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Overview of Stress Levels among Elderly Caregivers in Japan

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ABSTRACT

Background & Objective: This study aimed to describe the stress levels experienced by Indonesian elderly caregivers (nurses) working in Japan, with a focus on their demographic characteristics and psychological well-being. **Method:** A descriptive quantitative design was applied to portray stress without examining relationships among variables. The population comprised 51 Indonesian caregivers, all of whom were included as respondents using a total sampling technique. Data were collected online from July to August 2025 through a validated 12-item Zarit Burden Interview questionnaire and analyzed with descriptive statistics using SPSS. Demographic information such as gender and age was also obtained. **Result:** Results revealed that most respondents were female (88.2%) and in the 26–35 age group (52.9%). Stress level analysis showed that 39.2% experienced low stress, 41.2% moderate stress, and 19.6% high stress. These findings indicate that while most caregivers manage caregiving demands adequately, a significant proportion experiences moderate to high stress that may affect health and job performance. **Conclusion:** The study concludes that gender, age, and workplace conditions are key determinants of caregiver stress and recommends targeted mental health interventions, supportive workplace policies, and stress management training to reduce psychological burdens. Future research should incorporate longitudinal and mixed-method approaches to identify causal factors and coping mechanisms to better inform preventive strategies.

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Introduction

The World Health Organization (WHO, 2015) defines a caregiver as an individual who provides direct care and support to persons with physical, mental, or social limitations, either in formal settings such as hospitals or informal settings such as homes. According to Wahyuni and Zainuddin (2024), caregivers can be classified into two categories: formal and informal. A formal caregiver is a paid individual who provides attention, care, and protection to people who are ill, while an informal caregiver offers assistance to relatives, friends, or neighbors without payment. In Indonesia, elderly parents are traditionally cared for by their children, making most Indonesian caregivers informal due to strong cultural values of filial duty (Efendi et al., 2019).

WHO (2020) categorizes older adults as individuals aged 60 years and above, further dividing them into middle age (45–59 years), elderly (60–74 years), old (75–90 years), and very old (over 90 years). Indonesian Law No. 13/1998 on Elderly Welfare similarly defines older adults as those aged 60 years or older. Aging is associated with a natural decline in physical functions and increased risk of illness. Globally, the number of people aged 60 and above reached about 1 billion in 2020 and is projected to rise to 1.4 billion by 2030 and 2.1 billion by 2050, with the proportion of older adults increasing from 12% in 2015 to 22% by 2050 (WHO, 2020). According to the Population Reference Bureau (PRB, 2024), Japan ranks fourth worldwide in its elderly population. The World Bank (2023) reports Japan's total population as 124.5 million with a fertility rate of only 1.26 per woman, while the World Factbook Bureau (2024) shows that 29.5% of its citizens are aged 65 years and older, surpassing the proportion of younger age groups.

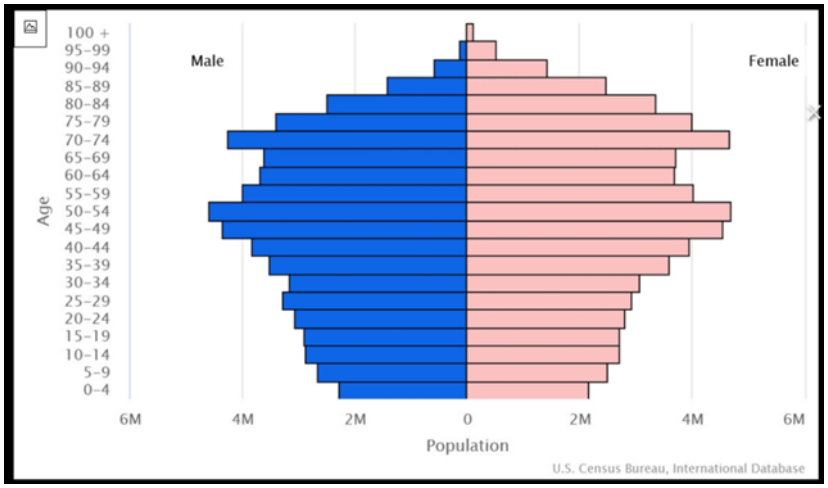

FIGURE 1. Elderly Population in Japan
Source: U.S. Census Bureau, International Database

The growing elderly population in Japan heightens the demand for professional caregivers. Japan provides four main types of elderly care facilities: group homes, *tokuyou* (special elderly nursing homes), *roken* (nursing health facilities), and housing with elderly services. Each type varies in admission criteria and services, such as end-of-life care and rehabilitation for those recovering from hospitalization. However, caregiving in these settings involves significant physical and emotional challenges, particularly when assisting patients with limited mobility (WHO, 2020; Zaman & Ahmad, 2020). Tasks such as transferring patients from beds to wheelchairs require considerable physical effort, while continuous psychological strain increases the risk of stress and burnout (Nursalam, 2016; Setiawan & Lestari, 2020).

Despite a rapidly aging population—about 29.3% of Japan's total population in 2024—the country had only around 1.07 million medical and welfare workers, including elderly caregivers, in 2023. This represents a striking disparity: roughly 35.18 million older adults require care, yet only about 3% have direct access to professional caregivers. The shortage exacerbates workloads and stress levels among caregivers. Stress-related occupational hazards are further underscored by Japan's persistent issue of *karōjisatsu* (work-related suicide). In 2015, 24,025 suicide cases were recorded, 12% of which were work-related. By 2024, the Ministry of Health, Labour, and Welfare documented 1,304 cases of death and illness linked to overwork, including 1,057 mental health disorders and 88 suicides or suicide attempts. Migrant workers, including Indonesian caregivers, are especially vulnerable to exploitative work conditions and extreme stress, with some reports indicating more than 80 hours of overtime per month—far exceeding safe limits.

Work-related stress is a global concern affecting all professions. WHO (2019) estimated that 264 million people worldwide experience stress or depression, while Gallup (2022) reported that 44% of workers globally experience stress. In Japan, around 82% of employees reported job-related stress in 2022, with 31% experiencing burnout, exceeding the global average. Caregivers often face heavy workloads, infection risks, family-related pressures, commuting issues, and inadequate workplace facilities (Irhamullah, 2021). Stress, defined as a condition arising from the interaction between an individual and the environment that creates a perceived gap between demands and resources (Sarafino & Smith, 2010), can stem from personal, family, and community sources. Caregivers, in particular, experience stress due to the demanding nature of caring for patients with physical limitations (Alifudin & Ediati, 2019).

Studies reinforce the emotional toll on caregivers. Jumiarti et al. (2023) found that caring for elderly patients with dementia often leads to emotional exhaustion due to insufficient knowledge, low income satisfaction, lack of personal time, and inadequate psychological support. Similarly, Ushvinder Kaur Popli and Rishi Panday (2018) reported that elderly caregivers are at higher risk of stress, depression, irritability, and health complications as they sacrifice recreational activities and social interactions. Considering the escalating demands of eldercare, limited caregiver resources, and the high prevalence of work-related stress in Japan, this study aims to describe the stress levels experienced by elderly caregivers (nurses) in Japan.

Objective

The purpose of this study is to describe the stress levels experienced by elderly caregivers (nurses) in Japan. Specifically, it aims to identify the demographic characteristics of respondents, such as age and gender, and to analyze as well as categorize the levels of stress encountered by these caregivers in their professional practice.

Method

This study employed a descriptive research design aimed at portraying the independent variable without comparing or associating it with other variables (Sugiyono, 2019). The research focused on Indonesian elderly caregivers (nurses) working in Japan, selected because of Japan's high proportion of older adults and the

significant presence of Indonesian caregivers in the country. Data collection was conducted from July to August 2025.

The population consisted of all elderly caregivers (nurses) affiliated with LPK Bahana Inspirasi Muda (BIM) in Japan, totaling 51 individuals. According to Sugiyono (2019), a population is a generalization area comprising objects or subjects with specific characteristics selected for study and conclusion. Sampling followed a non-probability approach using total or saturated sampling, whereby the entire population is included as the sample (Suryani et al., 2023). Consequently, the study involved all 51 caregivers to ensure that the sample accurately represented the population and allowed a precise description of stress levels.

The research measured a single dependent variable: stress level among Indonesian elderly caregivers in Japan. As a descriptive quantitative study, it did not distinguish between independent and dependent variables but focused on the stress level categorized through three dimensions—physical, emotional, and behavioral symptoms (Sugiyono, 2019). Stress was defined as the body's biological and psychological reaction to external threats or pressure and was assessed using the validated Zarit Burden Interview (ZBI) questionnaire. The ZBI employs a Likert scale to gauge respondents' attitudes, opinions, and perceptions (Riduwan, 2004). Scores of 0–10 indicated low stress, 10–20 moderate stress, and >20 high stress. Demographic data such as age (grouped into late adolescence 17–25, early adulthood 26–35, late adulthood 36–45, and early elderly >46) and gender were also collected through the questionnaire.

The ZBI instrument, consisting of 12 items, was administered online via a Google Form distributed through WhatsApp to all respondents. As the ZBI is a standardized tool with established validity and reliability, no additional validity or reliability testing was performed (Ghozali, 2019). Data collection involved three stages: preparation (including proposal approval and research permits), implementation (online distribution of the questionnaire and five days of data gathering), and final reporting.

Data were collected exclusively through the questionnaire method as described by Suwono and Ari (2006). To ensure inclusion criteria were met, the researcher verified respondent eligibility before analysis. All responses were processed using SPSS to generate descriptive statistics and univariate analysis, presenting the stress level of caregivers in tabular and narrative form (Setyosari, 2015).

Ethical considerations followed the principles of bioethics in nursing research (Swarjana, 2015). Participants received a clear explanation of the study's objectives, procedures, benefits, and potential risks and provided informed consent. Anonymity and confidentiality were maintained by using codes rather than names, and all information was kept secure. The study also adhered to the principles of beneficence and non-maleficence, ensuring that participation offered potential benefits without causing harm. Respondents participated voluntarily and could withdraw at any time without consequence. These ethical standards align with World Health Organization guidelines and current best practices in health research.

Results

The combined analysis of demographic data and stress levels revealed that the majority of respondents were female (88.2%) and predominantly within the 26–35 age group (52.9%). Regarding stress levels, 39.2% of respondents experienced low stress,

41.2% reported moderate stress, and 19.6% reported high stress. The detailed distribution is presented in Table 1.

TABLE 1. Distribution of Respondents by Gender, Age, and Stress Level

Variable	Frequency (n)	Percentage (%)
Gender		
Male	6	11.8
Female	45	88.2
Age (years)		
17–25	22	43.3
26–35	27	52.9
36–45	1	1.9
>46	1	1.9
Stress Level		
Low	20	39.2
Moderate	21	41.2
High	10	19.6
Total Respondents	**51**	**100**

Source: Primary Data (2025)

The integrated data show that most Indonesian elderly caregivers in Japan are women in early adulthood and tend to experience low to moderate stress levels, with only a small portion reporting high stress.

Discussion

The present study provides an in-depth examination of stress levels among 51 caregivers of older adults in Japan, highlighting the influence of gender, age, and contextual factors on psychological well-being. The findings revealed that the majority of respondents were women (88.2%), while men comprised only 11.8% of the sample. This gender imbalance reflects the reality of caregiving in many societies, where women are culturally and socially more likely to assume caregiving roles. Emotional sensitivity and greater reliance on emotional expression among women have been identified as contributors to their higher reported stress levels. A large-scale analysis using Gallup World Poll data across 131 countries demonstrated that 36.1% of women experienced stress compared to 33.6% of men (National Library of Medicine, 2025). These global patterns align with the current study's findings and suggest that women, particularly in caregiving roles, are disproportionately vulnerable to psychological distress.

Age distribution further contextualizes the stress burden. More than half of respondents were between 26 and 35 years old (52.9%). This life stage, characterized by identity exploration and career establishment, often coincides with increasing social and family demands. Prior research indicates that mental growth and the capacity to hypothesize about life challenges accelerate in late adolescence and early adulthood, making this group particularly susceptible to stress (Wong & Hockenberry, as cited in the current study). Statista (2022) reported that 66% of individuals aged 18–24 exhibited moderate to severe symptoms of stress, anxiety, or depression, far higher than older adults (around 25%). Moreover, caregivers in this age group are often unmarried, which may intensify stress through the absence of spousal support and increased role strain.

Regarding overall stress levels, 41.2% of participants reported moderate stress, 39.2% reported low stress, and 19.6% experienced high stress. These findings indicate

that while most caregivers can adapt to daily caregiving demands, nearly one-fifth face severe stress with potential consequences for health and job performance. The results correspond with Japanese studies showing that 15% of workers aged 18–83 score high on the Kessler Psychological Distress Scale (K10), signaling a heightened risk of depression Hiroyuki et al. (2014). Caregiving was specifically identified as a significant risk factor for depressive symptoms (OR = 2.1) when combined with heavy workloads and limited social support. Similarly, Honda et al. (2017) reported that 37.5% of family caregivers experienced emotional distress related not only to physical demands but also to sustained emotional burdens. A nationwide Japanese survey found that 38.6% of caregivers had a K6 score ≥5, with female gender (aOR = 1.35), poor caregiver health, and long caregiving hours as key risk factors (Noguchi et al., 2020). These data reinforce the conclusion that caregiving inherently elevates psychological strain.

The gender dimension of caregiver stress is further supported by a meta-analysis of 47 studies involving 14,919 caregivers, which revealed that women report higher psychological burdens than men, with the greatest differences observed in Asian countries (d = 0.27) (Duangjina et al., 2025). Pinquart and Sörensen (2006) and Chen et al. (2020) likewise confirmed that female caregivers exhibit higher rates of depression and stress than their male counterparts. The convergence of these findings underscores that gender is a critical determinant of caregiver stress, reflecting both biological predispositions and sociocultural expectations.

Several strengths enhance the credibility of this study. First, it contributes current, context-specific data on caregiver stress in Japan, a country with one of the world's fastest-aging populations. The inclusion of international and national comparisons strengthens the interpretation of the findings, situating them within a broader global discourse on caregiving and mental health. Furthermore, the study illuminates the combined effects of internal factors (gender, age, personal health) and external factors (workload, social support, caregiving duration) on caregiver stress, offering a comprehensive understanding of the phenomenon. This holistic perspective provides valuable evidence for designing interventions such as stress management programs, workplace policies that support caregivers, and enhanced social support systems.

Nevertheless, certain limitations must be acknowledged. Data collection was conducted entirely online, which may have introduced selection bias by excluding caregivers without reliable internet access or digital literacy. The online format also limited the researcher's ability to control the timing and conditions under which respondents completed the questionnaire, potentially affecting data consistency. Additionally, the measurement instrument assessed general stress levels but did not capture specific contributing factors such as coping strategies, socioeconomic status, or workplace environment. These omissions restrict the ability to draw detailed conclusions about causal pathways or to design tailored interventions. Moreover, the cross-sectional design prevents the assessment of stress trajectories over time, an important consideration given that caregiver stress often fluctuates with caregiving duration and changing patient needs.

In summary, this study strengthens existing evidence that caregiving for older adults in Japan is associated with moderate to high stress levels, particularly among women and younger adults. Its findings echo and extend prior research (Hiroyuki et al., 2014; Honda et al., 2017; Noguchi et al., 2020; Duangjina et al., 2025) by

emphasizing the interplay of gender, age, and structural factors in shaping caregiver mental health. Addressing these challenges requires multifaceted strategies, including workplace reforms, targeted mental health support, and public policies that recognize and alleviate the burdens of caregiving. Future research should employ longitudinal designs and more nuanced instruments to explore specific stressors and coping mechanisms, ultimately guiding interventions that promote the well-being of this essential workforce.

Conclusion

This study explored the stress levels of 51 Indonesian caregivers working with older adults in Japan, offering a detailed understanding of their demographic characteristics and psychological well-being. The findings revealed that caregivers are predominantly women of productive age, with the majority falling between 26 and 35 years old. This demographic pattern highlights a workforce shaped by social expectations and economic opportunities that draw younger, predominantly female workers into caregiving roles. Stress levels among participants were primarily in the low to moderate range, with 39.2% reporting low stress, 41.2% moderate stress, and 19.6% high stress. While most caregivers are able to manage daily job demands, the presence of nearly one-fifth of respondents experiencing high stress underscores the significant mental health challenges inherent in caregiving. These results emphasize that gender, age, and work conditions are key determinants of caregiver stress, aligning with global evidence that women and younger adults face heightened vulnerability to psychological strain.

The study underscores the need for targeted interventions and broader awareness about the impact of caregiving stress. For educational institutions, integrating mental health and stress management training into caregiver preparation programs can help future caregivers build resilience. For society at large, these findings reinforce the importance of recognizing caregiver stress as a serious issue that warrants community and policy support to prevent long-term mental and physical complications. Healthcare and social service providers should consider implementing accessible counseling services, peer support networks, and workplace policies that accommodate the unique demands of caregiving.

Future research should extend these findings by employing larger, more diverse samples and longitudinal designs to track changes in stress over time and to examine causal relationships. It would be valuable to investigate additional variables—such as coping mechanisms, cultural adaptation, social support systems, and economic pressures—that may influence stress levels among expatriate caregivers. Mixed-methods approaches combining quantitative measures with in-depth qualitative interviews could provide richer insights into caregivers' lived experiences. By addressing these avenues, subsequent studies can contribute to evidence-based strategies and interventions that safeguard the mental health and well-being of caregivers in Japan and similar contexts worldwide.

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