Choices of Leave When Caring for Family Members: What Is the Best System for Balancing Family Care with Employment?

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The purpose of this paper is to ascertain the attributes of workers who choose to take leave when a member of their family is in need of care, and to clarify the form this leave should take to increase the potential for balancing care with employment. To this end, the author carried out empirical analysis of the factors behind various choices of leave.

The following facts emerged from the analysis. Firstly, the likelihood of taking leave increases when the main caregiver ratio is higher, and this also tends to encourage absenteeism, in particular. Secondly, leave is more prone to be taken when the spouse works longer hours, especially when the spouse's employment format makes it impossible to control those working hours. Absenteeism is also more prone to occur if the spouse is a regular employee, and the likelihood of taking annual leave rises more or less significantly when the spouse is a regular or non-regular employee, or when there is no spouse. Thirdly, there is a greater likelihood that leave will be taken when the person receiving care is admitted to a general hospital or geriatric hospital; caregiver leave and annual leave are particularly likely to be taken in such cases. Fourthly, absenteeism is more prone to occur when the caregiver has a lower annual income. And fifthly, absenteeism is also more prone to occur if the caregiver is not a regular employee.

Based on the above results, it became clear that the caregiving environment of family members is varied, and that there is a need not only for caregiver leave that can be taken long-term but also for time off work in single-day units.

I. Introduction

Population aging is progressing rapidly in Japan, and the number of families facing care problems is expected to increase in future. When family members are in need of care, is it actually possible for caregivers to maintain their lifestyle up to that point while giving satisfactory care? Ikeda (2008) points out that, of workers who were cohabiting with family members in need of care, only 75.2% remained employed by the same employer as when they started giving care, 16.9% had changed jobs to another employer, and 7.9% had quit their original job and were out of work, revealing that many caregivers are unable to remain in employment.

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Japan now has a system of caregiver leave (leave taken by workers with a view to caring for eligible family members in need of care), which can be taken once, in principle, for a total of up to 93 working days per eligible family member. But is this system actually functioning effectively?

According to the Survey on Work and Care¹ conducted in 2006, of 610 workers who were employed when they started giving care, only nine or 1.5% actually took caregiver leave, a very small number. But how easy is it, in reality, to give care without taking time off work when a family member needs it? According to this survey, forms of leave taken by workers (other than caregiver leave) consisted of annual leave² by 38.6% of workers, systems for time off other than annual leave by 11.9%, and absenteeism by 26.8%. In other words, many workers take time off in units of single days in order to give family care.

So why is the caregiver leave system so underutilized, and why do so many workers take time off in single-day units? The reason for this could be that the existing system of caregiver leave does not match the system required by workers and diverges from their needs in too many respects.

In view of this situation, the Child Care and Family Care Leave Act was amended on June 24, 2009, and from June 30, 2010 a new system of "time off for caregivers" was created.³ Specifically, workers can request and receive five days off per year as "time off for caregivers" if they have one eligible family member in need of care, or ten days if they have two or more. There is no income guarantee, but many companies permit workers to submit the necessary supporting documents after they start to give care.⁴ As such, this could be seen as a form of leave that can respond to urgent requests when emergencies like a sudden change in the care recipient's symptoms occur. Moreover, many workers are eligible to take "time off for caregivers" even if they are not regular employees, and the range of eligibility could be described as broader than that of annual leave.⁵ More than anything, though, this system may be highly evaluated in that it recognizes workers' right to take time off in single-day units for caregiving. For workers whose only option has been absenteeism when faced with an urgent care situation requiring them to take time off work, this system of "time off for caregivers" is very likely to function effectively.

This paper will examine how effectively "time off for caregivers" functions as a sys-

¹ For details of the survey, see Japan Institute for Labour Policy and Training (2006).

² "Annual leave" refers to paid holidays, i.e. holidays for which the employer pays the worker's wages.

 $[\]frac{3}{3}$ The date of effectuation was delayed until July 1, 2012 for companies with 100 or fewer employees.

⁴ The guidelines in 2009 MHLW (Ministry of Health, Labour and Welfare) Notice No. 509 specify that due consideration shall be given to prevent an excessive burden being placed on workers (for example, enabling workers to defer the submission of documents supporting their need to take time off for care). As a result, many companies are thought to be operating the system in this way.

⁵ Workers eligible for "time off for caregivers" are those who care for or otherwise look after eligible family members in need of care, excluding workers with less than six months' service as well as those with two or fewer contractual working days per week who are deemed ineligible.

tem, by clarifying the attributes of workers who have opted to take time off in single-day units, in the form of annual leave or absenteeism when giving care. Examining factors affecting the choice between annual leave and absenteeism will also make it possible to explore the ideal nature of "time off for caregivers" in greater detail. Although both annual leave and absenteeism consist of taking time off in single-day units, they differ in the following points. Firstly, annual leave is paid, whereas absenteeism is not. Secondly, annual leave is a natural right of workers who have been granted it, whereas absenteeism is time taken off for unavoidable reasons. And thirdly, annual leave often needs to be requested in advance,⁶ whereas absenteeism is used in cases when faced with a sudden need to take time off. By asking whether workers choose annual leave or absenteeism, and by clarifying the determinant factors behind their choices, it should be possible to examine the form of "time off for caregivers" best suited to workers' needs.

Family care can be a long-term process. Depending on the individual, moreover, the content of care can be highly varied, and the quality of care to suit individual cases can be problematic. In this paper, "balancing care with work" will be taken to mean giving satisfactory care in a way that does not obstruct work, rather than merely being able to continue working; in other words, maintaining the previous style of employment while giving better quality care. For example, whenever workers are absent for family caregiving, it can cause no small obstruction to their work. In terms of ascertaining whether or not the previous employment style can be maintained, therefore, it is important to clarify whether caregiver leave is a system sought by workers, and whether "time off for caregivers" will function successfully.

To clarify these points, this paper will set out to define the realities of leave taking for family care. It is possible that workers may use forms of leave other than caregiver leave, i.e. annual leave and absenteeism. Therefore, different forms of leave will be subjected to empirical analysis to clarify, among others, the attributes of workers who take caregiver leave, or, if they take forms of leave other than caregiver leave, the determinant factors behind their choices. Finally, based on the results of this analysis, the paper will also discuss what sort of systems and policies are required to make it possible to balance care with work, and whether "time off for caregivers" will function effectively.

II. Existing Research on Balancing Care with Work

Several research studies dealing with family care and work have been conducted in recent years. However, research on caregiver leave systems and forms of leave for family

⁶ There is no legislation directly governing the timing of requests for annual leave. However, Article 39 of the Labor Standards Act permits companies to change the period of annual leave. Specifically, when granting leave in the requested period would interfere with the normal operation of the enterprise, the employer may grant leave during another period. As such, for a company to judge whether or not to exercise this right to change the period, the worker first needs to submit a leave request.

care have not been so well researched, either in Japan or abroad. As papers on the caregiver leave system, firstly, those by Sodei (1995) and Hamajima (2007) may be cited. Sodei (1995) mentions the background behind the caregiver leave system being enshrined in law, and identifies problems with the implementation of the caregiver leave system before it became systemized. Meanwhile, Hamajima (2007) states that workers with experience of caregiving do not take long-term leave such as caregiver leave, but opt instead for annual leave and others in single-day units. These findings are based on the aggregated results of the Survey on Work and Care.

One study has also included empirical analysis on the choices of leave for family care. Ikeda (2010) conducted logistic regression analysis on the necessity of consecutive time off for family care. As a result of the analysis, Ikeda asserts that the likelihood that consecutive time off will be needed for family care tends to be greater among women in non-regular employment compared to men, greater when the person in need of care is the worker's own parent compared to when that person is the spouse's parent, greater when constant physical assistance is required, and greater when in-home nursing care services are not used. However, 84.9% of the analysis subjects responded that they did not need consecutive time off for family care, and even when they did need it, the period was often short at less than two weeks. Ikeda therefore raises doubts as to whether the caregiver leave system can be called an effective support policy.

Meanwhile, Hamajima (2006a) conducted logistic regression analysis on whether workers had ever taken absence (absenteeism), arrived at work late or left early for family care. The result is that workers with such experience of absenteeism, lateness or leaving early tend to be those who require consecutive leave for family care, or those who had been involved in preparing the ground for family care at the beginning of the care.

Going further, Ikeda and Hamajima (2007) conducted logistic regression analysis on whether workers had ever experienced taking annual leave for family care, in addition to whether they had ever experienced absenteeism, lateness or leaving work early for this purpose. As a result of the analysis, Ikeda and Hamajima show that workers who were involved in preparing the ground for family care at the beginning of the care, have a tendency to take annual leave or be absent from work, arrive at work late or leave early. They also show that there is a tendency toward absenteeism, lateness or leaving early among workers who followed procedures when they started using long-term care insurance services. Also, because the analysis revealed that workers whose employer had a caregiver leave system at the start of giving care were more likely to experience taking annual leave, they conclude that even such a system exists, workers will not take caregiver leave but will attempt to balance work with family care by using their annual leave.

These existing research studies examine the attributes of workers who opt for the caregiver leave system or take leave for family care from various angles. Each of these studies could be described as significant in its own right. Nevertheless, Sodei (1995) and Hamajima (2007) both base their discussion only on simple aggregation concerning the

caregiver leave system; neither goes as far as empirical analysis. Ikeda (2010) analyzed the necessity of consecutive time off for family care, but this did not involve direct analysis of leave taking for family care. On the other hand, Hamajima (2006a) conducted empirical analysis of absenteeism, lateness or leaving early for family care, while Ikeda and Hamajima (2007) also added empirical analysis on taking of annual leave to those on absenteeism, lateness or leaving early. However, neither of these studies involved empirical analysis on the use of the caregiver leave system.

In this paper, as well as verifying determinant factors behind the decision to take leave for family care, choice factors behind caregiver leave, annual leave and absenteeism shall each be clarified. To this author's knowledge, no previous study in Japan has included empirical analysis on caregiver leave, due to constraints on the available data, etc. Therefore, conducting analysis that includes caregiver leave in this way could be seen as important in examining the form of leave required by workers.

III. Data and Models Used in the Analysis

Of microdata in the Survey on the Balance between Child Care or Family Care and Work⁷ conducted by the Japan Institute of Labour in 2003, the results from the "Individual Survey on Family Care" were used for the analysis. This survey targeted "male and female employees in their 40s and 50s," with valid responses received from 2,444 subjects (1,253 male, 1,191 female) of a total sample of 3,000.

The analysis here will focus on those who, when asked "Have you ever given care for a family member lasting two weeks or more within the last ten years?," replied "Yes" or "Am doing now, and expect it to last two weeks or more." However, because caring for a spouse and caring for an elderly parent are thought to involve very different situations, care recipients will be limited to the parents of the caregiver for this analysis. Also, since the focus of this paper is on balancing care with work, cases in which no care at all has been given and others where the caregiver was not working at the time will be removed from the analysis.

Another point is that, when a worker has experienced quitting a job for family care, information on that individual's employment could differ between the time when engaged in family care and the time of the survey. Therefore, respondents who started to work for their current employer (at the time of the survey) after their caregiving had finished were identified and removed from the analysis. This was done by first calculating the time when the respondent started working for the current employer from the "length of service with the present employer," then using information on when the care took place ("time of care") and how long it lasted ("duration of care").

⁷ This survey was conducted via random sampling by monitor members of Intage Inc. The gender ratio was 50:50, and the ratios of respondents in their 40s and 50s were sampled to match the component ratios of the monitors as a whole. Questionnaires were distributed and collected by mail.

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The purpose of this paper is to ascertain workers' attributes and factors that influence whether they take time off from work for family care, and if so, which form of leave they choose, and then to examine systems and policies that will make it possible to balance care with work. To this end, analysis was first conducted using a probit model with a "Leave taking dummy" as the explained variable, giving a value of 1 if the respondent had ever taken time off work for family care and 0 if not. Separate analysis was also carried out using, as explained variables, a "Caregiver leave dummy" with a value of 1 if the respondent took caregiver leave and 0 if not, an "Annual leave dummy" with a value of 1 if the respondent took annual leave and 0 if not.

As explanatory variables, a variable related to the respondent's attributes and employment, a variable related to the situation of the care recipient, the content of care (main caregiver ratio, i.e. the degree to which the respondent gave care as the main caregiver), a "Spouse's employment status dummy," a "Location of care dummy," the respondent's annual income, and the respondent's employment status dummy were used.

As variables related to the respondent's attributes and employment, a gender dummy, an age dummy, an occupation dummy, a corporate scale dummy, and a care support measure utilization dummy were used. The gender dummy was a dummy variable giving a value of 1 for males and 0 for females. Sodei (1995) states that, while 21.7% of males replied that they did not use the caregiver leave system because it sufficed to take annual leave, 50.0% of females gave this response, suggesting that there could be a gender difference in the decision-making process behind the choice of caregiver leave, annual leave, or other forms of leave. Therefore, the gender dummy was used to control this effect.

Next, the age dummy was a dummy variable giving a value of 1 for respondents in their 40s and 0 for those in their 50s. Shimizutani and Noguchi (2005) state that the probability of protracted care rises significantly as the age of the caregiver increases, and it is conceivable that a difference in decision making for the choice of leave may arise from differences in the time spent on care due to the caregiver's age. This effect was controlled by using the age dummy.

For the occupation dummy, meanwhile, 6 variables were used ("Professional and technical occupations," "Management occupations," "Marketing and sales occupations," "Security and service occupations," "Manufacturing and skilled occupations" and "Transport, communication and other occupations"), with figures compared to "Clerical occupations" as the reference value. The corporate scale dummy was used to show the impact on the choice of leave when the number of regular employees in the employing company is "30–99 employees," "100–999 employees" and "1,000 employees or more," in comparison to "fewer than 30 employees." Occupation and corporate scale are expected to impact whether workers are in an environment in which it is easy to take time off, affected by factors such as the weight of responsibility in a job, the difficulty in securing replacement personnel, and so on. By using these dummy variables, then, the impact due to differ-

ences in occupation and corporate scale was controlled.

For the care support measure utilization dummy, two variables were used—"Measures related to hours of employment" and "Measures related to overtime." The former was a dummy variable giving a score of 1 when using "Reduced daily working hours," "Flextime" or "Advanced or delayed time of starting or finishing work," 0 when not. The latter was a dummy variable giving a score of 1 when using "Reduced statutory working days per week or month," "Exemption from overtime" or "Exemption from holiday work," 0 when not. Nishimoto (2006) and Yamaguchi (2004) state that some workers attempt to balance care with work by reducing their hours of employment, while Hamajima (2006b) also states that about one in four workers adjusts working hours for family care. If the care support measures provided by the company are adequate, it becomes possible to control hours of employment and give family care without taking time off work. Therefore, the care support measure utilization dummy was used to remove the impact of differences in care support measures provided by companies on decision making for the choice of leave.

Next, the care recipient status dummy and the duration of care were used as variables related to the care recipient's symptoms. Dummy variables for the care recipient status dummy were "Completely bedridden," "Mostly bedridden" and "Other," with values obtained in comparison to cases of "Partially bedridden." Shimizutani and Noguchi (2005) show that the probability of giving long-term care rises as the care recipient's level of care need increases. Just as with the age dummy, the care recipient status dummy was used to control the impact on the choice of leave exerted by time spent on care.

A period expressed in months is used for the duration of care. Nishimoto (2006) and Yamaguchi (2004) state that the duration of care has an impact on reduced working hours, leave of absence, retirement and others. Therefore, considering that the duration of care could have a significant impact on leave taking, this variable was used. Also, while opportunities for leave taking tend to increase as the duration of care lengthens, this kind of impact can be removed by using the duration of care.

Next, the content of care (main caregiver ratio), the spouse's employment status dummy, the location of care dummy, the respondent's annual income, and the respondent's employment status dummy, of particular interest as variables that impact the choice of leave for family care, will be explained. Firstly, the number of care actions performed by the caregiver will be used as the content of care (main caregiver ratio). The caregiver's content of care can be gleaned from responses regarding "Walking," "Toilet assistance," "Meals," "Bathing," "Dressing and undressing," "Housework" and "Other" in the survey. Hamajima (2006c) states that main caregivers have a higher ratio of responsibility than non-main caregivers in every action in the content of care, suggesting that the number of actions in the content of care was used as a proxy variable for the main caregiver ratio.

On the spouse's employment status, a regular employee dummy giving a value of 1

for a response of "Regular employee" and 0 for others, a non-regular employee dummy giving 1 for "Part time, *arubaito* (side job), dispatch or contract employee" and 0 for others, a self-employed dummy giving 1 for "Self-employed, family business or home industry, others" and 0 for others, and a no-spouse dummy giving 1 for "No spouse" and 0 for others were used, shown as values in comparison to cases of "Not in employment." The possibility of becoming the main caregiver would seem to depend heavily on the spouse's employment status. In the Survey on Work and Care, similarly, the biggest reason given for not having taken caregiver leave until now was "Have been able to cope with care using family help and external services" with a response rate of 70.6%. This suggests that the degree of assistance by the spouse in family care significantly impacts the choice of leave taking.

For example, the possibility of becoming the main caregiver will differ depending on whether the spouse is a regular employee with long working hours, or a part time or *arubaito* worker with relatively short contractual working hours. If the spouse's working hours are longer, the time in which the spouse can be involved in family care will of course be shorter, and the caregiver will be more likely to choose some form of leave. The choice of leave for family care is also expected to differ depending on whether the spouse is a regular employee who cannot change working hours flexibly, or a self-employed person who can be more flexible in controlling working hours.

On the location of care, the variables consisted of a home care (living together) dummy giving a value of 1 if care is given at home living together and 0 if not, a home care (living apart) dummy giving 1 if care is given at home but living apart and 0 if not, a general hospital or geriatric hospital dummy giving 1 if admitted to a general hospital or geriatric hospital and 0 if not, and a care facility dummy giving 1 if admitted to a health center for the elderly, special elderly nursing home, private nursing home for the elderly or other care facility, and 0 if not.⁸

The nature of care given by family members is expected to differ radically depending on the location of care. This is because the services available differ according to the location. If care is given at home, home visit care and other home care services can be used. In other words, the care can be shared with home helpers in addition to the family members. In the case of facility care, meanwhile, facility services can be received and the care can be wholly entrusted the facility, thus relieving the family members of a large burden of care. With hospitalization, on the other hand, medical services can be received, but personal attendance services when admitted to hospital are not available.

In other words, depending on the location of care, different services in the form of home care services, facility services or medical services can be received. This leads to the possibility that differences will arise in matters such as the degree of care borne by the family, or whether the care can be shared. Moreover, "palliative care" is often given in hospi-

⁸ The location of care was a multiple choice question in which all applicable responses could be chosen.

tals,⁹ and the symptoms of the care recipient are thought to differ depending on the location of care. The analysis will clarify how this difference impacts decision making on the choice of leave.

On the other hand, the respondent's annual income can be perceived as an opportunity cost of family care. Those with high incomes have a higher opportunity cost of family care, and are therefore not likely to choose absenteeism, which is unpaid. The respondent's annual income may also be seen as a proxy variable for the margin of freedom in the household economy. If the annual income is low, hiring home helpers or otherwise outsourcing care is out of the question, and there is probably no alternative to absenteeism.

As the respondent's employment status dummy, a dummy variable giving a value of 1 for regular employees and 0 for others was used. Non-regular employees are not usually permitted to take caregiver leave or annual leave,¹⁰ and they probably have no alternative to absenteeism. Meanwhile, regular employees have a heavy weight of responsibility concerning their work; their working environment makes absenteeism difficult, and is therefore expected to reduce absenteeism.

However, the respondent's annual income is generally presumed to be in a mutual correlation with the employment status. Firstly, regular employees often work longer hours than non-regular employees, and their annual income also tends to be higher. As well as this, regular and non-regular employees have different wage structures. Non-regular employees often receive lower wages and bonuses than regular employees,¹¹ so that regular employees' annual income is presumed to be higher in relative terms. Even in the data used for this analysis, in fact, the correlation coefficient between the respondent's annual income and the employment status dummy showed a high correlation of 0.7271, as a result of which they could not be used simultaneously as explanatory variables. Therefore, two analyses were performed—one including the respondent's annual income among the explanatory variables,

⁹ According to the "Study on Medical Services for the Frail Elderly at the End of Life," an overwhelming 81.0% of elderly persons in need of care end their lives in hospital, while 13.9% die at home, 2.4% in facilities or sheltered housing, and 2.8% in other locations. In other words, whether in home care or in facility care, the majority end their lives in hospital, where they receive "palliative care" (Institute for Health Economics and Policy 2001).

¹⁰ On annual leave, the 2006 General Survey on Part-time Workers reveals that, of businesses that employ both regular employees and part-time and other non-regular workers, only about half or 53.8% give annual leave to part-time and other non-regular workers. Of these, in turn, only 27.4% give them the same number of days as regular employees, meaning that part-time and other non-regular workers can take fewer days of annual leave than regular employees (Ministry of Health, Labour and Welfare 2007).

¹¹ In the 2006 General Survey on Part-time Workers, the most common reason given for employing part-timers (multiple response) was "Because personnel costs are lower (more efficient labor cost)" with 71.0%. Among businesses that gave "Because personnel costs are lower" as their reason, the highest ratio of content considered particularly economical (multiple response up to a maximum of three) was 70.5% for "Wages," followed by "Bonuses" with 63.5% and "Retirement allowances" with 47.9%, revealing that wages and bonuses are set lower for part-timers (Ministry of Health, Labour and Welfare 2007).

the other including the respondent's employment status dummy.

While the variables used in the analysis are explained as shown above, the explained variables and explanatory variables will now be organized chronologically. Firstly, the explained variables were all created from information that pertained during the care. Similarly, the care support measure utilization, care recipient status dummy, content of care (main caregiver ratio), and location of care used when creating explanatory variables were also information that pertained during care. As such, they could be considered more or less synchronous with the information used for explained variables. The duration of care is information pertaining at the end of care when the care has ended at the time of the survey, but is information pertaining at the time of the survey when the care is still ongoing during the survey. In either case, however, there is no great chronological deviation from the information used to create the explained variables. Moreover, since people who started to work for their current employer (at the time of the survey) after finishing care have been removed from the analysis, information on their occupation, corporate scale, and the respondent's employment status at the time of the survey will likely not have changed much from when they were giving care. In other words, of the information used to create explanatory variables, the respondent's age, the spouse's employment status and the respondent's annual income could be information postdating the explained variables. However, judging from responses on the "time of care" and "duration of care" in the survey, the sample with a significant deviation between the time of care and the time of the survey was not so large,¹² and is thus not expected to have any great impact on the interpretation of results using these variables for analysis.

IV. Results of Analysis on Leave Taking for Family Care

Table 1 shows the descriptive statistics. In terms of the distribution of each explained variable, 140 of the 266 subjects had taken time off work, 25 had taken caregiver leave, 62 had taken annual leave, and 59 had taken absence from work.¹³

¹² About one-fifth of the analysis subjects are estimated to have finished care before 1998, five years before the survey was conducted. Half of the subjects finished care before the year preceding the survey, meaning that half were still giving care as of the year before the survey. Therefore, there are not thought to be so many cases in which the time of care and the survey period significantly deviate from each other.

¹³ In the survey, the various forms of leave were defined as "Use of a caregiver leave system," "Use of annual leave" and "Absenteeism," as well as "Use of a system of time off or leave other than annual leave and caregiver leave," "Leave of absence" and "Other." Since the subjects of analysis in this paper are workers in continuous employment, respondents who stated "Leave of absence" will be disregarded, but those who responded "Use of a system of time off or leave other than annual leave and caregiver leave" and "Other" forms of leave are included in the analysis subjects. Incidentally, some caregivers take more than one form of leave in combination, so that the number of those who have ever taken time off work and the total of those responding "Use of a caregiver leave system," "Use of annual leave" and "Absenteeism" will not tally. Of the analysis subjects, six used the caregiver

Variable	Sample	Average	Standard	Minimum	Maximum
Leave taking dummy (1 if time taken off 0 if not)	size	0.526	0 500	0	1
Caregiver leave system dummy (1 if used 0 if not)	266	0.020	0.200	0	1
Annual leave dummy (1 if used, 0 if not)	266	0.094	0.292	0	1
Absenteeism dummy (1 if absence taken () if not)	200	0.235	0.424	0	1
Gender dummy (1 if male 0 if female)	200	0.222	0.410	0	1
A ge dummy (1 if in the 40 s, 0 if in the 50 s)	266	0.372	0.458	0	1
Occupation dummy	200	0.277	0.450	0	T
Clerical occupations [reference]	266	0.203	0.403	0	1
Professional and technical occupations	266	0.147	0.354	0	1
Management occupations	266	0.090	0.287	0	1
Marketing and sales occupations	266	0.195	0.397	0	1
Security and service occupations	266	0.135	0.343	0	1
Manufacturing and skilled occupations	266	0.102	0.303	0	1
Transport communications and other	200	0.102	0.505	0	1
occupations	266	0.128	0.335	0	1
Corporate scale dummy					
Fewer than 30 employees [reference]	266	0.350	0.478	0	1
30–99 employees	266	0.165	0.372	0	1
100–999 employees	266	0.286	0.453	0	1
1.000 employees or more	266	0.199	0.400	Ő	1
Care support measure utilization dummy	200	0.1777	0.100	•	
Measures on hours of employment	266	0.195	0.397	0	1
Overtime-related measures	266	0.124	0.330	ů 0	1
Care recipient status dummy				-	-
Completely bedridden	266	0.143	0.351	0	1
Mostly bedridden	266	0.252	0.435	0	1
Partially bedridden [reference]	266	0.425	0.495	0	1
Other	266	0.180	0.385	0	1
Duration of care (months)	266	28.821	36.712	0.25	240
Content of care (main caregiver ratio)	266	2.985	1.621	0	6
Spouse employment status dummy				-	-
Not in employment [reference]	266	0.218	0.414	0	1
Regular employee	266	0.470	0.500	0	1
Non-regular employee	266	0.158	0.365	0	1
Self-employed	266	0.083	0.276	0	1
No spouse	266	0.071	0.258	0	1
Location of care dummy					
Home care (living together)	266	0.383	0.487	0	1
Home care (living apart)	266	0.267	0.443	0	1
General hospital, geriatric hospital	266	0.489	0.501	0	1
Care facility	266	0.135	0.343	0	1
Respondent's annual income (x 10,000 ven)	256	306.520	285.916	20	1500
Respondent's employment status dummy (1 if regular employee, 0 if not)	266	0.451	0.499	0	1

Table 1. Descriptive Statistics

er leave system and annual leave in combination, seven used the caregiver leave system and absenteeism, and seven used annual leave and absenteeism, but none used all three (caregiver leave system, annual leave and absenteeism).

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Tables 2 and 3 show the result of analysis on determinant factors behind the decision whether to take time off work for family care or not, and choice factors behind each of caregiver leave, annual leave and absenteeism. Table 2 shows the results of analysis using the respondent's annual income as an explanatory variable, and Table 3 those of analysis using the respondent's employment status dummy.

Looking firstly at results on the content of care, in both Table 2 and Table 3 a tendency is seen for leave taking to be proportionate to the number of actions in the content of care. The person who deals with the largest number of actions in the content of care is highly likely to be responsible for care as the main caregiver, and the probability of leave taking increases as expected. However, viewing the results by form of leave, neither of Tables 2 and 3 has a significant result in the analysis of caregiver leave and annual leave, and the probability of absenteeism rises significantly. This shows that the main caregiver is in a situation of having to respond to sudden changes in the care recipient's symptoms, and in such cases there is a tendency to opt for absenteeism. Caregiver leave requires a statement of the intention to take leave to made in advance, and the same is often true of annual leave. However, many companies permit paperwork requesting "time off for caregivers" to be submitted after the event, and so this could be seen as a form of leave that can cope with sudden requests. For main caregivers whose only option is absenteeism when responding to sudden change in the care recipient's symptoms, "time off for caregivers" could be a form of leave that increases the potential for balancing care with work, as it lets the caregiver respond to unexpected situations.

Turning next to the results for the spouse's employment status dummy in Tables 2 and 3, a positive result is obtained in all cases, i.e. the spouse as regular employee, non-regular employee, self-employed, and no spouse. The results show that the main caregiver is more likely to take time off work in these cases, compared to those where the spouse is not in employment. Of these, significant results are found in Table 2 for the spouse as regular employee and non-regular employee, where the marginal effects are 37% and 25%, and in Table 3 for regular employee, non-regular employee, and no spouse, with marginal effects of 39%, 26% and 24%, respectively. Taking the no-spouse scenario first, it goes without saying that the individual in question is highly likely to be the main caregiver, and results that encourage leave taking are as expected. If the spouse is employed, moreover, the burden of care on the caregiver tends to be heavier if the spouse's working hours are longer, and if the spouse's employment format makes it impossible to control those working hours flexibly. In these cases, there is a higher probability that taking leave will be the only option available. The marginal effects of these variables are also higher than those of other variables, suggesting that the spouse's employment status could have a major impact on leave taking.

If we now focus on the spouse's employment status in terms of the different forms of leave, both Table 2 and Table 3 show that, if the spouse is a regular employee, the probability of significant absenteeism is 14% higher than if not in employment. Table 2 also shows that the probability of taking annual leave rises significantly to 43% if there is no spouse,

while Table 3 shows this probability to be significantly higher at 15% if the spouse is a regular employee, 20% if a non-regular employee, and 46% if there is no spouse. If the spouse is a regular employee or non-regular employee, or if there is no spouse, it is harder to obtain the spouse's cooperation in care, and the individual's main caregiver ratio rises. In such cases, the survey results make it clear that the response is to take time off in single-day units. Based on the above results, "time off for caregivers," in which taking time off in single-day units for family care is recognized as a right, could be said to be of great value to workers with a high main caregiver ratio.

Next, let's look at the results for location of care. As stated above, services differ depending on the location of care, while the level of care burdens and the feasibility of sharing care also differ. In hospitals, there is a greater likelihood of receiving "palliative care," and the care recipient's symptoms differ from those in other care locations. From the results shown in Tables 2 and 3, the probability of leave taking appears to rise when the care recipient has been admitted to a general hospital or geriatric hospital. Breaking the results down into the different forms of leave, Table 2 shows that the probability of taking caregiver leave is significantly high at 7% and that of taking annual leave at 16% when admitted to a general hospital or geriatric hospital, while in Table 3 the probability of taking annual leave is shown to be significantly high at 15%. Caregiver leave comes with an entitlement to caregiver leave benefit from employment insurance,¹⁴ while annual leave is paid holiday. As such, both are forms of leave that provide some kind of income guarantee. In other words, both leave that can be taken over the long term and time off in single-day units tend to be encouraged if the care recipient is admitted to a general hospital or geriatric hospital, but in either case, these are chosen as leave that offers some kind of income guarantee.

In terms of the respondent's annual income, Table 2 reveals the significant result that absenteeism tends to be less likely as annual income rises. Income may be understood as the opportunity cost of family care. As a result of the analysis, it was confirmed that the higher the income, the higher the opportunity cost of family care and the greater the downward pressure on absenteeism. A higher income also allows a greater latitude in the household economy, and family care can be outsourced. For example, if the income is higher than the expenditure needed for outsourcing care, the option of outsourcing care, avoiding absentee-ism and receiving wages as normal would surely be encouraged. Conversely, if the income is low, it may be lower than the cost of outsourcing care, encouraging the option of using absenteeism to give care. Ikeda (2006) states that the lower the household income, the higher the ratio of negative pressure on household economy due to care. In other words, we may paint a scenario whereby, in low-income households, the option of going absent and giving care is taken rather than outsourcing, and by going absent, the income falls even lower, causing difficulty in making ends meet. Therefore, it could be said that time off in

¹⁴ For those starting leave up to July 2016, caregiver leave benefit used to be 40% of the wage paid before starting leave, but this has been raised to 67% for leave commencing in or after August 2016.

	Estimate (1)			
Explanatory variable	Leave taking			
	Marginal ef	fects	z value	
Gender dummy (1 if male, 0 if female)	0.089		0.73	
Age dummy (1 if in the 40s, 0 if in the 50s)	-0.093		-1.17	
Occupation dummy [Clerical occupations]				
Professional and technical occupations	-0.200	*	-1.72	
Management occupations	-0.145		-0.89	
Marketing and sales occupations	-0.088		-0.77	
Security and service occupations	-0.320	***	-2.64	
Manufacturing and skilled occupations	-0.157		-1.21	
Transport, communications and other ccupations	-0.253	**	-2.08	
Corporate scale dummy [Fewer than 30 employees]				
30–99 employees	-0.034		-0.33	
100–999 employees	0.120		1.29	
1,000 employees or more	-0.014		-0.13	
Care support measure utilization dummy				
Measures on hours of employment	0.133		1.44	
Overtime-related measures	0.052		0.46	
Care recipient status dummy [Partially bedridden]				
Completely bedridden	-0.002		-0.02	
Mostly bedridden	0.064		0.73	
Other	0.129		1.32	
Duration of care (months)	-0.00115		-1.14	
Content of care (main caregiver ratio)	0.082	***	3.17	
Spouse employment status dummy [Not in employment]				
Regular employee	0.368	***	3.64	
Non-regular employee	0.245	**	2.18	
Self-employed	0.225		1.62	
No spouse	0.228		1.58	
Location of care dummy				
Home care (living together)	-0.102		-0.95	
Home care (living apart)	0.006		0.06	
General hospital, geriatric hospital	0.173	**	1.96	
Care facility	0.090		0.77	
Respondent's annual income (x 10,000 yen)	-0.00003		-0.14	
Sample size 256				
$Prob > chi^2$	0.0	0021		
log likelihood	-150).394		
Pseudo R ²	0.1	494		

Table 2. Result of Estimates Using Probit Model 1 (Analysis Using

Note: [] = reference group. The care support measure utilization dummy uses a value of if care is given in the respective location, 0 if not.

***, ** and * indicate significant values at the 1%, 5%, 10% level, respectively.

			r				
Estimate (2)		Estin	nate (3	3)	Estimate (4)		
Caregiver lea	ave	Annu	al lear	ve	Absenteeis	m	
Marginal effects	z value	Marginal ef	fects	z value	Marginal effects	z value	
-0.050	-1.05	0.127		1.29	-0.003	-0.04	
-0.044	-1.40	0.018		0.29	-0.063	-1.23	
-0.052	-1.49	-0.106		-1.34	0.012	0.14	
-0.068 *	-1.90	0.052		0.42	0.067	0.40	
-0.033	-0.89	-0.169	**	-2.34	0.037	0.49	
-0.017	-0.44	-0.151	**	-1.98	-0.051	-0.67	
-0.060 *	-1.65	-0.152	*	-1.87	0.183 *	1.76	
-0.046	-1.30	-0.191	**	-2.40	0.016	0.19	
0.018	0.36	0.113		1.18	-0.061	-0.97	
0.041	0.93	0.179	**	2.16	0.002	0.04	
0.011	0.24	0.142		1.52	-0.079	-1.15	
0.008	0.20	0.060		0.81	0.053	0.82	
0.070	1.22	0.089		0.98	-0.068	-1.07	
-0.034	-0.88	-0.026		-0.30	0.003	0.04	
-0.044	-1.30	0.104		1.43	0.016	0.26	
0.027	0.66	0.010		0.12	0.020	0.30	
0.00016	0.36	0.00009		0.11	0.00014	0.19	
-0.013	-1.17	0.026		1.32	0.039 **	2.29	
0.043	0.92	0.130		1.52	0.135 *	1.72	
0.111	1.53	0.171		1.62	0.119	1.13	
0.030	0.41	0.141		1.01	0.153	1.23	
0.096	1.08	0.427	***	2.82	-0.053	-0.50	
0.055	1.18	-0.068		-0.83	-0.106	-1.51	
0.012	0.27	0.003		0.04	-0.060	-0.96	
0.065 *	1.81	0.158	**	2.32	-0.040	-0.63	
0.081	1.37	-0.026		-0.29	-0.014	-0.19	
0.00012	1.34	0.00001		0.08	-0.00052 **	-2.39	
256		256			256		
0.5326		0.0141		0.0005			
-64.483		-118.929 -106.781					
0.1664		0.	1608		0.2134		

"Respondent's Annual Income" as the Explanatory Variable)

1 if the respective measure is used, 0 if not. The care location dummy uses a value of 1

	Estimate (1)			
Explanatory variable	Leave taking			
	Marginal effects	z value		
Gender dummy (1 if male, 0 if female)	0.049	0.43		
Age dummy (1 if in the 40s, 0 if in the 50s)	-0.093	-1.18		
Occupation dummy [Clerical occupations]				
Professional and technical occupations	-0.186	-1.62		
Management occupations	-0.179	-1.22		
Marketing and sales occupations	-0.059	-0.51		
Security and service occupations	-0.327 ***	-2.79		
Manufacturing and skilled occupations	-0.136	-1.05		
Transport, communications and other occupations	-0.215 *	-1.79		
Corporate scale dummy [Fewer than 30 employees]				
30–99 employees	-0.030	-0.29		
100–999 employees	0.112	1.23		
1,000 employees or more	0.009	0.10		
Care support measure utilization dummy				
Measures on hours of employment	0.148	1.61		
Overtime-related measures	0.046	0.41		
Care recipient status dummy [Partially bedridden]				
Completely bedridden	0.004	0.04		
Mostly bedridden	0.078	0.90		
Other	0.155	1.61		
Duration of care (months)	-0.00139	-1.40		
Content of care (main caregiver ratio)	0.088 ***	3.46		
Spouse employment status dummy [Not in employment]				
Regular employee	0.389 ***	3.92		
Non-regular employee	0.259 **	2.34		
Self-employed	0.211	1.53		
No spouse	0.240 *	1.66		
Location of care dummy				
Home care (living together)	-0.118	-1.13		
Home care (living apart)	-0.017	-0.17		
General hospital, geriatric hospital	0.159 *	1.83		
Care facility	0.077	0.68		
Respondent's employment status dummy	0.040	0.42		
(1 if regular employee, 0 if not)	0.040	0.42		
Sample size	266			
$Prob > chi^2$	0.0003			
log likelihood	-153.961	l		
Pseudo R ²	0.1633			

Table 3.	Result of	Estimates	Using	Probit	Model	2 (Ar	nalysis	Using

Note: [] = reference group. The care support measure utilization dummy uses a value of if care is given in the respective location, 0 if not.

***, ** and * indicate significant values at the 1%, 5%, 10% level, respectively.

Respondent's Employment Status Dummy as the Explanatory Variable)							
Estimate (2)		Estimate (3)			Estimate (4)		
Caregiver lea	ave	Annu	al lear	ve	Absent	eeism	
Marginal effects	z value	Marginal ef	fects	z value	Marginal effe	cts z value	
-0.030	-0.64	0.078		0.91	-0.078	-0.99	
-0.043	-1.28	0.015		0.25	-0.059	-1.11	
-0.055	-1.34	-0.093		-1.21	0.001	0.01	
-0.070	-1.58	0.017		0.16	-0.064	-0.52	
-0.027	-0.66	-0.149	**	-2.12	0.029	0.37	
-0.030	-0.73	-0.142	**	-1.96	-0.060	-0.77	
-0.066	-1.57	-0.133	*	-1.65	0.184 *	1.74	
-0.035	-0.83	-0.173	**	-2.23	0.044	0.49	
0.029	0.51	0.114		1.22	-0.079	-1.23	
0.061	1.26	0.167	**	2.12	-0.012	-0.20	
0.095	1.64	0.140		1.64	-0.098	-1.49	
0.007	0.18	0.066		0.93	0.066	0.97	
0.059	1.00	0.091		1.02	-0.085	-1.32	
-0.036	-0.85	-0.024		-0.28	0.012	0.15	
-0.037	-1.02	0.090		1.31	0.056	0.87	
0.065	1.32	0.017		0.21	0.017	0.24	
-0.00003	-0.05	-0.00006		-0.07	-0.00009	-0.12	
-0.007	-0.65	0.029		1.54	0.048 *	** 2.71	
0.051	1.00	0.150	*	1.82	0.141 *	1.73	
0.114	1.49	0.197	*	1.91	0.100	0.94	
0.027	0.35	0.150		1.11	0.128	1.03	
0.101	1.07	0.459	***	3.03	-0.089	-0.88	
0.041	0.87	-0.081		-1.04	-0.099	-1.35	
-0.017	-0.39	0.005		0.06	-0.055	-0.85	
0.051	1.37	0.150	**	2.28	-0.046	-0.72	
0.064	1.11	-0.040		-0.49	-0.006	-0.09	
0.014	0.36	0.095		1.38	-0.126 *	-1.91	
266		266		266			
0.6672		0.0068			0.0002		
-71.237		-120.184			-110.442		
0.1407		0.	1679		0.21	54	

Choices of Leave When Caring for Family Members

"Respondent's Employment Status Dummy" as the Explanatory Variable)

1 if the respective measure is used, 0 if not. The care location dummy uses a value of 1

single-day units with income guarantee is required for low-income households like this.

In that case, is there no possibility of a reverse cause-and-effect relationship whereby, as a result of repeated absences for family care, the respondent's annual income decreases owing to a reduction in salary and bonuses? The possibility certainly cannot be denied. However, the respondent's annual income as used in the analysis for this paper is the income per year. Over the course of a year, absences for family care are not expected to be so numerous,¹⁵ and it may be safe to assume that there is a low likelihood that taking absences for family care will cause a reduction in salary and bonuses and lead to a reduction in annual income.

Next, the results of the respondent's employment status in Table 3 show significantly that regular employees take fewer absences than non-regular employees. The results bear out the expectation that regular employees have a heavy responsibility in regard to their work and are in an environment that inhibits them from taking absences. This does not contradict the findings by Hamajima (2006a) or Ikeda and Hamajima (2007) that absenteeism, lateness and leaving early do not occur when the employment format is regular.

Meanwhile, the fact that regular employees do not take absences means that there is a tendency for non-regular employees to do so. The expected result is that many non-regular employees are not permitted to take caregiver leave or annual leave, and thus have no alternative but to choose absenteeism. Many workers are eligible to take "time off for caregivers," even if not regular employees, and the scope of eligibility is thus broad. Therefore, it could be said that there is a strong likelihood that "time off for caregivers" will function effectively for those workers.

However, both caregiver leave and annual leave show positive figures for regular employees, who are supposed to be permitted to take caregiver leave and annual leave, but this is not a significant result. On the other hand, Ikeda and Hamajima (2007) show the result that if the employment format at the start of care is regular employment, taking of annual leave is significantly encouraged—a finding not consistent with the levels of significance shown in connection with annual leave in this paper's results. This is thought to be because this paper and Ikeda and Hamajima (2007) are based on different analysis subjects. While this paper uses survey results including not only home care but also admission to hospital and care facilities, care for family members admitted to old people's homes and other facilities are not included in the analysis by Ikeda and Hamajima (2007) show that there is a tendency for regular employees who are giving home care to take annual leave for this purpose. In the

¹⁵ According to Otake (1999), average days lost to absenteeism per worker per year in Japan are very low at 3.4 days, though these figures are not limited only to family care. Again, according to Hamajima (2006b), the number of days taken as annual leave for family care was 4.7 days by main caregivers in regular employment, and 2.3 days if not the main caregiver. Although the number of days of absenteeism for family care itself is unknown, we may infer from this information that absenteeism for family care is not so very common.

analysis by this paper, on the other hand, regular employees who are given responsible work duties and cannot easily take time off work are expected to include cases in which steps are taken to transfer from home care to facility care, rather than responding by taking time off. Therefore, compared to Ikeda and Hamajima (2007), who conducted analysis only on cases of home care, it is thought that the regular employee's need to take annual leave decreases, as a result of which significant results were not obtained.

Meanwhile, of the variables related to the respondent's attributes and employment and those related to the status of the care recipient used as control variables, significant results were obtained from occupation and corporate scale. The results on occupations in Table 2 suggest that, compared to "Clerical occupations," leave taking is significantly reduced in cases of "Professional and technical occupations," "Security and service occupations," "Transport, communications and other occupations." Table 3 also shows significantly reduced leave taking in the case of "Security and service occupations" and "Transport, communications and other occupation to the other. Taking "Manufacturing and skilled occupations" in Table 2, for example, significantly negative values are seen in caregiver leave and annual leave, but the value for absenteeism is significantly positive. Nevertheless, the analysis of total leave taking involving all of these forms show no significant result due to offsetting of the positive values. In view of these points concerning occupations, therefore, the results for each form of leave will now be interpreted separately.

In Table 2, firstly, taking of caregiver leave was significantly reduced in "Management occupations" and "Manufacturing and skilled occupations" compared to "Clerical occupations." "Management occupations" impose heavy burdens of work responsibility and are therefore thought to provide little scope for taking long-term caregiver leave. And in "Manufacturing and skilled occupations," taking of caregiver leave is conceivably reduced due to a difficulty in securing long-term replacements, among other reasons.

On the other hand, taking of annual leave is significantly reduced, in both Table 2 and Table 3, in the case of "Marketing and sales occupations," "Security and service occupations," "Manufacturing and skilled occupations" and "Transport, communications and other occupations." While the environment surrounding these occupations make it difficult to take annual leave, it is possible that annual leave is not given in the first place. According to the days of annual leave taken in the 2003 Questionnaire Survey on Taking of Annual Leave conducted by Japan Institute of Labour, 8.5 days were taken by workers in "General clerical, etc.," 6.0 days in "sales and marketing, etc.," 7.2 days in "Service industries," 8.3 days in "Manufacturing," and 9.5 days in "Transport and communication." In other words, fewer days of leave were taken than in "General clerical, etc." in all categories except "Transport and communication." In occupations where annual leave is difficult to take, the same clearly seems to apply when it comes to annual leave for family care (Japan Institute of Labour 2003).

Meanwhile, workers in "Transport and communication" take more days of annual

leave, but this may be because the survey was aimed at regular employees and therefore included no information on non-regular employees. "Transport and communication" occupations are expected to include many non-regular workers who are not eligible for annual leave, and this is probably what caused the negative result with regard to taking annual leave.

Tables 2 and 3 show that absenteeism is significantly encouraged in "Manufacturing and skilled occupations." In these occupations, we know that taking of caregiver leave and annual leave is reduced, and absenteeism is used when needing to take time off work for family care. It would surely be desirable, then, to develop an environment that makes it easier to take caregiver leave and annual leave in these occupations, in particular.

In terms of corporate scale, both Table 2 and Table 3 show that taking of annual leave is significantly encouraged in companies with "100–999 employees" compared to those with "fewer than 30 employees." Positive values are also obtained for "1,000 employees or more," albeit not at a significant level. Thus, when the corporate scale is larger, replacement personnel must be easier to secure and annual leave tends to be taken when needing to take time off work for family care.

V. Conclusion

In this paper, empirical analysis has been carried out to clarify the attributes of workers who take time off work for family care, what form of leave is preferable in order to balance care with work, and what choice factors lie behind this. The analysis results were then used in an attempt to examine whether "time off for caregivers" is functioning effectively. As a result, the following points have become clear.

- (i) In terms of the content of care, the more the individual concerned is the main caregiver, the higher the probability of leave taking and the higher the probability of absenteeism, as the specific form of leave.
- (ii) The longer the spouse's working hours, and the more the spouse's employment format makes it impossible to control working hours flexibly, the higher the probability of leave taking. Also, when the spouse is a regular employee, the individual's main caregiver ratio rises and absenteeism is encouraged. Meanwhile, when the spouse is a regular or non-regular employee, or when there is no spouse, the probability of taking annual leave rises more or less significantly.
- (iii) When the care recipient has been admitted to a general hospital or geriatric hospital, the probability of leave taking rises, and both caregiver leave and taking of annual leave are encouraged.
- (iv) The lower the individual's annual income, the more absenteeism is encouraged.
- (v) If the individual is not a regular employee, absenteeism is encouraged.

Systems and policies required for balancing care with work differ according to the

situation of each individual household economy. So what is the ideal form of leave for family care that is preferred by workers? Firstly, judging from (i) and (ii) above, we know that the higher the individual's main caregiver ratio, the higher the probability of absenteeism. When the main caregiver ratio is high, the present reality seems to be that unexpected situations (such as sudden changes in the care recipient's symptoms) are handled via absenteeism, which requires no advance application. In this regard, "time off for caregivers" may be highly evaluated in that it can respond to sudden requests.

Judging from point (ii) above, the results show that it is difficult to obtain help with family care when the spouse is a regular employee or a non-regular employee, or when there is no spouse. As well as absenteeism, taking of annual leave is also encouraged in such cases. However, considering that annual leave as a system was not originally created with only family care in mind, "time off for caregivers" may be highly evaluated in that it recognizes time off in single-day units for family care as a right, and therefore has strong potential for functioning effectively as a system. At the present time, however, "time off for caregivers" provides no income guarantee. According to point (iv) above, we know that the lower the income, the greater the tendency for the household economy to be difficult and for the individual in question to be personally responsible for care, tending to do so by taking absences rather than outsourcing the care. Enhancing the system of "time off for caregivers" so that income guarantees can be obtained would surely enable these workers to give care with greater reassurance.

Finally, the reason why there is a tendency toward absenteeism when not a regular employee, as in (v) above, is that non-regular employees are not permitted to take annual leave, or even if permitted to do so, only for a limited number of days. "Time off for care-givers" can be highly evaluated in that it covers a wider range of eligibility than annual leave, and that workers who are not granted annual leave are sometimes able to use it.

From the above results, "time off for caregivers" could be said to have the effect of increasing the potential for balancing care with work. However, balancing care with work certainly cannot be achieved merely by taking time off in single-day units. As in (iii) above, both leave that can be taken over a protracted period and time off in single-day units are seen as necessary if the care recipient is admitted to a general hospital or geriatric hospital. Although there is a high likelihood of "palliative care" being given in hospitals, this would only involve the provision of medical services. The care is entrusted to the family members, who evidently attempt to balance care with work by taking caregiver leave when long-term care is required and annual leave when short-term care is needed.

In this paper, forms of leave necessary to balance care with work have been clarified through analysis. This has made it clear that different families will have different care environments, and that a response that can address different care environments is required; that is, as well as caregiver leave that can be taken over the long term, time off in single-day units is also required. It will be possible to take "time off for caregivers" in units of half a day (i.e. half of the contractual daily working hours) from January 1st, 2017 in Japan. Ac-

cording to the Report on the FY2012 Survey Research Project to Ascertain the Actual Situation of Work Life Balance, the largest response by workers who have parents in need of assistance or care, concerning the content of that assistance or care, was "Minor shopping errands and putting out rubbish" with 88.0%, followed by "Preparing meals, cleaning, laundry and other housework" with 86.5% and "Taking to and from hospital and helping with going out" with 85.7%.¹⁶ As such, taking time off for half a day could be sufficient, depending on the content of care. By increasing the options of "time off for caregivers" to include half-days as well as whole days, the care environment could be said to have been further enhanced for workers.

From the same date, caregiver leave may also be split into segments. Until now it has only been possible to take leave once per eligible family member, for a total of 93 working days, but from that date it will also be possible to split caregiver leave into a maximum of three segments. Combining "time off for caregivers" with split segments of caregiver leave may be expected to provide a care environment suited to each individual case, leading to increased potential for balancing care with work.

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¹⁶ The result of a multiple response question in which workers were asked the content of assistance and care borne by either caregiver including the respondent.

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