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## **Original article**

## Ability of older male caregivers to seek help when caring for a wife or mother with dementia living at home

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### Abstract

**Objective:** We aimed to clarify factors associated with the ability to seek help among older male caregivers who care for women with dementia in their families.

**Patients and Methods:** This information will inform strategies to support their continued provision of long-term care. Participants were 364 male caregivers recruited from three places: The study period was 2017–2018. We obtained ethical approval for this study from the relevant ethics committee.

**Results:** The ability to seek help for care problems among male caregivers was normally distributed. We found that more than 90% of older male caregivers did not actively seek help to resolve care problems, suggesting that older male caregivers had problems with long-term care. In the high score group, health status and the number of emotional support persons in the household were significantly and somewhat strongly positively correlated. The low score group showed a significant and rather weak positive correlation between economic status and health status, and the number of emotional supporters inside and outside the household.

Positive correlations for the high score group were self-esteem and depressive symptoms, and self-esteem and resources. Positive correlations for the low score group were self-esteem and depressive symptoms, self-esteem and resources, and resources and depressive symptoms.

**Conclusion:** Male caregivers are more likely to seek help if they are employed or play a role in their community. Nurses also need to support male caregivers with positive words and praise to help them use available support and resources and continue to provide long-term care. It is important for healthcare professionals to observe whether a caregiver presents with depressive symptoms or has long-term care problems because older male caregivers do not seek help. Collaboration between caregivers and medical, long-term care, and welfare professionals is necessary. Direct and timely intervention is needed.

Key words: male caregiver, dementia, help

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Introduction

In 2017, 27.3% of the Japanese population comprised older adults, and it is estimated that 38.4% of the population was over age 65 years. According to a Ministry of Health, Labour and Welfare Survey conducted in 2017, the number of people requiring nursing care will increase as the population ages. That survey also showed that dementia was the most common reason for needing long-term care, and the number of people with dementia is expected to continue to increase. The number of male caregivers has also increased, and some problems specific to male caregivers have been

identified. The National Lifestyle Survey showed the percentage of male family caregivers was 25% in 2001, but increased to 34.0% in 2016. Many older male caregivers care for wives or mothers<sup>1, 2)</sup>. Male caregivers are burdened and stressed when caring for their families, which can lead to abuse of the care recipient<sup>3–5)</sup>. For example, if providing care for people with dementia does not go as planned, male caregivers often experience shame and self-blame<sup>6)</sup>. In general, people do not want to feel shame<sup>7, 8)</sup>, which may make it even more difficult for male caregivers to request assistance. Characteristics related to the ability to seek help among men in family caregiver roles are unclear and require investigation and clarification.

We aimed to clarify factors associated with the ability to seek help among older male caregivers who provide care for women in their families with dementia. This information will inform strategies to support these caregivers in continuing to provide long-term care.

### **Participants and Methods**

Our research concept was based on the Lazarus stress coping theory<sup>9</sup> (Figure 1). We hypothesized that the stress response differed depending on how a male caregiver perceived stressors associated with long-term care and if they could ask for help. It is important to note that depression may occur as a stress response when dealing with stress-ors<sup>10</sup>.

Participants in this study were 364 male caregivers recruited from four places: caregivers of outpatients with dementia attending the University Hospital Department of Psychiatry Medicine and Department of Neurology, members of male caregivers' associations nationwide, and members of dementia patient family's associations nationwide. The study period was 2017–2018. Participants completed a self-administered questionnaire. We excluded those with incomplete answers, which left 311 participants for inclusion in the analysis (valid response rate 85.4%).

#### **Definition of terms**

Ability to seek help for care problems: behavior that benefits from others' input to resolve problems encountered when providing long-term home care<sup>11</sup>).

Patient with dementia: wife or mother who was diagnosed with dementia by a doctor.

Male caregiver: an older man who provides care for a wife or mother with dementia living at home.

#### Information covered in the questionnaire

We collected information about the age of the participating male caregivers, number of people living together in the home, participants' employment or role in the community, nursing care hours, length of care period, age of the patient with dementia, level of long-term care need certification, and dementia diagnosis.

The Care Problems Coping scale comprises 15 items on five factors<sup>12–15)</sup>. The scale focuses on nursing care problems encountered by men caring for someone with dementia at home. The five factors describe different styles of coping: "Solve the problem", "Emotional avoidance", "Cognitive transformation", "Careful supervision and waiting", and "Assistance request". Each item has three response options: "I don't think so" = 1 point, "I sometimes do so" = 2 points, and "I often do so" = 3 points. The total score for the assistance request coping subscale ranges from 2 to 6. A score of 2 points was considered low (low-scoring group) and a score of 6 points was considered high (high-scoring group). We compared the scores for the low- and high-scoring groups for each variable.

The J-ZBI\_8 comprises eight items. This tool is a careburden scale that was translated into Japanese by Arai *et*  $al^{16}$ . Its reliability and validity have been verified. The scale explores the burden arising from care, the burden that caused care to begin, and the overall care-burden.

The RSES-J consists of 10 items. The original version is a commonly used measure in other countries<sup>17)</sup>. The reliability and validity of the Japanese version were established in 2007. Each item has four response options: "strongly agree", "agree", "disagree", and "strongly disagree". The maximum total score is 40 points.

The SDS consists of 20 items, and is used to assess symptoms of depression. The scale correlates with the Hamilton Depression Rating Scale diagnostic criteria for depression. Each item has four response options: "infrequently", "sometimes", "often", and "almost always". The maximum total score is 80 points.



Figure 1 Lazarus stress coping framework.

Both a stable economic situation and good health are considered necessary for male caregivers to continue providing care for a family member with dementia. We evaluated whether participants were receiving support through emotional interaction with their families and other people to help resolve long-term care problems using Munakata's Emotional Support Network scale. This scale comprises 10 items, and examines where people obtain emotional support, particularly whether this is from within the family or from external sources.

#### Ethical approval

We obtained ethical approval for this study from the relevant ethics committee (approval code: 2017M003). This study conformed to the provisions of the Declaration of Helsinki in 1995 (as revised in Tokyo in 2004). The purpose of the study was explained to participants verbally and in writing. All participants were informed that their information and data would be treated confidentially. Participants gave their consent by returning a completed questionnaire.

#### Analysis

Based on the conceptual framework, the care-burden was identified, and coping with the care-burden was set as "care problem coping". The first evaluation measured selfesteem, and the second evaluation measured depression and resources.

The mean and standard deviation were calculated and used for the item analysis.

Stressors for providing long-term care were clarified from the background factors using factor analysis.

We used t-tests and chi-square test to evaluate betweengroup differences for ordinal scales (e.g., age) and Mann– Whitney U tests for interval scales (e.g., the RSES-J).

We compared the high- and low-scoring groups in terms of the ability to seek help. Participants with medium scores (i.e., 3-5 points) were excluded from this comparison.

Correlations between related items were calculated by Pearson's correlation coefficients for both the high- and lowscoring groups.

We used SPSS23.0J for Windows for the statistical analyses, and the significance level was set at 5%.

### Results

Among the 311 participants, 30 (9.6%) participants had high scores, 153 (49.2%) had medium scores, and 128 (41.2%) had low scores. The scores showed a lognormal distribution.

# Demographic data for participants and patients with dementia

There were significant differences between the low-

scoring and high-scoring groups in employment or role in a community situation, and those with low scores tended to be older than those with high scores (P<0.001).

The most common care need rating was 3 (n=72, 23.2%), and the second most common care need rating was 1. The most common dementia diagnosis was Alzheimer's type (n=172, 55.3%), followed by Lewy bodies type (n=72, 23.2%) (Table 1).

# Differences between high- and low-scoring groups

Comparisons between the high- and low-scoring groups showed that among factors related to the ability seek help for care problems, there were significant differences for self-esteem and emotional support in the family (P<0.001). For both self-esteem and emotional support in the family, those with low scores tended to be older than those with high scores (Table 2).

# Correlations with resources for the high- and low-scoring groups

There was a significant correlation between emotional support in the family and health status in the high-scoring group (r=0.41, P<0.001).

There was a significant correlation between emotional support in the family and outside the family in the low-scoring group (r=0.33, P<0.001). There was also a significant correlation between health status and economic situation in this group (r=0.21, P<0.005) (Table 3).

#### Factor analysis of long-term care stressors

We examined reliability using the measure internal consistency. The overall Cronbach's alpha value was 0.83. Principal component analysis was performed to identify stress in providing long-term care. Two items with a load of less than 0.4 were excluded. Next, exploratory factor analysis with promax rotation extracted five items and two factors. We confirmed the contribution rate for the two-factor solution was 54.38%. The first factor included the age of male caregivers, number of people living together, and level of certification of long-term care need. The second factor included length of care period and nursing care hours. The age of the patients with dementia was excluded because of low factor loading (Table 4).

# Ability to seek help for care problems based on external criteria

We compared the scores for the Care Problems Coping Scale, J-ZBI\_8, RSES, SDS, and resources between the high- and low-scoring groups.

#### High scoring group

We found slightly strong positive correlations between

#### Table 1 Participants' demographic data (n=311)

Variable			High-scoring group (n=30) 9.6%	Low-scoring group (n=113) 36.3%	$\chi^2$	t	Р
	Mean		Mean $\pm$ SI	D or n (%)			
Relationship with the caregiver	Mother Wife	13 (4.2) 298 (95.8)					
Male caregivers' age, years			$71.4\pm10.10$	$69.7 \pm 11.00$		-0.79	n.s
Number of people living together			$1.42\pm1.38$	$1.52\pm1.20$		0.22	n.s
Employment or role in a community situation			14 (47)	26 (23)	13.63		<0.001*
Nursing care hours			$4.17 \pm 1.03$	$4.15\pm1.17$		1.03	n.s
Average care period, months			$61.6\pm35.53$	$65.8\pm46.76$		0.49	n.s
Wife/mothers' age, years			$71.29\pm20.00$	$73.22\pm19.83$		0.46	n.s
Level of certification of long-term	Care support 1	3 (0.9)					
care need of wife or mother	Care support 2	27 (8.7)					
	Care need 1	71 (22.8)					
	Care need 2	51 (16.4)					
	Care need 3	72 (23.2)					
	Care need 4	9 (2.9)					
	Care need 5	7 (2.3)					
	Not applicable or unspecified	71 (22.8)					
Diagnosis of dementia	Alzheimer's type	172 (55.3)					
	Lewy bodies type	72 (23.2)					
	Cerebrovascular type	46 (14.8)					
	Frontotemporal lobar degeneration	21 (6.7)					

Student's t-test, n.s: not significant.  $*\chi^2$  test: P < 0.001: significant difference. ()=%. SD: standard deviation.

self-esteem and depression (r=0.48) and between self-esteem and resources (r=0.40). There was a weak positive correlation between depression and resources (r=0.26) (Figure 2).

#### Low scoring-group

We found slightly strong positive correlations between self-esteem and depression (r=0.28) and between self-esteem and resources (r=0.26). There was a slightly weak positive correlation between depression and resources (r=0.26) (Figure 3).

### Discussion

The ability to seek help for care problems among male caregivers was normally distributed. The high score group comprised 30 (9.6%) participants, the medium score group comprised 253 (49.2%) participants, and the low score group comprised 128 (41.2%) participants. We found that more than 90% of older male caregivers did not actively seek help to resolve care problems<sup>18</sup>). We therefore considered that it was important to clarify factors associated with the ability to seek help.

Male caregivers who are employed or have a role in a

community situation have opportunity for many social emotional exchanges. This suggests that these caregivers may have a high ability to seek help because they are in an environment where they are connected with other people and are therefore more likely to seek help than male caregivers who have a low ability to seek help. Low ability to seek help does not often lead to employment or community roles. They may have fewer opportunities for emotional interaction in society. They may not seek help and remain isolated from society with problems in caregiving due to the lack of opportunities for emotional interaction in society.

For older men, having a social role is also economically important and considered necessary to maintain masculinity<sup>11, 19, 20</sup>. It may therefore be necessary to promote a mechanism that allows older male caregivers to continue working and contributing to community activities to increase their ability to seek help.

The high-scoring group had more family interaction and higher self-esteem than the low-scoring group. Emotional exchanges can help people to recover their mental health status when they are experiencing stress<sup>21–23</sup>. For example, family members who actively talk were reported to be highly satisfied<sup>24, 25</sup>. A previous study found associations between

Variable			High-scoring group (n=30) 9.6%	Low-scoring group (n=113) 36.3%	t	Р
Resource	Economic situation	<ol> <li>I'm in good condition</li> <li>I have no trouble in my life</li> <li>I have a problem in my life</li> </ol>	$1.4\pm0.62$	$1.36\pm0.55$	-0.33	n.s
	Health conditions	<ol> <li>Satisfactory</li> <li>Fairly satisfied</li> <li>Fairly unhealthy</li> <li>Unhealthy</li> </ol>	$2.4\pm0.72$	$2.22\pm0.70$	-1.21	n.s
	I have emotional supp	port in the family	$2.3\pm2.39$	$1.04\pm1.73$	-2.80	< 0.001
	I have emotional supp	port out of the family	$2.93\pm2.47$	$2.61\pm2.44$	-0.71	n.s
Cognition	Care burden		$9.6\pm8.31$	$11.6\pm9.34$		
Evaluation	Self-esteem Depression		$\begin{array}{c} 13.8 \pm 6.51 \\ 38.13 \pm 10.03 \end{array}$	$\begin{array}{c} 6.9\pm7.00\\ 37.19\pm10.31\end{array}$	-0.47	<0.001 n.s

#### Table 2 Differences between high- and low-scoring groups (n=143)

Mann–Whitney U test. Data shown as mean ± standard deviation. n.s: not significant. P<0.001: Significant difference.

#### Table 3 Correlations with resources in the high- and low-scoring groups

		Economic	Health conditions		I have emotional support in the family		I have emotional support out of the family	
		situation	Correlation coefficient	Р	Correlation coefficient	Р	Correlation coefficient	Р
High-scoring group (n=30)	Economic situation Health conditions I have emotional support in the family I have emotional support out of the family	_	0.02	n.s	-0.15 0.41 -	n.s <0.001	0.11 -0.12 0.35	n.s n.s n.s
Low-scoring group (n=113)	Economic situation Health conditions I have emotional support in the family I have emotional support out of the family	_	0.21	<.005	0.10 0.09 -	n.s n.s	-0.11 -0.15 0.33	n.s n.s <0.005

Test statistic was Pearson's correlation coefficient. n.s: not significant. P<0.001: Slightly Strong correlation. P<0.005: Slightly Weakly correlations.

		Factor loading		
		Factor 1	Factor 2	
Factor 1	Male caregivers' age	-0.93	0.27	
	Number of people living together	0.55	0.04	
	Level of certification of long-term care need of wife or mother	0.52	0.31	
	Average care period	0.32	0.05	
Factor 2	Nursing care hours	0.02	0.99	
Variance	value	1.55	1.17	
Contribution rate %		31.01	23.37	
Cumulo-contributing rate %		31.01	54.38	

 Table 4
 Factor analysis of long-term care stressors

Cronbach's alpha=0.83. Promax-rotation.

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Figure 2 Relationship between ability to seek help for care problems and external criteria in the high-scoring group. Test statistic was Pearson's correlation coefficient.



Figure 3 Relationship between ability to seek help for care problems and external criteria in the low-scoring group. Test statistics was Pearson's correlation coefficient.

satisfaction in their caregiving life and continued care at home among family caregivers. Male caregivers who do not seek help may need to be monitored for health or financial problems, and medical and welfare teams need to work together to assist male caregivers<sup>26</sup>. For example, nurses may need to speak positively and with respect to male caregivers to encourage these caregivers to seek and accept support from others.

Regardless of the strength of ability to seek help, we found associations between self-esteem and resources and self-esteem and depressive symptoms among older male caregivers, although the strength of the correlations differed. Male caregivers in the high-scoring group tended to have high self-esteem and confidence. They were prone to depression symptoms, but at the same time had a wealth of emotional interaction and maintained their own health.

Older male caregivers often do not ask for help and may not actively interact with their surroundings. There may be a high risk for social isolation among these caregivers if their connection with their surroundings is weak. In addition, individual isolation is thought to cause family isolation<sup>27</sup>). Previous research suggested that even if the people surrounding the caregiver had established a support system, male caregivers will not seek help to resolve a care problem. However, one study found that husbands sought support to resolve care problems after learning the limits of long-term care and consulting a medical institution<sup>28</sup>). This highlights the importance of caregiving support from professionals such as visiting nurses, social workers, and home visit docters<sup>29</sup>).

Because older male caregivers do not seek help, health-

care professionals should observe whether they present with depressive symptoms or other care problems and offer support. Collaboration among medical, long-term care, and welfare professionals is important, and direct and timely intervention may be required.

### Conclusion

This study showed that more than 90% of older male caregivers have problems with long-term care. However, simply building a support system without the caregiver actively seeking help from others will not meet their support needs. Male caregivers that have a job or play a role in their community are more likely to seek help with caregiving, which highlights the importance of supporting male caregivers to take such roles. Nurses also need to support male caregivers with positive words and praise to encourage them to use available resources while continuing to provide longterm care for their family member. It is important for health professionals to it is necessary to observe whether older male caregivers are presenting with depressive symptoms and are unable to seek help because of long-term care problems. Cooperation between caregivers and healthcare and welfare professionals is important, and may require direct and timely intervention.

Participants were older males who provided care for family members with dementia at home but who could visit a hospital. The generalizability of the results is limited as we did not consider male caregivers who may already be receiving support and those who cannot connect with society. Al-

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though we considered the necessity of emotional exchanges, the method and content of such exchanges was not examined. It is necessary for further studies to collaborate with professionals that provide home medical care and explore the ability to request assistance among men who cannot go out and men who have no experience in long-term care.

**Conflicts of interest:** There are no conflicts of interest to be disclosed.

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