

## FACTORS AFFECTING ATTITUDES TOWARD CARE OF ELDERLY MOTHERS

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**Objective** In this study, we aimed to examine the factors that affect people's attitudes toward parental care. Previous qualitative studies present several factors that affect the decision of adult children of whether to take care of elderly parents or send them to a nursing home when they become fragile and need daily help. In the present study, we included affection, filial obligation, *sekentei* (i.e., wanting to keep an appearance of taking care), and other factors presented in previous studies.

**Methods** In May 2001, we mailed a questionnaire to females in their 30s who live in an agricultural area of K. City, Saitama Prefecture in Japan. We asked the respondents whether they would take care of their mothers or mothers-in-law, or send the mothers to a nursing home when the mothers need 24-hour care in the near future.

**Results** Logistic regression analysis revealed that filial obligation and *sekentei* affected attitude toward care in the case of a mother while affection did in the case of a mother-in-law.

**Discussion** These results suggest that women who do not have intimate feelings towards their mothers-in-law may choose not to be a caregiver. On the other hand, women may take care of their mothers, whatever feelings they have because of the blood-relation. Also it may be that in such a small agricultural area, *sekentei* affects people's conduct, even if it is a private matter, such as caring an elderly mother.

**Key words** : attitudes toward care, affection, filial obligation, *sekentei*

### I. Introduction

#### *Background*

The number of those over 65 years old in Japan reached 24 million in May 2004, which was over 19%<sup>1)</sup> of the total population. One characteristic of aging in Japan is rapidness. It took only 24 years for a proportion of the elderly Japanese aged 65 and over to grow from 7% to 14% in Japan, while in other countries such as France, Sweden, and German it took 115, 85, and 40 years, respectively<sup>2)</sup>. More seriously, with the increasing proportion of elderly, the number of those needing care is rising rapidly. In February 2004, the number of those who were considered as "a person who needs care" was 3.8 million and this number continues to increase<sup>3)</sup>.

After the World War II, especially after the 1960s, the nuclear family increased in Japan so that the typical family structure drastically changed. Un-

der the circumstances, it is natural that filial obligation functions have been weakening. The Middle, Old Age Questionnaire on Aging Problem<sup>4)</sup> revealed that 47.2% of respondents in the 40–59 age group, when asked about who should care for elderly parents or spouses, responded that "mainly a spouse, or children with the remainder to be supplied by a home-helper service or welfare service." Some 33.5% stated that "mainly a spouse, or children should take care" while only 8.6% suggested "to reduce the burden to the family, use an old-people's home". On the other hand, the percentage of those in their 60s who answered "mainly a spouse, or children should take care" was 46.2%, "mainly a spouse, or children with the remainder to be supplied by a home-helper service or welfare service" was 31.0%, and "to reduce the burden to the family, use an old-people's home" was 10.1%, respectively.

In another survey conducted in metropolitan areas including Tokyo, Osaka, and Sendai and whose respondents were over the age 20, the majority answered that "Professional services would be preferred" if their relatives become suffering from senile dementia. The percentages by city were Tokyo 75.1%, Osaka 65.8%, and Sendai 73.0%<sup>5)</sup>. What this research tells us is that there are differences in

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terms of attitude toward care between generations as well as by age groups. In fact family care accounts for up to 70% of the total, even now. In general, the care givers are mainly female. For caring for a father, the wife or son's wife takes responsibility. For a mother, the daughter or son's wife takes care<sup>6)</sup>.

Once elderly parents require 24-hour help, their adult children generally need to make one of two choices: taking care of the parents by themselves, or sending them to a special facility such as a nursing home. To make the decision is not an easy task. Most people struggle with their ability to take care of elderly parents because they are emotionally eager to fulfill the responsibility by themselves, but their physical status does not permit them to do so (for example, there might be a geographical problem, or employment conflicts).

#### *Previous Research*

How attitudes toward care develop, and what factors affect it, is an area in need of more study. Okamoto<sup>7)</sup> stressed three elements including private support, public support, and private assistant service, and especially focused on the factors for private support. Economic status, physical status, physical ability, sense of filial obligation, and family style were examined, and Okamoto emphasized that the sense of filial obligation was a main influence on attitude toward care. Other studies pointed to incentive and support factors as affecting continued care. They included affiliation, filial obligation, *sekentei* (appearance or frame of reference), disappointment, and cooperation of family members<sup>8)</sup>. Yamamoto and Wallhagen<sup>9)</sup> proposed three categories of reasons for continuation of care, which were value of care, maintainers of value, and reinforcers of care continuation. Value of care came from societal norms such as feelings of filial responsibility and attachment, and was the basis of caregivers' motivation.

In addition, in the field of social welfare, many studies have revealed factors which influence the use of public care services, including the members of the family<sup>7,10,11)</sup>, physical functions<sup>7,10,11)</sup>, obstacles caused by work<sup>7)</sup>, the burden<sup>7)</sup>, and *sekentei*<sup>12)</sup>.

In previous studies in the U.S., affection<sup>13~15)</sup>, filial obligation<sup>13,16,17)</sup>, availability of facilities<sup>18,19)</sup>, geographical distance<sup>20)</sup>, gender and age of caring person<sup>21)</sup>, marital status<sup>21)</sup>, employment status<sup>18,19)</sup>, economical status<sup>18,19)</sup>, health status<sup>22)</sup>, number of children<sup>23)</sup>, economic status of the elderly parents<sup>22)</sup> have been established as factors in becoming a caregiver. Guberman et al.<sup>23)</sup> listed 14 factors that lead to the decision to care for a dependent adult relative, including love, guilt and duty, women's social identity built around caring, absence of appropriate public or private care alternatives, and

women's socioeconomic dependence. In many of the studies, affection and filial obligation proved to be key factors of a family cohesion<sup>24)</sup>.

#### (1) Affection as a Factor for Family Cohesion

Attachment behavior is identified as "behavior that people show when they feel close or want to keep closeness with an certain favored person"<sup>25)</sup>. Moreover, this attachment behavior is induced in part by the favorable object or a danger caused by it<sup>25)</sup>. According to Attachment Theory<sup>26)</sup>, an infant who feels comfortable and secure in the mother's arms becomes eager to confirm affection once the mother is apart from the infant. This theory is applicable not only to infants but also to children, and adults as well. The stronger affection children have towards their parents, the closer they want to be to take care of the parents. This is a natural corollary of showing affection.

#### (2) Filial Obligation as a Factor for Family Cohesion

After the World War II, the family structure in Japan drastically changed, affecting the sense of filial obligation. The rate of adult children who live together with their parents is still high however, at 49.1%<sup>27)</sup> and most elderly parents want their children to help them whenever they get ill or become fragile and it is natural that children help them in their need. Actually, sense of filial obligation as a social norm still exists.

#### (3) *Sekentei* as a Social Norm

*Sekentei* literally means appearance or frame of reference. Taking care of *sekentei* is keeping up appearances. Peoples' conduct is often affected by the appearance they wish to project in the society they belong to. That is, people behave according to the norm or values of their society. If a person does not want to do "something trivial," he will do it because of the desire to keep up appearances.

As mentioned above, over the last 60 years, the family system has drastically changed as well as the sense of filial obligation and social norms. In traditional village areas however, where people have lived in the same area for many generations and know neighborhoods and each other well, and where people have the feeling that they live in a similar society with similar values, they will try more to live up to appearances. People behave in a way that will fulfill how they want to be perceived in other people's eyes. People take care that their behavior fits the social norm. The more intimate the society is, the more people are aware of *sekentei*.

Taking care of elderly parents or not is totally a private concern. In a traditional village society, however, *sekentei* will influence even the "private" matters. It is assumed that taking care of fragile el-

derly parents is an adult child's duty. Therefore, in this study, it was hypothesized that because of *seken-tei*, people will take care of a mother or a mother-in-law by themselves because people think caring for elderly parents is a Japanese traditional virtue or the norm that people respect.

In previous studies, there were several factors that affect the decision to become a caregiver. Those who cared for their parents gave reasons such as, "Because I love them" or "I have a strong affection for my mother so I am taking care of her." From these statements, it can be derived that a person who loves the parents takes care of them. But this statement also implies that the person whose affection for the parents is weak does not take care of them. From such statements, inferences may thus be equivocal. Therefore, in this study, we aimed to elucidate the factors that affect the decision to become a caregiver by including in the analysis all the factors presented in the previous studies to find out what affect attitude toward care.

## II. Methods

In May 2001, a questionnaire was mailed to all 210 females in their 30s living in an agricultural area of K. City, Saitama Prefecture in Japan. Their names were obtained from the Resident Register of the city.

This survey was conducted under the name of the University of Tokyo. The questionnaire was anonymous. The subjects were informed that answers were not obligatory, and that the data would be used only for academic research into attitudes toward elderly care, with statistical analysis in a confidential way so that their privacy was protected.

### *Analysis*

First, each factor was examined in relation to a dependent variable, attitude toward care, using chi-square with categorical variables and the t-test with continuous variables. These factors were affection, filial obligation, *seken-tei*, working status, the number of persons taking care of elderly parents, residential status, number of rooms, distance and time to the parents' house. Next, we conducted logistic analysis with statistically significant independent variables.

### *Variables*

#### (1) *Dependent Variable*

For attitude toward care, we asked the respondents whether they themselves would take care of their mothers (or mothers-in-law), or send them to a nursing home when they became in need of 24-hour care in the future.

#### (2) *Independent Variables*

For affection, we used the Mother-Daughter Intimacy Scale of Walker & Thompson<sup>28)</sup> that is widely used in the U.S. After translating this scale that consists of 17 items into Japanese, we conducted a pre-test, and ended up with 7 items. The Cronbach  $\alpha$  was 0.89, and the reliability coefficient of test-retest was 0.87 ( $P < 0.01$ ), demonstrating high reliability. This is a 7-point Likert scale from "I strongly agree" to "I do not agree at all."

For filial obligation, we used the Filial Obligation Scale<sup>29)</sup> that had been developed in our earlier research. This scale consists of three dimensions with eleven items (three for financial support, five for physical aid, three for emotional support) and includes a 5-point Likert scale from "I agree" to "I do not agree."

Regarding *seken-tei*, a single item with the direct question, "Do you care for *seken-tei*?" was used, including a 4-point Likert scale from "I care very much" to "I do not care at all."

## III. Results

### *Description of Variables*

93 (44%) women responded to the survey. Among them, eight had experience caring of family and five were caring a family member at that time. These were all excluded from the analysis so that 80 women were the subjects. The mean age ( $\pm$ SD) was 35.5 ( $\pm$ 2.8). In terms of education, 49.4% graduated from high school and 48.1% graduated from junior college or specialized training college. 91.1% of the women were married. One characteristic of an agricultural area was revealed. That is, 98.7% owned a home with an average lot size of 283.8 m<sup>2</sup>, a size that is relatively large in Japan.

The distribution of affiliation is shown in Table 1. The mean for affiliation to a mother was 36.3 ( $\pm$ 7.9) while that to a mother-in-law was 28.3 ( $\pm$ 8.7). The distribution for filial obligation is shown in Table 1. Its mean was 40.2 ( $\pm$ 6.7), showing high score. The distribution of *seken-tei* is also shown in Table 1. 53.8% answered they cared about *seken-tei*. The distribution of three dimensions of filial obligation is shown in Table 2. The mean for financial support was 11.2 ( $\pm$ 2.7), for physical aid was 17.3 ( $\pm$ 3.9), and for emotional support was 11.6 ( $\pm$ 2.2).

The distribution for attitude toward care is shown in Table 3. 70.1% answered take care of her mainly by themselves with the family in the case of the mother and 68.8% did in the case of the mother-in-law.

**Table 1.** Affiliation, Filial Obligation, and Sekentei  
N = 80

|                                | Score               | n (%)      |
|--------------------------------|---------------------|------------|
| Affiliation<br>(Mother)        | 7-13                | 2 ( 2.6)   |
|                                | 14-20               | 1 ( 1.3)   |
|                                | 21-27               | 7 ( 9.1)   |
|                                | 28-34               | 13 (16.9)  |
|                                | 35-41               | 36 (46.8)  |
|                                | 42-49               | 18 (23.4)  |
|                                | mean ± SD           | 36.3 ± 7.9 |
| Affiliation<br>(Mother-in-law) | 7-13                | 4 ( 6.0)   |
|                                | 14-20               | 9 (13.4)   |
|                                | 21-27               | 14 (20.9)  |
|                                | 28-34               | 19 (28.4)  |
|                                | 35-41               | 20 (29.9)  |
|                                | 42-49               | 1 ( 1.5)   |
|                                | mean ± SD           | 28.3 ± 8.7 |
| Filial Obligation              | 11-21               | 0 ( 0.0)   |
|                                | 22-32               | 11 (13.8)  |
|                                | 33-43               | 45 (56.3)  |
|                                | 44-55               | 24 (30.0)  |
|                                | mean ± SD           | 40.2 ± 6.7 |
| Sekentei                       | I care very much    | 5 ( 6.3)   |
|                                | I care              | 43 (53.8)  |
|                                | I don't care        | 30 (37.5)  |
|                                | I don't care at all | 2 ( 2.5)   |

**Table 2.** Three Dimensions of Filial Obligation  
N = 80

|                   | Score     | n (%)      |
|-------------------|-----------|------------|
| Financial Support | 3-5       | 3 ( 3.8)   |
|                   | 6-8       | 9 (11.3)   |
|                   | 9-11      | 23 (28.8)  |
|                   | 12-15     | 45 (56.3)  |
|                   | mean ± SD | 11.2 ± 2.7 |
| Physical Aid      | 5-9       | 3 ( 3.8)   |
|                   | 10-14     | 12 (15.0)  |
|                   | 15-19     | 42 (52.5)  |
|                   | 20-25     | 23 (28.8)  |
|                   | mean ± SD | 17.3 ± 3.9 |
| Emotional Support | 3-5       | 1 ( 1.3)   |
|                   | 6-8       | 2 ( 2.5)   |
|                   | 9-11      | 33 (41.3)  |
|                   | 12-15     | 44 (55.0)  |
|                   | mean ± SD | 11.6 ± 2.2 |

*Bivariate Analysis*

The results of bivariate analysis showed that affection and filial obligation were significantly related with the dependent variable. With a mother, the higher the filial obligation is, the more respondents would tend to take care of her. As for a mother-in-law, the higher the affiliation is, the more the respondents would be likely to give care.

*Logistic Regression Analysis*

Even though the results of bivariate analysis showed only affection and filial obligation were significantly related with attitude toward care, considering this study's target area is an agricultural area, we could not ignore sekentei. Therefore, in addition to affection and filial obligation, sekentei was added as one independent variable for logistic regression analysis. For the dependent variable, we assigned take care of her mainly by themselves with the family = 0, and send her to a nursing home = 1. Before conducting the analysis, we examined multicollinearity. The correlation coefficients of each independent variable

**Table 3.** Attitudes toward Care

N = 80

| Attitudes toward Care                             | n (%)     |
|---|-----------|
| of Mother   |           |
| Take care of her mainly by themselves with family | 54 (70.1) |
| Send her to a nursing home.                       | 23 (29.9) |
| of Mother-in-law                                  |           |
| Take care of her mainly by themselves with family | 44 (68.8) |
| Send her to a nursing home.                       | 20 (31.3) |

**Table 4.** The Results of Logistic Regression Analysis (Model I)

$\beta$  (odds ratio; 95% confidence interval)

|                   | Mother                       | Mother-in-law                |
|-------------------|------------------------------|------------------------------|
| Affection         | -0.02<br>(0.98; 0.91-1.05)   | -0.12**<br>(0.89; 0.82-0.96) |
| Filial Obligation | -0.15**<br>(0.86; 0.77-0.96) | -0.06<br>(0.94; 0.85-1.03)   |
| Sekentei          | -1.16*<br>(0.31; 0.11-0.87)  | -0.96<br>(0.38; 0.14-1.05)   |
| $\chi^2$          | 10.04 (P=0.19)               | 9.78 (P=0.28)                |

\* P<0.05 \*\* P<0.01

Take care of mother (or mother-in-law) mainly by themselves with family = 0

Send mother (or mother-in-law) to a nursing home = 1

Hosmer and Lemeshow Goodness-of-Fit Test

**Table 5.** The Results of Logistic Regression Analysis (Model II)  
 $\beta$  (odds ratio; 95% confidence interval)

|                   | Mother                       | Mother-in-law                |
|-------------------|------------------------------|------------------------------|
| Affection         | -0.02<br>(0.98; 0.90-1.06)   | -0.12**<br>(0.88; 0.81-0.96) |
| Filial Obligation |                              |                              |
| Financial Support | 0.02<br>(1.02; 0.80-1.29)    | 0.14<br>(1.16; 0.90-1.48)    |
| Physical Aid      | -0.21*<br>(0.81; 0.66-0.99)  | -0.22*<br>(0.80; 0.66-0.97)  |
| Emotional Support | -0.53**<br>(0.59; 0.41-0.84) | 0.00<br>(1.00; 0.75-1.35)    |
| Sekentei          | -1.53**<br>(0.22; 0.07-0.67) | -1.09*<br>(0.34; 0.12-0.98)  |
| $\chi^2$          | 7.00 ( $P=0.43$ )            | 5.02 ( $P=0.76$ )            |

\*  $P < 0.05$  \*\*  $P < 0.01$

Take care of mother (or mother-in-law) mainly by themselves with family = 0

Send mother (or mother-in-law) to a nursing home = 1

Hosmer and Lemeshow Goodness-of-Fit Test

were not high enough (0.40 at maximum) to create multicollinearity.

The results are shown in Table 4. First we tested the appropriateness of the model with Hosmer and Lemeshow Goodness-of-Fit test.

Second, the results of the logistic regression models were examined. With the mother, filial obligation and sekentei were significantly related with attitude toward care,  $\beta$  being  $-0.15$  ( $P < 0.01$ ),  $-1.16$  ( $P < 0.05$ ) respectively: the higher filial obligation is, the more people tend to take care of her. The higher consciousness of sekentei is, the more people tend to take care of her. With the mother-in-law, affection was significantly related with the attitude toward care,  $\beta$  being  $-0.12$  ( $P < 0.01$ ): the higher affection towards mother-in-law, the more people tend to take care of her. No interaction was found between affection and filial obligation.

Since filial obligation consists of three dimensions, financial support, physical aid, and emotional support, another model (Model II) with five independent variables including affection, financial support, physical aid, emotional support, and sekentei was evaluated. The results are shown in Table 5. The results of Hosmer and Lemeshow Goodness-of-Fit test showed the appropriateness of the model.

The results of this logistic regression revealed that, for the mother, physical aid, emotional support, and sekentei were significantly related with the attitude toward care,  $\beta$  being  $-0.21$  ( $P < 0.05$ ),  $-0.53$  ( $P < 0.01$ ),  $-1.53$  ( $P < 0.01$ ), respectively:

the higher the conscious of physical aid is, the more people tend to take care of her as well as the higher the conscious of emotional support is, the more people tend to take care of her. The higher the conscious of sekentei is, the more people tend to take care of her. For the mother-in-law, physical aid, affection, and sekentei were significantly related with the attitude toward care,  $\beta$  being  $-0.22$  ( $P < 0.05$ ),  $-0.12$  ( $P < 0.01$ ),  $-1.09$  ( $P < 0.05$ ), respectively: the higher the conscious of physical aid is, the more people tend to take care of her. The more affection people have towards mother-in-law, the more people tend to take care her. The higher the conscious of sekentei is, the more people tend to take care of her.

We could not find any interactions between affection and financial support, affection and physical aid, and affection and emotional support, on testing all patterns.

#### IV. Discussion

The present analysis of factors affecting the attitudes of females in their 30s living in an agricultural area toward care of elderly mothers or mothers-in-law demonstrated a profound significance: sekentei and filial obligation affected attitude toward care in the case of a mother while affection did in the case of a mother-in-law. Moreover, in Model II, sekentei, physical aid, and emotional support affected attitude toward care in the case of a mother while skentei, physical aid, and affection did in the case of a mother-in-law.

Considering the respondents' age and current situation, we judged that they answered the survey honestly according to their expectations: rather than what they should or will do in terms of care, but what they want to do. As a result, if the respondents did not have intimate feelings towards the mother-in-law, they answered they would not be willing to act as a caregiver, and vice versa. With mothers' case, it is difficult to obtain a statistical significance because the average score of intimacy is relatively high and the standard deviation is small. However, we can also judge that respondents would take care of their mothers whatever feelings they have because of the blood-relation.

This research provided support for the conclusion that sekentei affected the attitude toward care in both models. In small agricultural area, it is natural that sekentei affects people's conducts, even if it is a private matter, caring an elderly mother.

It was notable that emotional support significantly affected attitude towards care in the case of a mother, but not in the case of a mother-in-law. This result suggests that a mother-in-law may not be

emotionally close even if they live together.

Physical aid was confirmed to affect attitude toward care in both cases while financial support was not. This is a natural result because filial obligation for physical aid is itself a key factor of care while filial obligation for financial support is less likely to be considered as directly related with care.

There are several limitations in this study that should be considered. First, the low response rate may have caused selection bias. In such a case, we should compare the sample with the target population in terms of characteristics. However, in this case, it is impossible to make this comparison because we did not have data on non-respondents, other than their age. We may conclude that there may have been a tendency for those interested in elderly care problems to have answered this survey. The risk of selection bias is unavoidable, but from the standpoint of comparing those who have the tendency to take care of mothers with those who have not, the problem affected by this selection bias becomes small.

Next, we should consider carefully about how to use the filial obligation scale. This was developed concerning filial obligation in general so that there was a possibility that some people answered the questions with parents in mind, and others did with parents-in-law in mind. To obtain more precise data, we should have asked respondents to answer this question, indicating which they have in mind.

For the next step, it is necessary to continue this study and get panel data using the same measures so that we will be able to analyze the factors of care decision, instead of attitude toward care, which will allow conclusions as to policy implications. Second, for comparison, it is necessary to conduct this survey not only in a typical conservative agricultural area but also in a progressive urban area to examine the external validity. In addition, respondents should include males with a larger sample size and ask not only about the mothers or mothers-in-law but also the fathers or fathers-in-law.

## Appendix

### *Filial Obligation Scale*

Five-point Likert scale from "I agree" to "I do not agree," the total point is 11–55.

### *Financial Support*

- Children should give their parents financial support not to be in dairy difficulties.
- It is children's duty to support financially their parents.
- It is not necessary for children to give financial support including dairy expenses to their parents.

### *Physical Aid*

- Taking care of parents is the children's duty.
- Children who do not take care of their parents neglect children's role.
- Taking care of parents is not necessarily children's role.
- Children should be ready for taking care of their parents.
- It is natural for parents to expect their children to take care of them.

### *Emotional Support*

- Children should have time enjoying something with their parents.
- Children should have time spending with their parents.
- Sometime, children should offer their parents opportunities of travel or hobby activities.

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