

The Challenging Role of Informal Carers Within the Long-Term Care System in Japan: Focusing on Issues of Japanese Working Carers

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Abstract. Despite the increasing demand for long-term care (LTC) caused by demographic changes and several long-term care insurance (LTCI) program reforms, formal care in Japan is shrinking because of public financial constraints, leading to many problems for informal carers. Because more than half of the informal carers are employed in paying jobs, balancing working and caregiving roles is an important issue in the political agenda. Based on an online survey data of working carers of care recipients eligible for the LTCI program (N=600), this study aims to examine informal carers' challenging role within the Japanese LTC system, and analyze the work-life balance issues of working carers. The results reveal that most of the respondents are their parents' carers and more than half co-reside with the care-recipients. With the community promoting comprehensive care, many frail older adults now use a combination of formal and informal care services. Additionally, over three hours of informal caregiving per day, age, marital status, co-residence with the care recipient, self-rated health, and insufficient understanding of the caregiving role in the workplace are significantly related to the psychological well-being of informal carers. Furthermore, most of the aforementioned factors are also associated with turnover intention due to caregiving responsibilities. Informal care is a crucial component of the Japanese LTC system and to alleviate informal working carers' struggles and decrease unwanted turnover, it is necessary to consider the link between formal and informal care, together with support programs for informal carers.

Keywords: Long-term care, Informal care, Formal care, Working carer, Turnover intention, Japan

Introduction

Long-term care system in an aging society

Sustainable long-term care (LTC) systems in an aging society constitute a global agenda. In particular, owing to rapid population aging, the Japanese society has been struggling

Our research was supported by Japan Society for the Promotion of Science (JSPS, KAKENHI-B 16H03715).

Received: 2023-07-27. **Accepted:** 2023-09-27.

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to provide the necessary care for older people sustainably. Traditionally, Japanese society has taken for granted the care provided by adult children, mostly by co-resident daughters-in-law. With shifts in the family structure and its challenge to the cultural norm of care, informal carers are facing many challenges in Japan (Yamaguchi & Rand, 2019). Takahashi (2003) argued that due to a decrease in family size and an increase in female labor force participation, the capacity to care for children and older persons is limited.

To share care responsibilities in society, Japan established the long-term care insurance (LTCI) program in 2000. The LTCI system, funded by insurance premiums paid by people aged 40 years or older and taxes, is the primary formal care system that provides both residential and community-based services for eligible older persons. The number of service users increased from 1.5 million to 5.9 million between 2000 and 2022 (Cabinet Office, 2023). However, it has been argued that the burden on family carers has not been fully eased (Tokunaga & Hashimoto, 2017). Despite several reforms in the LTCI program to increase formal care services owing to the increasing demand for LTC caused by demographic changes, formal care is shrinking because of public financial constraints (Yamaguchi, 2023).

In this context, informal carers in Japan are an increasingly diverse group, including men, older spousal couples, co-resident adult children, and those employed in paying jobs. Informal carers, especially those who are family, seem to have no respite as their burden is increasing owing to the demand being greater than that which can be met by the limited scope of formal care services, particularly, formal residential care, in the Japanese LTCI system (Miyawaki et al. 2020).

According to the national life basic survey conducted in 2022, approximately half of the primary carers of eligible LTCI program care-recipients are spouses (22.9%), co-resident adult children (16.2%), or adult children's spouses (5.4%) (Ministry of Health, Labor and Welfare [MHLW], 2023). The proportion of older carers is also increasing. In 2022, one in three dyads of co-resident main carers and care recipients were both over the age of over 75 years. Over 30% of co-resident main carers daily spend an average of more than a half-day on caregiving. These results indicate that family members play a crucial caregiving role because of formal care services' limited availability.

Informal caregiving increases as care recipients have more care needs. The eligible level of the LTCI program care recipients ranges from support level (1 and 2) to care level (1 to 5). Care level 5 is the most severe level of care needs. Those above care level 3 are eligible to use care facilities within the LTCI services. However, owing to the aforementioned facilities' shortage, many eligible users are forced to wait for a certain period, use private nursing homes or community-based care services, or rely more on informal care.

The 2022 employment status survey indicates that among all workers (67 million), 92% are employers/employees and 8% are self-employed (Ministry of Internal Affairs and Communications [MIAC], 2023). The percentages of female and male part-time workers are 53% and 22%, respectively. Among 6.3 million carers, over half (58%) of carers are employed in paying jobs. Among the employed carers, 33% are female and 25% male. Each year, approximately one hundred thousand carers quit their jobs owing to caregiving responsibilities. Among these, 80% are female.

There has been little discussion on the financial damage to society, employers, and working carers in Japan. However, the Japanese government has gradually recognized the societal risks related to working carers quitting their jobs. According to the Ministry of Economy, Trade, and Industry (METI, 2023), because of carer turnover, by 2030, society will suffer losses to the tune of 9 trillion yen.

Because over half the informal carers are employed in paying jobs and large economic losses due to carer turnover are expected, balancing working and caregiving roles is an important concern in the political agenda. Thus, decreasing the turnover of workers owing to their caregiving roles is a crucial political issue in Japan. However, despite a national initiative to ensure that people are not forced to leave their jobs because of their caregiving role, there are no specific mandatory programs for carers based on legislations. Although, based on the Childcare Leave/Caregiver Leave Act, there are leave and other related programs, such as a reduction in working hours, a limited number of people avail these programs because the available services are insufficient to address the psychological, physical, and financial needs of working carers. In Japan, the importance of supporting carers is not widely understood or acknowledged. In particular, there is lack of discussions on the rights of working carers and from the perspective of their well-being.

Complex interface between formal and informal care

Formal and informal care interrelatedness, unpaid care situations in social care systems, and formal social care services' impact on unpaid carers are topics that are globally discussed in context of social care policy. Welfare regimes examine the relations among the state, market, and family, and the Japanese welfare system is considered a mix of several regimes characterized by strong familism (Esping-Andersen 1990, 1999).

Several studies have examined the complex relationship between formal and informal care, insisting on the various linkages between them, such as the substitution and complementary nature of care (Penning, 2002; Verbakel et al., 2018, etc.). Analyzing the interlocking system of formal (public and private) and informal (often unpaid) care, Burchardt et al. (2018) found that adults living alone and those with high (not the highest) difficulty levels are most likely to have unmet needs and that public policy needs to integrate support for both modes of care. Barbieri and Ghibelli (2018) stated that developing a stronger infrastructure for informal care provision could produce significant social returns. Saloniki et al. (2019) analyzed the substitution effect between formal and informal care for people over 75 years of age in England, finding that the effect is stronger when care is received from within the household.

Several studies have investigated the position of informal carers in the social care system. Twigg and Aktin (1994) examined the ambiguous position of carers, suggesting four models from a professional perspective: carers as resources, co-workers, co-clients, and those suspended. While the carer-as-resources model focuses on disabled persons and aims for care maximization and the minimization of substitution, the carer-as-co-

client model focuses on the carer and their well-being. Lloyd (2023) critically analyzed unpaid care policies in the UK from the perspectives of rights, resources, and relationships, arguing that in the UK, unpaid carers' status within the social care system is marginalized, reflecting the dominant perception of unpaid carers as background resources.

Many scholars have discussed care in terms of its crises, poverty, sustainability of systems, and limited availability (Kröger, 2022, among others). The Organization for Economic Cooperation and Development (OECD, 2021) has highlighted the care crisis during COVID-19. Kröger et al. (2019) examined care poverty's level, defined as inadequate coverage of care needs resulting from an interplay between individual and societal factors, finding that the care poverty rates of instrumental activities of daily living (IADL) and activities of daily living (ADL) are 26% and 17%, respectively, among respondents over the age of 75, who face limitations in performing daily activities. Kodate and Timonen (2017) advocated the expansion of family care in Asian and European LTC settings.

Furthermore, several researchers have discussed formal care use from a financial perspective (Bittman et al., 2007; Schwartz et al., 2022). Ervik and Lindén (2021) argued that increasing inequalities and poor quality of care are consequences of prioritization within the LTC system. Duncan et al. (2020) stated that care-related out-of-pocket expenditures significantly predict financial hardship.

According to Japanese studies, LTCI services for older people have not sufficiently eased the burden on family carers (Tokunaga & Hashimoto, 2017). In addition to the absence of direct compulsory services for carers within the LTCI program, lack of information and limited-service availability for care recipients may negatively influence carers' well-being. According to Miyawaki et al.'s (2020) analysis on reduced formal care availability's effect on formal and informal care patterns, reduced formal care availability under the Japanese 2016 LTCI reform increased informal caregiving hours, corresponding to formal LTC's reduced use, and deteriorated multiple dimensions of carer health, indicating reduced formal care's impact on informal care provision in the Japanese context.

Many studies have discussed the relationship between unpaid care and paid work (Kröger and Yeandle, 2014; The Organization for Economic Cooperation and Development [OECD], 2014). The International Labour Organization (ILO, 2018) pointed out that unpaid care work conditions affect the way unpaid carers enter and remain in job market, explaining that the "unpaid care work–paid work–paid care work circle" affects gender inequality in paid work within households, as well as women and men's ability to provide unpaid care work. OECD's (2021) study highlighted gender inequality in paid and unpaid work during COVID-19. Vicente et al. (2022) found that Swedish female working carers provide more hours of informal care across more care domains than male working carers. Furthermore, Carmichae and Ercolani (2016) examined the link between unpaid caregiving and paid work over life courses and found that those following the most caregiving-intensive pathway face poorer situations and lower levels of health and well-being.

Several studies have examined factors that increase carers' turnover intention. Empirical studies have revealed that the deterioration of working carers' health cause turnover,

as well as low productivity in the workplace. For instance, Dixley et al. (2019) systematically reviewed informal carers and employment, finding that employment exit risks include difficulties in obtaining formal care, co-residence, inflexible employers, weak attachment to the labor market, key transition points, workplace hostility, occupation type, care intensity (over 20 hours a week), carer health, difficulty in concentrating, age, and sex (female). Using the World Health Organization well-being index (WHO-5), Austin and Heyes (2020) found that mental well-being, was higher among working carers in organizations that provided support than among those that did not. Furthermore, Montano and Peter (2022) revealed that supervisor behavior mediates the association between the level of work-life conflict and the intention to give up employment. Greaves et al. (2015) showed that supervisor support is related to the turnover intention of employees with eldercare responsibilities.

Many Japanese studies have highlighted that carers face different challenges in caring based on their sex, age, marital status, economical condition, and working condition. For example, Kitamura et al. (2021) found a significant reduction in labor force participation for female workers co-residing with parents. Yamaguchi (2023) examined the difficulties faced by female Japanese single working carers, particularly, those working part-time and co-residing with care recipients. Although some studies have investigated caregiving burden, few have focused on the impact of caregiving on the work and well-being of working carers.

Empirical studies combining work and caregiving, and working carers' turnover intentions are scant. Nonetheless, studies in this field are steadily increasing (Wang et al., 2014; Yamaguchi, 2020). Kikuzawa (2015) found the interaction between carer and worker roles to be positively associated with well-being among middle-aged Japanese men and women. Fujihara et al. (2019) concluded that co-worker support buffers the association between carer burden with presenteeism, and the overall work impairment among working family carers of people with dementia in Japan. Ikeda (2017) stated that work schedule flexibility is crucial, especially for working individuals caregiving for long periods. These findings are inconsistent because of the differences in sampling design and measurements. The work-life balance among Japanese working carers must be further researched to understand the situation's complicated nature.

Little is known about the complex nature of formal and informal care and paying jobs in Japanese demographic and political contexts. Therefore, this study aims to examine informal carers' challenging role within the Japanese LTC system and analyze factors affecting working carers' work-life balance. Based on these findings, it is assumed that working carers provide a substantial amount of informal care even under the provision of formal care. Given the Japanese gendered context, female working carers face a greater burden than male working carers. It is hypothesized that long hours of informal caregiving and sex are associated with the psychological well-being of working carers. It is also hypothesized that long hours of informal caregiving and organizational support are associated with turnover intention, after controlling for other variables.

Methods

In March 2018, an online survey of working carers was conducted, where 600 carers between 20 and 69 years old were selected from a nonrandom survey sample, sourced from the internet panel of a web-based research company which has the nationwide data of more than 20,000 carers. We used this dataset because it contains detailed information about care, such as the care level within the LTCI. We selected employed main carers, caring for recipients of all eligible care levels recipients eligible for the LTCI program.

The main variables were well-being and turnover intentions. The 5-item WHO-5 index, which is a globally used, valid, and reliable tool (Sisichka et al., 2020; Topp et al., 2015) was used to assess subjective psychological well-being. The WHO-5 index response options range from 0 (none of the time) to 5 (all the time). Those with scores of less than 13 on this index are considered to have low/medium-low mental well-being, and may have a possible depressive tendency.

We set a variable measuring turnover intention within one year using a 7-point Likert-type scale (1 = not at all likely, 7 = almost certain). We created a dummy variable for those who had turnover intentions, that is, for those who responded from 1 to 3 (maybe unlikely).

Main independent variables were age, sex (female=1), marital status (single=1), co-resident with care-recipient (yes=1), household earnings (less than 4 million yen=1), working status (part-time =1), caring period (more than 3 years=1), average hours of caring per day during the past week (more than 3 hours=1), care level (higher than care level 3=1), frequency of use of care service (more than 3 days per week=1), and unmet needs of colleagues and managers' understanding their caring role(yes=1). Variables other than age and WHO-5 scores were used as dummy variables in the regression analysis. Table 1 presents the respondents' demographic data.

Table 1. **Demographic data of sample**

	Frequency	% of total
Carer's sex		
<i>Female</i>	226	37.7
<i>Male</i>	374	62.3
Carer's in employment status		
<i>Full-time (General level)</i>	272	45.3
<i>Full-time (Management level)</i>	124	20.7
<i>Other (Part-time, Contract work)</i>	204	34.0
Carer's self-rated health		
<i>Good, Fair or Neither good nor bad</i>	519	86.5
<i>Relatively bad or bad</i>	81	13.5

	Frequency	% of total
Carer's marital status		
<i>Unmarried</i>	226	37.7
<i>Married, Divorced, Widowed</i>	374	62.3
Co-resident with care-recipient		
<i>Yes</i>	380	63.3
<i>No</i>	220	36.7
Relationship with care-recipient		
<i>Mother</i>	368	61.3
<i>Father</i>	130	21.7
<i>Mother/Father-in-law</i>	52	8.7
<i>Spouse</i>	17	2.8
<i>Others</i>	33	5.5
Care-level		
<i>Support level 1 to Care level 2</i>	304	50.7
<i>Care level 3 to 5</i>	296	49.3
Frequency of use of care service		
<i>More than 3 days per week</i>	365	60.8
<i>Less than 3 days per week</i>	235	39.2
Duration of care giving		
<i>More than 3 years</i>	350	58.3
<i>Less than 3 years</i>	250	41.7
Average hours of caring per day		
<i>Over 3 hours per day</i>	247	41.2
<i>Less than 3 hours per day</i>	353	58.8

A bivariate analysis was conducted before the multivariable and logistic regression analyses. All analyses were performed using SPSS version 29. The relevant ethical procedures were followed and approval was received from the Research Ethics Committee of the author's organization.

Results

Among 600 respondents, two thirds are male carers. The average age of the respondents is 55.6 (SD=8.8). Less than 40% are unmarried. Majority of the respondents work full time in general positions, followed by managerial, part time and contractual positions. The household earnings of 26.7% of the respondents is less than 4 million yen.

Additionally, we see that over 60% of carers co-reside with the care-recipients. Over 80% provide care to parents (mothers, 61.3%; fathers, 21.7%), followed by 8.7%, 5.5%, and 2.8% to their parents-in-law, others, and spouses, respectively. Majority (57.8%) of

care-recipients are in their 80s, followed by 19.2%, 17.6%, 4.8%, and 0.5% in their 70s, 90s, late 60s, and over 100 years old, respectively. Approximately, half of the care recipients are at a high need level (care levels 3 to 5). Over 60% of care recipient have used some kind of care service more than three days during the previous week.

Approximately 14% self-rate their health as relatively bad or bad. The average WHO-5 score is 11.7 (SD=6.2), ranging from 0 to 25, with half the respondents having scores lesser than 13. Approximately 40% of respondents reduced their working hours to provide care, 10% quit their jobs, 9% used care leave that they are eligible to by law, and 5% took leaves other than care leaves. No significant differences between men and women are observed in taking care leave or previous turnover. One in seven working carers (14.2%) has had turnover intentions within one year.

Table 2 presents the bivariate analysis results. It indicates that the sex is associated with working status and the average number of caring hours per day. Two out of five respondents provided care for over three hours a day while continuing their paying jobs. Compared with male, female carers are more likely to be in non-full-time positions. While approximately 35% of male carers provide care more than 3 hours per day, over half (50.9%) of female carers do the same. While significant sex differences are found among full-time workers, no such differences are found between part-time and contract workers.

Table 2. Caring hours per day by working status and sex

		Less than 3 hours	Over 3 hours	Total	N	$\chi^2(df)$
Full-time worker	Male	68.3%	31.7%	100.0%	287	$\chi^2(1)=10.8^{**}$
	Female	50.5%	49.5%	100.0%	109	
	Total	63.4%	36.6%	100.0%	396	
Not full-time worker	Male	52.9%	47.1%	100.0%	81	$\chi^2(1)=0.5$
	Female	47.9%	52.1%	100.0%	117	
	Total	50.0%	50.0%	100.0%	204	
	Male	64.7%	35.3%	100.0%	374	$\chi^2(1)=14.2^{***}$
	Female	49.1%	50.9%	100.0%	226	
	Total	58.8%	41.2%	100.0%	600	

Note. *df* = degree of freedom. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3 shows that turnover intentions are associated with care hours and unmet needs of understanding by co-workers/supervisors. The percentage of respondents who intended to leave their current work within a year was significantly higher among those who felt there was insufficient understanding at the workplace than among those who felt the opposite. Additionally, among respondents caregiving for over three hours a day, approximately 34% of those who felt unmet needs at workplace intended to leave their current jobs, which is much higher compared to those who felt sufficient understanding at their workplace (about 12%).

Table 3. Turnover intention within one year by Caring hours and Unmet needs of understanding from coworker/supervisor

		Yes	No	Total	N	$\chi^2(df)$
Caring less than 3 hours	Unmet needs (Yes)	17.0%	83.0%	100.0%	88	$\chi^2(1)=6.9^{**}$
	Unmet needs (No)	7.4%	92.4%	100.0%	257	
	Total	9.9%	90.1%	100.0%	345	
Caring over 3 hours	Unmet needs (Yes)	33.7%	66.3%	100.0%	92	$\chi^2(1)=15.7^{***}$
	Unmet needs (No)	12.1%	87.9%	100.0%	140	
	Total	20.7%	79.3%	100.0%	232	
	Unmet needs (Yes)	25.6%	74.4%	100.0%	180	$\chi^2(1)=27.6^{***}$
	Unmet needs (No)	9.2%	90.9%	100.0%	397	
	Total	14.2%	85.8%	100.0%	577	

Note. *df* = degree of freedom. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 4 reveals an association between the psychological well-being of informal carers and their life situation. The regression analysis results indicate that age, marital status, co-residence with care recipient, average hours of caring per day, insufficient understanding from co-worker/supervisor, and self-rated health are significant predictors of informal carers' psychological well-being. Especially, long hours of informal caregiving (over three hours per day), age, being unmarried, co-residing with care recipients, insufficient understanding of their caregiving role at the workplace, and poor health conditions are significantly related to the psychological well-being of informal carers. Sex and household earnings are not significant after controlling for other variables.

Table 4. Regression analysis on Carer's well-being

	B
Carer's age	-0.17***
Carer's sex female=1	-0.06
Carer's marital status (single=1)	-0.18***
Co-resident with care-recipient	-0.10*
Household earnings (less than 4 million yen=1)	-0.08
Carer's working status (not full time =1)	0.03
Caring period (more than 3 years=1)	0.01
Average hours of caring per day (more than 3 hours=1)	-0.12**
Care level (higher than Care level 3=1)	-0.01
Frequency of use of care service (more than 3 days per week=1)	-0.06
Unmet needs of understanding from coworker/supervisor	-0.16***
Carer's self-rated health (relatively bad or bad=1)	-0.19***
Adjusted R ² =0.157; N=520	

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

We conducted a variance inflation factor (VIF) test to check for multicollinearity possibility in the regression analysis. The VIF indicators are less than 2.0, indicating that there are no multicollinearity problems with the data. The adjusted multiple regression coefficient (R^2) for the overall turnover is 15.7 %.

The logistic regression analysis results reveal that age, sex, long hours of informal caregiving (over three hours per day), unmet needs of understanding from co-workers/supervisors, and self-rated health are significantly related to turnover intentions (see Table 5). Older males providing longer hours of care, and having an insufficient understanding from their workplace are more likely to consider discontinuing their jobs. Carers who provide care for over 3 hours a day and who have unmet needs making them feel that their caregiving role is insufficiently understood at their workplace are 2.50 and 2.62 times, respectively, more likely to have turnover intentions compared to those who do not. Carers with bad health condition are 2.18 times more likely to have turnover intentions compared to those who are healthier. Psychological well-being of informal carers is not a significant indicator of turnover intention after controlling for other variables.

Table 5. Logistic regression analysis on turnover intention

	Exp(B)	95%CI
Carer's age	0.966*	0.933-0.999
Carer's sex female=1	0.343**	0.176-0.670
Carer's marital status (single=1)	0.723	0.388-1.346
Co-resident with care-recipient	0.902	0.508-1.600
Household earnings (less than 4 million yen=1)	1.318	0.682-2.547
Carer's working status (not full time =1)	1.867	0.950-3.669
Caring period (more than 3 years=1)	1.405	0.792-2.492
Average hours of caring per day (more than 3 hours=1)	2.502**	1.433-4.370
Care level (higher than Care level 3=1)	1.033	0.586-1.820
Frequency of use of care service (more than 3 days per week=1)	0.791	0.445-1.405
Unmet needs of understanding from coworker/supervisor	2.615**	1.514-4.518
Carer's self-rated health (relatively bad or bad=1)	2.183*	1.087-4.385
Carer's well-being	1.022	0.977-1.069
Nagelkerke=0.176, N=501		

Note. CI = confidence interval. * $p < .05$; ** $p < .01$; *** $p < .001$.

Discussion

This study examines informal carers' challenging role within the Japanese LTC system and analyzes the factors affecting working carers' work-life balance. It confirms the interlinked relationship between formal and informal care, as well as the decrease in formal care under the situation of increasing and varying care needs for frail older family members.

The results reconfirm that there are diverse working carers. One in two female working carers provides care for more than three hours a day, compared with one in three male working carers. As female working carers tend to work part-time and earn lower incomes, their fragile situation must be considered. The results indicate gender inequality and gap in unpaid care work, consistent with previous studies (OECD, 2014; Vicente et al., 2022). Although our research was conducted before COVID-19, the care crisis and gender inequality in paid and unpaid work would be more serious during (and after) the COVID-19 pandemic (OECD, 2021). Since unpaid care affects carers' financial situation, health, and well-being over their life course (Carmichae & Ercolani, 2016), we need to consider this accumulated disadvantage of female working carers over their life course, both in the public and private spheres.

Simultaneously, the findings indicate that both female and male working carers provide substantial care to their co-resident parents, even if they work full-time and use several types of LTCI services. Yamaguchi and Rand (2019) highlighted the need of further exploring male working carer issues. My findings add new insights into understanding the difficult conditions of male and female working carers.

A notable amount of unpaid care is provided by informal working carers who are themselves vulnerable. They have been providing care while continuing to work, developing complex feelings trying to balance the two. My findings confirm that informal, unpaid carers are forced to play a crucial role because of formal care services' limited availability. This is a complex situation involving a decrease in formal care and increasing and varying care needs for frail older family members. Informal carers' burdens are increasing because of a greater demand for care and reduced scope of formal care services in the Japanese LTC system. Implicitly, carers are treated in the Japanese policy discourse as unpaid resources, rather than as citizens with individual rights and clients with diverse needs (Yamaguchi & Rand, 2019). Similar to Lloyd's (2023) findings, our findings also indicate the marginalized status of working carers, but within the Japanese LTC system.

Consistent with previous studies (Miyawaki et al., 2020), I find that long hours of informal caregiving is negatively associated with working carers' psychological well-being. Working carers who provide longer hours of care suffer from poor health, and those who feel that their needs in the workplace are unmet are more likely to have lower well-being levels than those who do not.

The logistic regression analysis results reveal that long hours of informal caregiving and an insufficient understanding of the caregiving role in the workplace are associated with turnover intentions. I find workplace and long hours of caring to be strong predictors of Japanese working carers' turnover intentions, after controlling for other demographic variables, consistent with previous Western and Japanese studies (Dixley et al., 2019; Fujihara et al., 2019).

Additionally, consistent with other western studies (Austin & Heyes, 2020; Montano & Peter, 2022), I find that those with supportive workplaces tend to stay-on and are less likely to quit their current jobs, however, my findings add new insights by using a unique

sample of Japanese working carers of LTCI recipients with high level of needs. These carers experience difficulty balancing work and care, despite using a certain level of formal care services within the LTCI program.

I find the sex to be statistically related to turnover intention after controlling for other variables. Unexpectedly, males are more likely to leave their jobs within one year. As the actual carers who leave their jobs are mostly women, our sample characteristics may affect the result. Analyzing data of many male working carers, I find that male carers provide a large amount of care. In Japan, there are many ‘hidden carers’ who, due to the unconscious bias in gender roles, cannot talk about their work-life balance issue at their workplace and being more unlikely to mention their caring role, do not receive any support from the workplace (Yamaguchi, 2021). Many carers who provide long hours of care, struggle without sufficient support from the workplace, leading to their well-being deteriorating.

My study is not without limitations. First, I have not fully considered care-related concepts such as formal/informal, paid/unpaid, and care crises in the Japanese cultural context. Further studies need to investigate the conceptual considerations of formal/informal and paid/unpaid care work and work–life balance more comprehensively.

Second, as my sample is not random it is difficult to generalize the results. In my study, I focused on working carers of older adults, eligible for LTCI. We need to consider carers of those with disabilities and older and young carers of those with diverse care needs. Further studies with representative samples are needed to understand how Japanese carers’ well-being is affected by both direct and indirect services/supports.

Despite these limitations, my findings are meaningful because they confirm the complex association between formal and informal care within limited social care services, finding a relationship between unmet workplace needs and turnover intentions in the Japanese context. My study suggests the need to understand the over-loaded burden of working carers in Japan. Given the limited understanding of the influence of Japanese working carers’ care situation on their turnover intention, my results add to the literature by shedding light on the difficulties faced by working carers.

Conclusion

This study demonstrates the interlinked relationship between formal and informal care, as well as well-being and turnover intentions of diverse Japanese working carers. It also highlights the importance of considering factors such as carers co-residing with care-recipient, sex, marital status, length of caring hours, and workplace support.

These findings have practical implications for social care professionals and workplace managers/colleagues. To alleviate carers’ psychological well-being adversely being affected and consequent carer turnover because of no support, counselling opportunities, carer-friendly workplace, and collaborative support from managers and colleagues and from those in the community is needed.

Social care professionals, including social workers, must understand the link between formal care services and informal care, provided mostly by family carers, and take the initiative to promote balancing work and caregiving for working carers.

In workplaces, working carer turnover reduction necessitates establishing support systems where working carers can talk about their roles. This will help managers grasp workers' caregiving situation level and enable colleagues understand carers' caring role. Simultaneously, the community must establish a comprehensive counselling and support system for working carers, and assess their hidden voices, concerns, and dilemmas of balancing work and caregiving.

Informal care must be recognized as a crucial component of the Japanese LTC system. Alleviating their struggles and decreasing unwanted turnover necessitates considering the link between formal and informal care, together with support programs for informal carers, creating a carer-friendly work environment. To support the diverse working carers and assess their hidden voices, concerns, and dilemma of balancing work and caring, tailored advice based on carer assessments are crucial. In addition, to mitigate the negative effects of caregiving on the well-being and turnover intention of working carers, a comprehensive support system for working carers as their direct clients is needed.

My findings, based on experiences in a super-aged Japanese society can help other countries which are expecting an increase in their aging population in the near future. Although the speed of population aging and scope of gender inequality differ from those in European countries, there are some similarities in the increase in female labor force participation and greater expectations of family care (Kodate & Timonen, 2017). My findings from the Japanese context might be useful for European countries to consider their future dilemmas in reducing informal carers' burdens within a greater demand for care and a reduced scope of formal care services.

Acknowledgements. We would like to thank participants in the research.

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