

Asian Journal of  
**HUMAN  
SERVICES**

Printed 2017.1030 ISSN2188-059X  
Published by Asian Society of Human Services

October 2017  
VOL. 13



ORIGINAL ARTICLE

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

Midori NISHIO, Kumiko OGATA, Hiromi KIMURA, Kayoko KOGA.

Department of Nursing, Faculty of Medicine, Fukuoka University, Fukuoka, Japan

## 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.

Received  
March 24, 2017

Revised  
April 27, 2017

Accepted  
July 8, 2017

Published  
October 30, 2017

<Key-words>

male caregivers, dementia, coping, period spent providing nursing care.

[nisiomidori@adm.fukuoka-u.ac.jp](mailto:nisiomidori@adm.fukuoka-u.ac.jp) (Midori NISHIO; Japan)

Asian J Human Services, 2017, 13:1-9. © 2017 Asian Society of Human Services

## 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.

### Acknowledgment

We thank the doctors who cooperated with Fukuoka University Hospital, as well as all the male caregivers and dementia family caregivers. This study was supported by the 2013 first semester home care subsidy of Yuubi Memorial Goods Research Funding and Kyushu-University Funding.

## References

- 1) Department of Psychiatry, University of Tsukuba [cited 1 May 2017] Dementia prevalence in the urban area and correspondence to life functional disorder of dementia. Available from. <http://www.tsukuba-psychiatry.com>.
- 2) Tanigawa D, Misu S, Sawa R, Nakakubo S, Tsutsumimoto K, Doi T, et al. (2014) Cross-sectional relationships between depression and psychological elements of pain for elderly people requiring long-term care. *Psychogeriatrics*, 25(2), 177-184.
- 3) Kiyohara Y (2013) Advances in aging and health research. *Japan Foundation for Aging and Health*, 1(1), 25-34.
- 4) WHO (2015) <http://www.who.int/mediacentre/factsheets/fs362/2015>.
- 5) Health Labor and Welfare Statistics Association (2016) *2016/2017 Journal of health and welfare statistics*.
- 6) Health Labor and Welfare Statistics Association (2016) *2016/2017 Journal of health statistics*.
- 7) Saito M (2015) The Contemporary Issue of Family Care and Gender Equality. *Japanese Journal of Labour Studies*, 658, 35-46.
- 8) Nagai Y, Hori Y, Hoshino J, Hamamoto R, Suzuki Y, Sugiyama A, Niimi Y, et al. (2011) Subjective physical and mental health characteristics of male family caregivers. *Japanese Society of Public Health*, 58, 606-615.
- 9) Nicole R, Ashley N, Kleinpeter C (2002) Gender differences in coping strategies of spousal dementia caregivers. *Journal of Human Behavior in the Social Environment*, 1(1), 29-46.
- 10) Papastavrou E, Tsangari H, Kalokerinou A, Savvas S, Panagiota C (2009) Gender issues in caring for demented relatives. *Health Science Journal*, 3(1), 41-53.
- 11) Waki J (1998) Families Caring the Aged-Toward Development of Empowerment. *Kawashima Publishing*, 1(1), 40-167.
- 12) Smale B, Dupuis S (2013) Caregivers of persons with dementia: Roles, experiences, supports and coping. Ontario Dementia Caregiver Needs Project. <https://uwaterloo.ca/murray-alzheimer-research-and-education-program/sites/ca.murray-alzheimer-research-and-education-program/files/uploads/files/InTheirOwnVoices-LiteratureReview>.
- 13) Matsuura T (2013) The actual situation of the care by a working person, *Nissay Basic Res Center*; 1(1), 2-28.
- 14) Morimoto T, Schreiner A, Asano H (2003) Caregiver burden and health-rated quality of life among Japanese stroke caregivers. *Age Ageing*, 32(2), 218-223.

- 15) Kinuko T, Emiko K, Momoe K (2010) Jittusennkaramanabu: Elderly Abuse. *Japan Nursing Care Association*, 1(1), 57-91.
- 16) Arai Y, Kudo K, Hosokawa T, Washio M, Miura H, Hisamichi S (1997) Reliability and validity of the Japanese version of the Zarit Caregiver Burden Interview. *Psychiatry and Clinical Neuroscience*; 51, 281-287.
- 17) Nishio M, Ogomori K, Oma S, Uchida N, Nishimura R, Ono M (2014) Development of the Coping Scale for home care of male caregivers of dementia. *Bio Medical Fuzzy System*, 16(1), 15-21.
- 18) Nishio M, Ono M (2015a) Development of a nursing care problems coping scale for male caregivers for people with dementia living at home. *J rural Med*, 10(1), 34-42.
- 19) Nishio M, Ono M, Kimura H, Ogamori K, Oma S, Urashima H et al. (2015b) Reliability and Validify of the Nursing Care Problems Coping Scale for Male Caregivers for People with Dementia Living at Home. *International Journal of Nursing & Clinical Practice*, <http://dx.doi.org/10.15344/2394-4978/2015/130>.
- 20) Nishio M, Nakano M, Kimura H, Ogata K, Sakanashi S, Nishimura K (2016) Calculation of the Coping Scale for home care of male caregivers of dementia. *Bio Medical Fuzzy System*, 18(2), 15-21.
- 21) Nishio M, Kimura H, Ogomori K, Urashima H, Ono M (2015) Dannsei kaigoshu to sahakai wo tsunaggu; Care men's kitchen. *Community Care*, 17(12), 67-71.
- 22) Czaja S, Gitlin L, Schulz R, Zhang S, Burgio L, Stevens A et al. (2009) Development of the risk appraisal Measure-A Brief Screen to Identify Risk Areas and Guide Interventions for Dementia Caregivers. *The American Geriatrics Society*. 57(6), 1064-1072.
- 23) Yoshitomo T (2015) Cyunen Danseino Jisatsu. *Koushu-Eisei*, 79 (3), 181-188.
- 24) Midori N, Hiromi K, Koji O, Kumiko O (2017), Emotional and Instrumental Support Influencing Male Caregivers for People with Dementia Living at Home. *J rural Med*, 12(1), 20-27.
- 25) Miyasaka K, Fujita K, Tabuchi Y (2014) A study on the Positive Appraisal Toward Caregiving of the Family Members Who Care Elderly People with Dementia. *Japan Academy of Gerontological Nursing*, 18(2), 58-66.
- 26) Sara J, Laura N, Richard S, Song Z, Alan B, Linda O et al. (2009) Development of the risk appraisal measure; A brief screen to identify risk areas and guide interventions for dementia caregivers. *J Am Geriatr Soc*. 57(6), 1064-1073.

**- Editorial Board -**

Editor-in-Chief	Masahiro KOHZUKI	Tohoku University (Japan)
Executive Editors	Injae LEE	Hanshin Univerisity (Korea)
	Satoru EBIHARA	Toho University (Japan)

Atsushi TANAKA  
University of the Ryukyus (Japan)

Changwan HAN  
University of the Ryukyus (Japan)

Guo QI  
Tianjin Medical University (China)

Hideyuki OKUZUMI  
Tokyo Gakugei University (Japan)

Hsintai LIN  
National Taiwan Noraml University (Taiwan)

Inkeri Ruokonen  
University of Helsinki (Finland)

Jaewon LEE  
Pukyong National University (Korea)

Jenyi LI  
Nanyang Technological University (Singapore)

Jung Won Sonn  
University College London (UK)

Kagari SHIBAZAKI  
University of Huddersfield (UK)

Nigel A Marshall  
University of Sussex (UK)

Osamu ITO  
Tohoku University (Japan)

Taku HARADA  
Tohoku University (Japan)

Petr Dobšák  
Masaryk University (Czech)

Sunwoo LEE  
Inje University (Korea)

Taekyun YOO  
Soongsil University (Korea)

Youngchoul KIM  
University of Evansville (USA)

Yuichiro HARUNA  
National Institute of Vocational Rehabilitation (Japan)

Zhongli JIANG  
First Affiliated Hospital of Nanjing Medical  
University (China)

**Editorial Staff**

- Editorial Assistants	Aiko KOHARA	University of the Ryukyus (Japan)
	Marcus Eije Zantere	University of Gothenburg (Sweden)
	Moonjung KIM	Korea Labor Force Development Institute for the aged (Korea)
	Natsuki YANO	Tohoku University (Japan)

**Asian Journal of Human Services**

**VOL.13      October 2017**

© 2017 Asian Society of Human Services

Editor-in-Chief      Masahiro KOHZUKI

Presidents              Masahiro KOHZUKI · Sunwoo LEE

Publisher              Asian Society of Human Services

Faculty of Education, University of the Ryukyus, 1 Senbaru, Nishihara, Nakagami, Okinawa, Japan  
FAX: +81-098-895-8420    E-mail: ashs201091@gmail.com

Production              Asian Society of Human Services Press

Faculty of Education, University of the Ryukyus, 1 Senbaru, Nishihara, Nakagami, Okinawa, Japan  
FAX: +81-098-895-8420    E-mail: ashs201091@gmail.com

*CONTENTS*

**ORIGINAL ARTICLES**

---

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

Midori NISHIO et al., 1

Study on Triage Education for Nursing Students: Analysis of Their Errors in Triage

Kazuyuki AKINAGA et al., 10

The Role of Surgical Nurse in International Disaster Response (IDR) in Japan  
: Recognition of the Medical Workers with Experience in IDR

Akina ISHIBASHI et al., 23

Objective and Subjective Evaluation of Neurofeedback Trainings in Nonclinical Individuals

Kota SUZUKI et al., 36

Life Satisfaction and Social Capital of the Chinese Elderly

Xinyu HE et al., 46

Development of a Tool for Collaboration between the Fields of Medicine and Education Based on  
“Inclusive Needs-Child Record”: With Focus on Autism Spectrum Disorder (ASD) and Attention  
Deficit/Hyperactivity Disorder (ADHD)

Natsuki YANO et al., 63

**CASE REPORT**

---

Individual Evaluation of the Visual Functions of Children with Severe Motor and Intellectual  
Disabilities using the Heart Rate Index

Osamu ISHIDA et al., 75

---