood pressure and lipid levels among elderly at risk of hypertension in a northern Thai community. *PloS One*, *16*(11), e0259697. https://doi.org/10.1371/journal.pone.0259697

Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). New York: Routledge.

Canda, E. R. (2013). Filial piety and care for elders: A contested Confucian virtue reexamined. *Journal of Ethnic and Cultural Diversity in Social Work*, *22*(3-4), 213-234. https://doi.org/10.1080/15313204.2013.843134

Chappell, N. L., & Funk, L. (2012). Filial responsibility: Does it matter for care-giving behaviours? *Ageing & Society*, *32*(7), 1128-1146. https://doi.org/10.1017/S0144686X11000821

del Río Lozano, M., García-Calvente, M. d. M., Calle-Romero, J., Machón-Sobrado, M., & Larrañaga-Padilla, I. (2017). Health-related quality of life in Spanish informal caregivers: Gender differences and support received. *Quality of Life Research*, *26*, 3227-3238. https://doi.org/10.1007/s11136-017-1678-2

del-Pino-Casado, R., Frías-Osuna, A., Palomino-Moral, P. A., Ruzafa-Martínez, M., & Ramos-Morcillo, A. J. (2018). Social support and subjective burden in caregivers of adults and older adults: A meta-analysis. *PloS One*, *13*(1), e0189874. https://doi.org/10.1371/journal.pone.0189874

Department of Statistics Malaysia. (2020). *Pocket Stats Q1 2020 (Issue May)*. Department of Statistics Malaysia. https://www.dosm.gov.my

Díaz, M., Estévez, A., Momeñe, J., & Ozerinjauregi, N. (2019). Social support in the relationship between perceived informal caregiver burden and general health of female caregivers. *Ansiedad y Estrés*, *25*(1), 20-27. https://doi.org/10.1016/j.anyes.2019.04.001

Ghazali, S., Abdullah, K. L., Abd Aziz, A., Amin, R. B. M., & Sulaini, A. (2015). Burden of caregivers of the elderly with chronic illnesses and their associated factors in an urban setting in Malaysia. *Malaysian Journal of Public Health Medicine*, *15*(1), 1-9.

Giovannetti, E. R., Wolff, J. L., Xue, Q.-L., Weiss, C. O., Leff, B., Boult, C., Hughes, T., & Boyd, C. M. (2012). Difficulty assisting with health care tasks among caregivers of multimorbid older adults. *Journal of General Internal Medicine*, *27*, 37-44. https://doi.org/10.1007/s11606-011-1831-5

Goh, Z.-Y., Lai, M.-M., Lau, S.-H., & Ahmad, N. (2013). The formal and informal long-term caregiving for the elderly: The Malaysian experience. *Asian Social Science*, *9*(4), 174. https://doi.org/10.5539/ass.v9n4p174

Haya, M. A. N., Ichikawa, S., Wakabayashi, H., & Takemura, Y. (2019). Family caregivers' perspectives for the effect of social support on their care burden and quality of life: A mixed-method study in rural and sub-urban central Japan. *The Tohoku Journal of Experimental Medicine*, *247*(3), 197-207. https://doi.org/10.1620/tjem.247.197

Jantan, R., & Hussin, R. (2015). Analyzing co-creation in service innovation: Assisted living experience in Malaysia. *Journal of Contemporary Issues and Thought*, *5*, 27-39.

Kristanti, M. S., Kusmaryanto, K., & Effendy, C. (2021). Common ethical dilemmas of family caregivers of palliative patients in Indonesia. *Belitung Nursing Journal*, *7*(3), 246-250. https://doi.org/10.33546/bnj.1457

Lai, S. L., & Tey, N. P. (2021). The quality of life of older adults in a multiethnic metropolitan: An analysis of CASP-19. *SAGE Open*, *11*(2), 21582440211029910. https://doi.org/10.1177/21582440211029910

Leung, D. Y. P., Chan, H. Y. L., Chiu, P. K. C., Lo, R. S. K., & Lee, L. L. Y. (2020). Source of social support and caregiving self-efficacy on caregiver burden and patient's quality of life: A path analysis on patients with palliative care needs and their caregivers. *International Journal of Environmental Research and Public Health*, *17*(15), 5457. https://doi.org/10.3390/ijerph17155457

Liu, Y.-e., Norman, I. J., & While, A. E. (2013). Nurses' attitudes towards older people: A systematic review. *International Journal of Nursing Studies*, *50*(9), 1271-1282. https://doi.org/10.1016/j.ijnurstu.2012.11.021

Maheshwari Preksha, S., & Kaur, M. R. (2016). Perceived social support and burden among family caregivers of cancer patients. *International Journal of Health Sciences and Research*, *6*(1), 304-314.

Makhtar, A., & Samsudin, N. H. (2020). Filial piety expectations and loneliness among older people in Kuantan, Pahang. *Makara Journal of Health Research*, *24*(3), 203-207. https://doi.org/10.7454/msk.v24i3.1234

Michalík, J., & Valenta, M. (2012). Family caring for a family member with severe disability as a specific group of clients of helping professions. *Procedia-Social and Behavioral Sciences*, *69*, 467-476. https://doi.org/10.1016/j.sbspro.2012.11.435

Miller, B., & Guo, S. (2000). Social support for spouse caregivers of persons with dementia. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *55*(3), S163-S172. https://doi.org/10.1093/geronb/55.3.S163

Munoz-Bermejo, L., Adsuar, J. C., Postigo-Mota, S., Casado-Verdejo, I., de Melo-Tavares, C. M., Garcia-Gordillo, M. Á., Pérez-Gómez, J., & Carlos-Vivas, J. (2020). Relationship of perceived social support with mental health in older caregivers. *International Journal of Environmental Research and Public Health*, *17*(11), 3886. https://doi.org/10.3390/ijerph17113886

Naing, L., Winn, T., & Rusli, B. N. (2006). Practical issues in calculating the sample size for prevalence studies. *Archives of Orofacial Sciences*, *1*, 9-14.

Ng, C. G., Siddiq, A. N. A., Aida, S. A., Zainal, N. Z., & Koh, O. H. (2010). Validation of the Malay version of the Multidimensional Scale of Perceived Social Support (MSPSS-M) among a group of medical students in Faculty of Medicine, University Malaya. *Asian Journal of Psychiatry*, *3*(1), 3-6. https://doi.org/10.1016/j.ajp.2009.12.001

Nor, N. N. F. M., & Ghazali, S. (2021). Malaysia towards an ageing country. *GEOGRAFIA Malaysian Journal of Society and Space*, *17*(3), 234-245. https://doi.org/10.17576/geo-2021-1703-17

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill, Inc.

Perkins, E. A., & LaMartin, K. M. (2012). The Internet as social support for older carers of adults with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities*, *9*(1), 53-62. https://doi.org/10.1111/j.1741-1130.2012.00330.x

Rodríguez-Madrid, M. N., del Río-Lozano, M., Fernandez-Peña, R., Jiménez-Pernett, J., García-Mochón, L., Lupiañez-Castillo, A., & García-Calvente, M. d. M. (2019). Gender differences in social support received by informal caregivers: A personal network analysis approach. *International Journal of Environmental Research and Public Health*, *16*(1), 91. https://doi.org/10.3390/ijerph16010091

Tan, C.-E., Hi, M.-Y., Azmi, N. S., Ishak, N. K., & Aziz, A. F. A. (2020). Caregiving self-efficacy and knowledge regarding patient positioning among Malaysian caregivers of stroke patients. *Cureus*, *12*(3), e7390. https://doi.org/10.7759/cureus.7390

Thirumoorthy, A., Saraswati Devi, P., & Thennarusu, K. (2016). Social support among the caregivers of persons living with cancer. *International Journal of Humanities and Social Science Invention*, *5*(1), 45-52.

Vun, I. J. S., Cheah, W. L., & Helmy, H. (2020). Quality of Life and its associated factors among caregivers of patients with dementia--A crosssectional study in Kuching, Sarawak, Malaysia. *Neurology Asia*, *25*(2), 165 - 172.

Winahyu, K. M., Hemchayat, M., & Charoensuk, S. (2015). The relationships between health status, perceived control of symptoms, caregiver burden, perceived social support and quality of life among family caregivers of patients with schizophrenia in Indonesia. *The Journal of Prapokklao Hospital Clinical Medical Education Center*, *32*(1), 44-57.

Yilmaz, D., Kisa, S., & Zeyneloğlu, S. (2012). University students' views and practices of ageism. *Ageing International*, *37*, 143-154. https://doi.org/10.1007/s12126-010-9097-5

Yu, Y., Hu, J., Efird, J. T., & McCoy, T. P. (2013). Social support, coping strategies and health-related quality of life among primary caregivers of stroke survivors in China. *Journal of Clinical Nursing*, *22*(15-16), 2160-2171. https://doi.org/10.1111/jocn.12251

Yurtsever, S., Özge, A., Kara, A., Yandim, A., Kalav, S., & Yesil, P. (2013). The relationship between care burden and social support in Turkish Alzheimer patients family caregivers: Cross-sectional study. *Journal of Nursing Education and Practice*, *3*(9), 1-12. http://dx.doi.org/10.5430/jnep.v3n9p1

Zhao, C., Wong, L., Zhu, Q., & Yang, H. (2018). Prevalence and correlates of chronic diseases in an elderly population: A community-based survey in Haikou. *PloS One*, *13*(6), e0199006. https://doi.org/10.1371/journal.pone.0199006

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, *52*(1), 30-41. https://doi.org/10.1207/s15327752jpa5201_2

Cite this article as: Makhtar, A., Ab Ghani, N. N., Syed Elias, S. M., & Mohamed Ludin, S. (2023). Social support and associated factors among family caregivers of older people in North-East Peninsular Malaysia. *Belitung Nursing Journal, 9*(1), 69-78. https://doi.org/10.33546/bnj.2334