

- 4 Morley JE, Malmstrom TK, Miller DK. A simple frailty questionnaire (FRAIL) predicts outcomes in middle aged African Americans. *J Nutr Health Aging* 2012; 16: 601–608.
- 5 Takeda C, Guyonnet S, Sumi Y, Vellas B, Araujo de Carvalho I. Integrated care for older people and the implementation in the INSPIRE care cohort. *J Prev Alzheimers Dis* 2020; 7: 70–74.
- 6 <https://link.springer.com/article/10.1023%2FB%3AQUIRE.0000018499.64574.1f>.

How to cite this article: Ho VW, Merchant RA. Digitally administered SARC-F or the 5-time chair rise: Which is better? *Geriatr. Gerontol. Int.* 2021;21:964–966. <https://doi.org/10.1111/ggi.14261>

Mental well-being of staff in long-term care facilities at risk

Dear Editor,

The burden on staff in long-term care facilities will increase as society ages and as more older people require long-term care. In addition, the gap between the supply and demand for care workers is estimated to reach 380 000 in 2025.¹ Reducing staff turnover is a solution for this supply and demand gap, and will also improve the quality of care provided.²

Most work focused on preventing staff turnover has considered burnout among care staff. Burnout has been associated with lower job satisfaction, lower perceived adequacy of staffing levels, poor care home environments, feeling unsupported, poor care home leadership and caring for residents showing agitated behavior.³ In Japan, a positive attitude toward providing end-of-life care was identified as a protective factor against depersonalization, which is a subcategory of burnout.⁴ Given that health is a state of complete physical, mental and social well-being, rather than simply the absence of illness or disability, the mental well-being of care staff is an important factor that has not been sufficiently explored in comparison with burnout.⁵

In Japan, Inatani *et al.* carried out a survey among staff of long-term care facilities using the General Health Questionnaire-28,

which is usually used as a screening tool to detect mental illness.⁶ They used a General Health Questionnaire-28 cut-off score of 6/7, based on Fukunishi's method.⁷ Inatani *et al.* reported that physical burden and caregiver burden were associated with scores below this cut-off point.⁶ However, to our knowledge, no previous research has used the Japanese version of the World Health Organization Five Well-Being Index (WHO-5-J).⁸ The WHO-5-J is a widely used tool that comprises positive expressions that are familiar to respondents. The WHO-5-J uses a 6-point scale with a total score range of 0–25 points; scores <13 indicate poor mental well-being.

We assessed mental well-being among staff in long-term care facilities using the WHO-5-J, and determined the proportion of staff under the cut-off point. We also explored protective factors against poor mental well-being using multivariate logistic regression analysis. Eight of 19 long-term care facilities in X area of Kanagawa Prefecture participated our study. Participants were full-time care staff, and included care workers, nurses and case workers. The present study was carried out before the outbreak of the coronavirus disease 2019 pandemic (December 2019). We mailed out 245 questionnaires to care workers; 232 were returned, 32 of which were completely

Table 1 Results of the binomial logistic regression analysis

	Odds ratio	95% Confidence interval		P-value
		Lower	Upper	
Sex: male	0.758	0.336	1.711	0.505
Age: <40 years	0.990	0.450	2.181	0.981
Educational level: above college or technical school	1.069	0.487	2.345	0.868
Living status: living alone	0.356	0.124	1.023	0.055
Marital status: married	2.381	0.952	5.953	0.064
Have a religion	0.561	0.170	1.850	0.342
Time in the care field: <10 years	2.946	0.720	12.054	0.133
Job position: unit chief or above	0.624	0.265	1.470	0.281
Time in this facility: <10 years	0.585	0.146	2.342	0.449
Frequency of night work: <5 nights per month	1.260	0.585	2.714	0.555
Have someone to talk with about work concerns in their workspace	1.785	0.465	6.844	0.398
Good work environment: easy to discuss work concerns in their workspace	4.539	1.552	13.273	0.006
Positive attitude toward end-of-life care	2.563	1.011	6.495	0.047
Generalized trust: generally speaking, most people can be trusted	2.475	1.165	5.257	0.018

blank. Therefore, 200 (81.6%) valid responses were retrieved. After excluding questionnaires with missing values, we included data for 189 (77.1%) participants in our analysis. The study protocol was approved by the ethics committee of Taisho University. Written informed consent was obtained from all participants.

In addition to demographic variables, we explored work items: job position (unit chief or above *vs* others), time in the present facility, frequency of night work, time in the care field, work environment (“Do you think it is easy to discuss work concerns in your work space?” [yes/no]) and support from colleagues (“Do you have someone to talk about work concerns in your work space?”). We also investigated generalized trust (i.e. “Generally speaking, would you say that most people can be trusted?”), attitude toward end-of-life care (i.e. “Are you willing to take care of a dying person?”) and whether they had a religion.

First, univariate analyses were carried out, followed by binary logistic regression analysis using the forced entry method. Demographic items and items that were significant in the univariate analyses were used as predictor variables. The final values obtained are shown in the Table 1. The mean WHO-5-J score was 10.4 (standard deviation 5.2), and 64.6% of participating care staff showed poor mental well-being. The binary logistic regression analyses showed that factors associated with good mental well-being (i.e. protective factors) were good work environment (OR 4.539, 95% CI 1.552–13.273), positive attitude toward end-of-life care (OR 2.563, 95% CI 1.011–6.495) and generalized trust (OR 2.475, 95% CI 1.165–5.257). Basic items, such as marital status, living status and work experience, were not associated with poor mental well-being.

The present findings showed that care staff continue working despite poor mental well-being. We suggest that delivering education for care home leaders about improving the work environment and educating staff about end-of-life care might improve mental well-being among care staff. However, cross-sectional design has inherent limitations in determining causal relationships. Accordingly, future study is necessary to investigate the impact of end-of-life care education on mental well-being among care staff.

Acknowledgements

This work was supported by JSPS KAKENHI Grant Number JP20K20336. We are grateful to Ms Kayoko Tokita for her support and constructive suggestions. We also thank Audrey Holmes, MA, from Edanz (<https://jp.edanz.com/ac>) for editing a draft of this manuscript.


Progressive deterioration of frailty is associated with poor outcomes in patients with transthyretin cardiac amyloidosis

Dear Editor,

Frailty is common in older patients with heart failure (HF) and is associated with increased risk of mortality.^{1,2} In particular, it is important to characterize frailty in patients with HF with

Disclosure statement

The authors declare no conflict of interest.

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References

- 1 The Ministry of Health, Labor, and Welfare. Press release. Estimated Supply and Demand for Human Resources for Nursing Care in 2025 (in Japanese). <https://www.mhlw.go.jp/stf/houdou/0000088998.html> [Accessed 2021-05-04].
- 2 Castle NG, Engberg J, Men A. Nursing home staff turnover: impact on nursing home compare quality measures. *Gerontologist* 2007; **47**: 650–661. <https://doi.org/10.1093/geront/47.5.650>.
- 3 Costello H, Walsh S, Cooper C, Livingston G. A systematic review and meta-analysis of the prevalence and associations of stress and burnout among staff in long-term care facilities for people with dementia. *Int Psychogeriatr* 2019; **31**: 1203–1216. <https://doi.org/10.1017/S1041610218001606>.
- 4 Okamura T, Shimmei M, Takase A *et al*. A positive attitude towards provision of end-of-life care may protect against burnout: burnout and religion in a super-aging society. *PLoS One* 2018; **13**: e0202277. <https://doi.org/10.1371/journal.pone.0202277>.
- 5 World Health Organization. Mental health: strengthening our response. 2018. <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response> [Accessed 2021-07-10].
- 6 Inatani F, Tsuda A, Murata S, Kamizono Y. Effects of occupational stresses and cognitive appraisal on mental health of workers in elderly care homes. *Kurume Univ Psychol Res* 2008; **7**: 35–40.
- 7 Fukunishi I. The assessment of cut-off point of the general health questionnaire (GHQ) in the Japanese version. *Clin Psychol* 1990; **3**: 228–234.
- 8 Awata S, Bech P, Koizumi Y *et al*. Validity and utility of the Japanese version of the WHO-five well-being index in the context of detecting suicidal ideation in elderly community residents. *Int Psychogeriatr* 2007; **19**: 77–88. <https://doi.org/10.1017/S1041610206004212>.

How to cite this article: Ura C, Okamura T, Takase A, Shimmei M, Ogawa Y. Mental well-being of staff in long-term care facilities at risk. *Geriatr. Gerontol. Int.* 2021;21:966–967. <https://doi.org/10.1111/ggi.14260>