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ORIGINAL ARTICLE

# Male Caregivers Get Coping to Nursing care with Dementia Living at Home

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## ABSTRACT

**Object:** Clarify male caregivers get coping to Nursing care with dementia living at Home.

**Patients/Materials and Methods:** The subjects were 298 male caregivers. Nursing care burden was assessed using the Zarit Caregiver Burden Scale. Ability to cope with care problems was assessed using the Nursing Care Problems Coping Scale for Male Caregivers for People with Dementia Living at Home. It is clarify that significant correlations between the five coping styles of the NCSM and J-ZBI, long-term care need.

**Results:** There was a significant correlation ( $P < 0.04$ ) between the point (index) of NCSM and Zarit Caregiver Burden Scale. A positive significant correlation was found in three coping styles. A negative significant correlation was found in one coping style, and no significant correlation in one coping style. There was a significant correlation ( $P < 0.04$ ) between the point (index) of NCSM and Zarit Caregiver Burden Scale. A positive significant correlation was found in the 'Solve the problem' coping style.

**Conclusion:** Solve the problem style constitution categories are revise, Information gathering, planning, learn from the experience of caring. To focus coping is Male Caregivers Get Coping to Dementia Living at Home. And to reduce the care burden of this style of caregiver, it is important to help how caregivers with this style can be helped. Solve the problem style is effective continue nursing care problems coping style.

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## I. Introduction

In Japan, the number of older adults with dementia requiring nursing care is increasing. By 2025, this figure is expected to reach more than 7.00 million <sup>1)</sup>. With a rapidly aging population and greater life expectancy <sup>2)</sup>, it is estimated that by 2025, 25% of the population over the age of 65 years will have dementia<sup>3)</sup>. It has also tried to strengthen public and private efforts to improve care and support for people with dementia and their caregivers. Dementia is a syndrome in which there is deterioration in memory, thinking, behavior and the ability to perform everyday activities<sup>4)</sup>. Extra care is required for people with dementia with behavioral and psychological symptoms, which places a burden on caregivers and may damage their psychological health<sup>4)</sup>. In Japan, families with just two or one living accounted for 36.7% of the total number of households in 2010, but this is expected to change because of a change in family structure and an increase in family size <sup>5)</sup>. Therefore families with just two or one living accounted for 58.4% of the total number of households in 2035<sup>6)</sup>. 17.0% of the population were unmarried men in their fifties in 2010, but this is expected to increase to 25.2% by 2030. The proportion of unmarried men in their sixties was 9.1% in 2010, but is expected to more than double to 19.8% by 2030. The number of male caregivers of people living at home is increase <sup>7)</sup>.

Male caregivers have been reported to have health problems and social issues<sup>8)</sup>. They suffer from depression<sup>9)</sup>, tension<sup>10)</sup>, and dissatisfaction, and their needs are not represented. Male caregivers often do not seek counseling or support from friends or other people<sup>11)</sup> and they can easily become isolated from their local community <sup>12)</sup>. They are often so devoted to the care they provide that they cannot work or pursue personal interests <sup>13)</sup>. The problems that male caregivers face can affect each other, reducing quality of life and affecting psychological condition<sup>14)</sup>. Male caregivers often experience problems providing care, and these problems are not effectively managed. It is predicted that male caregivers will be found not to ask friends and family to help solve nursing problems. Male caregivers are also more likely to abuse the person for whom they are providing care <sup>15)</sup>.

The purpose of this study was to clarify male caregivers get coping to dementia Living at Home. So the relative period spent providing nursing care and coping of care problems male caregivers for people with dementia living at home.

## II. Subjects and Methods

### 1. Subjects and Procedures

The subjects were 762 male caregivers.

Measurements

We wanted to examine issues of age, relationship with the caregiver, employment situation and period spent providing nursing care. It was thought that support might vary with employment status, so we also asked about whether the person was employed or unemployed.

We were advanced along a concept framework of Lazarus Coping theory. We used several scales, including the Japanese version of the Zarit Caregiver Burden Scale (J-ZBI)<sup>16)</sup>. The Care Problems Coping Scale, or Nursing Care Problems Coping for Male Caregivers for People with Dementia Living at Home (NCSM)<sup>17;18;19;20;21)</sup>.

## 2. Data Collection

1) J-ZBI: This scale Cronbach's  $\alpha$  is 0.93. This scale consists of 22 items, and is a care burden scale that was translated into Japanese by Arai et al. Its reliability and validity have been verified, and it has been used in many previous studies in Japan. Its main focus is the burdens arising from providing care, having to start to provide care, and overall. It uses a five-point Likert-type scale with choices ranging from never = 0, through rarely = 1, sometimes = 2, and quite often = 3 to nearly always = 4.

2) NCSM: This scale Cronbach's  $\alpha$  is 0.76. This scale consists of 15 items and five factors. Its main focus is nursing care problems encountered by men caring for someone with dementia at home. The five factors are divided into 'Solve the problem', 'Emotional avoidance', 'Cognitive transformation', 'Careful supervision and waiting' and 'Assistance request' styles of coping.

We also asked about the care recipient's age, diagnosis of dementia and level of certification of long term care need.

## 3. Statistics analysis

### We performed two main statistical analyses:

We looked at the answer distribution compared with the mean and standard deviation that male caregivers of age, relationship with the caregiver, employment situation, period spent providing nursing care and J-ZBI. Add people with dementia of age, diagnosis of dementia, level of certification of long-term care need. We examined correlations between NCSM scores, period spent providing nursing care and the J-ZBI; Pearson's correlation coefficient.

All statistical analyses were performed using the Japanese version of SPSS22.0 for Windows. The level of statistical significance was set at 0.05 (two-tailed).

## 4 Ethical approval

We obtained ethical approval for this study from the ethics committee of Fukuoka University (approval code: 13-7-07). The study conforms to the provisions of the Declaration of Helsinki in 1995 (as revised in Tokyo in 2004). Consent was obtained from hospitals, a care facility, and the Men's Caregiver and Family Association. The purpose of

the study was explained orally and in writing to the relevant parties. Subjects were informed that their information and data would be treated confidentially. Subjects gave their consent by returning completed questionnaires.

### III. Results

#### 1. Subject Characteristics

We received valid responses from 298 people, a response rate of 39.1%. The mean subject age was 70.1 (SD 11.2) years. The care recipient was the caregiver's wife in 190 cases (63.8%), the parent of the caregiver in 103 cases (34.6%), and another relative in four cases (0.2%). Of the respondents, 99 (29.9%) were employed, of whom 43 (14.4%) were farmers, 28 (9.4%) were company employees, and 24 (8.1%) worked in a family-operated business. The mean period spent providing nursing care was 12.0(SD 8.6) years. The J-ZBI of overall care burden mean score was 2.1 (SD 1.2) (see Table 1).

**Table 1 .** Demographic information of respondents.

|                                      | Variable                        | Results (%)  |
|--------------------------------------|---------------------------------|--------------|
| Age                                  | Mean age                        | 70.1 SD 11.2 |
|                                      | Relationship with the caregiver |              |
|                                      | Wife                            | 190 (63.8)   |
|                                      | Parent                          | 103 (34.6)   |
|                                      | Other relative                  | 4 (0.2)      |
| Employment status                    | Employed                        | 99 (29.9)    |
|                                      | farmer                          | 43 (14.4)    |
|                                      | company employee                | 28 (9.4)     |
|                                      | family-operated business        | 24 (8.1)     |
|                                      | Unemployed                      | 104 (34.9)   |
| Period spent providing nursing care. | The mean time (years)           | 12.0 SD 8.6  |
| J-ZBI*                               | Mean point score (SD)           | 2.1 SD 1.2   |

\*Japanese version of the Zarit Caregiver Burden Scale

#### 2. Overview of care recipients

The mean age of the care recipients was 78.1 (SD 9.8) years. In total, 179 (54.6%) had Alzheimer's type dementia, 68 (28.8%) had Lewy body type, 8(2.8%) had front-temporal lobar degeneration. (See Table 2).

**Table 2** Overview of the people with dementia

| Variable                                      |                                   | Results (%) |        |
|---|-----------------------------------|-------------|--------|
| Age   | Mean                              | 78.1        | SD 9.8 |
| Diagnosis of dementia                         | Alzheimer's type                  | 179         | (54.6) |
|   | Lewy bodies                       | 68          | (28.8) |
|   | Frontotemporal lobar degeneration | 8           | (2.8)  |
|   | Cerebrovascular type              | 9           | (2.7)  |
|   | Pick type                         | 4           | (1.2)  |
| Level of certification of long-term care need | Care support 1 or 2               | 20          | (6.7)  |
|   | Care need 1                       | 65          | (21.8) |
|   | Care need 2                       | 47          | (15.7) |
|   | Care need 3                       | 41          | (13.7) |
|   | Care need 4                       | 41          | (13.7) |
|   | Care need 5                       | 53          | (17.8) |
|   | Not applicable or unspecified     | 31          | (10.4) |

*Note.* Care support is a less intensive level of support required than care need.  
The numbers refer to increasing levels of care required.

### 3. Significant correlations between the five coping styles of the NCSM and J-ZBI.

As 'Solve the problem' coping style and the J-ZBI were  $r = 0.26$ , There was a significant positive correlation. As 'Emotional avoidance style' coping style and the J-ZBI were  $r = -0.31$ , there was a significant negative correlation. As 'Cognitive transformation style' and the J-ZBI were  $r = 0.24$ , there was a significant positive correlation. As 'Careful supervision and waiting style' coping style and the J-ZBI were not significant correlation. As 'Request assistance style' and the J-ZBI were  $r = 0.18$ , there was a significant positive correlation (See Table 3).

### 4. Significant correlation between coping style and period spent providing nursing care.

As 'Solve the problem' style and period spent providing nursing care were  $r = 0.17$ , there was a significant positive correlation. As 'Emotional avoidance style' and period spent providing nursing care were not significant correlation. As 'Cognitive transformation style' and period spent providing nursing care were significant correlation. As 'Careful supervision and waiting style' and period spent providing nursing care were not significant correlation. As 'Request assistance style' and period spent providing nursing care were not significant correlation (See. Table 3).

**Table 3. Significant correlations between five coping styles of the NCSM and period spent providing nursing care.**

|  | J-ZBI    | Period spent providing nursing care. |
|--|----------|--------------------------------------|
| <b>1 Solve the problem type</b>  |          |                                      |
| I collect information to help with nursing care.   |          |                                      |
| I plan for when to do nursing care.  | 0.26 **  | 0.17 **                              |
| When nursing care is not successful, I think about the possible cause.                                       |          |                                      |
| I think that one can learn from the experience of caring.  |          |                                      |
| <b>2 Emotional avoidance type</b>  |          |                                      |
| I think that providing nursing care is not my responsibility.  |          |                                      |
| I think that providing nursing care is seen as shameful.   |          |                                      |
| I think it is pathetic to provide even this much nursing care.   | -0.31 ** | n.p                                  |
| I become emotional or destroy things.  |          |                                      |
| I try not to look as I provide nursing care.   |          |                                      |
| <b>3 Cognitive transformation type</b>   |          |                                      |
| Having to provide care has been imposed on me.   | 0.24 **  | n.p                                  |
| I will try hard to provide nursing care.   |          |                                      |
| <b>4 Careful supervision and waiting type</b>  |          |                                      |
| I will wait until I can provide good nursing care.   | n.p      | n.p                                  |
| I am optimistic that I will improve.   |          |                                      |
| <b>5 Assistance request type</b>   |          |                                      |
| I ask for help from neighbors, family and/or relatives.  | 0.18 **  | n.p                                  |
| It is a heavy burden to provide nursing care, so I get support from family members and the people around me. |          |                                      |

Pearson's correlation coefficient. \*\*p 0.01

J-ZBI: Japan Zarit Caregiver Burden Scale

NCSM; Nursing Care Problems Coping Scale for Male Caregivers

#### IV. Discussion

We aimed to clarify the male caregivers get coping to dementia Living at Home. And this study is contribute to male caregivers. This study is relative period spent providing nursing care and coping of care problems male caregivers for people with dementia living at home. The significance of this study is that it focuses only on men, and therefore demonstrates their particular problems providing care. Men may have particular issues in coping with a nursing care problem<sup>7)</sup>. When a male caregiver has trouble with providing nursing care, previous studies have shown that they do not tend to ask for external support<sup>22)</sup>. They has troubled that go to work or remain at home<sup>23)</sup>. However, I have to more evaluation of nursing care problems coping, son or husband, employed caregiver or not, they have emotional supporter<sup>24,25)</sup> or not.

1) Solve the problem style

J-ZBI has a positive correlation with 'solve the problem' style in male caregivers, and this style is also connected with the period spent providing nursing care. Solve the problem style constitution categories are revise, Information gathering, planning, learn from the experience of caring. To focus coping is Male Caregivers Get Coping to Dementia Living at Home. And to reduce the care burden of this style of caregiver, it is important to help how caregivers with this style can be helped. Solve the problem style is effective. Continue nursing care problems coping style<sup>24</sup>). It is same report of Miyasaka<sup>25</sup>)that period spent providing nursing care is important to satisfied and continuing caregiver.

2) Emotional avoidance style

This style is negatively correlated with J-ZBI, and this style is a not connected with the period spent providing nursing care. Therefore Emotional avoidance style is not get with a period spent providing nursing care coping. This coping style tend to be a suicide and murder by care providers<sup>26</sup>). This style is a case for formal intervention to safeguard the care recipient.

3) Cognitive transformation style

This style is positive correlated with J-ZBI, and this style is a not connected with the period spent providing nursing care. Cognitive transformation style can invest all their time and energy in providing care, increasing their social isolation to serious levels<sup>31</sup>). Therefore Cognitive transformation style is not get with a period spent providing nursing care coping.

4) Careful supervision and waiting style.

There were no correlations between this style and J-ZBI, period spent providing nursing care. Therefore Careful supervision and waiting style is not get with a period spent providing nursing care coping.

5) Assistance request style.

This style has positive correlations with J-ZBI and this style is not connected with the period spent providing nursing care. These caregivers tend to support<sup>20</sup>). Therefore Assistance request style is not get with a period spent providing nursing care coping. Thus, Solve the problem style is effective continue nursing care problems coping style.

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