of 1 or 2 of 5 points (Table 1). The FRAIL scale areas under the curve for discrimination of disability was significantly smaller than that of the KCL in both persons aged <75 years and those aged ≥75 years (Table 1). Therefore, the discrimination ability of the FRAIL scale for frailty and disability was acceptable[9] in not only those aged <75 years, but also in those aged ≥75 years; however, the discrimination ability for disability of the FRAIL scale was inferior to that of the KCL. In addition, the cut-off points of the FRAIL scale in this study were found to differ from those of previous studies (2 or 3 points).[2,4] If frailty was redefined as a score of at least 1 point on the FRAIL scale, kappa coefficients between the KCL score and the FRAIL scale score were improved, but the degree of agreement was still weak ($\kappa = 0.34$ in those aged <75 years, $\kappa = 0.43$ in those aged ≥75 years).

In conclusion, the FRAIL scale appears to be a simple and useful tool as a screening test for frailty in Japanese community-dwelling older people. However, an alternative FRAIL scale cut-off point may need to be considered for Japanese older people that is best predictive of KCL defined frailty. Furthermore, the predictive ability for disability may have limitations in comparison with other validated scales for frailty. In clinical practice, if the FRAIL scale were to be applied to Japanese older people, further assessment of frailty using other validated scales or criteria may be recommended for individuals who score at least 1 point on the FRAIL scale.

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Disclosure Statement

The authors declare no conflict of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Experiences with COVID-19 cluster infections in geriatric care facilities

Dear Editor,

Geriatric care facilities, where vulnerable older adults live, have struggled with the risk of coronavirus disease (COVID-19) cluster infections and COVID-19-related death.[1,2] People with dementia (PWD), who constitute the majority of facility-dwelling residents, are at high risk of COVID-19 infection and worse outcomes.[3] Facilities have made efforts, such as changing care methods while adhering to the infection prevention measures and visiting restrictions as needed.[4,5] However, to our knowledge, there are no reports on geriatric care facilities' experiences with COVID-19 cluster infections or their difficulties with dementia care during such times. Therefore, we explored COVID-19 cluster infection experiences in geriatric care facilities (medical and long-term care facilities for older adults), including those of PWD, during the 2 years following the pandemic's onset. Sharing experiences with COVID-19 cluster infections in geriatric care facilities provides a valuable resource in considering future measures for the prevention and early convergence of cluster infections.

In this study, an online self-administered questionnaire survey of medical and long-term care facilities was conducted from October to December 2021 by Hiroshima University and the Japan Geriatrics Society. Medical facilities included hospitals specializing in PWD treatment and recuperation, mental illness and chronic diseases requiring long-term care. Of 686 facilities that participated, 16 (2.3%) responded that they had experienced COVID-19 cluster infections; these included one medical facility (dementia treatment unit) and 15 long-term care facilities (care homes for older people and group homes for PWD). Figure 1 shows the difficulties experienced while responding to cluster infections, and the greatest impact was on staff. The most frequent answer was psychological burden on staff, followed by physical burden on staff and lack of staff available to work. Among the 16 respondents, eight indicated that it was difficult for their facilities to cooperate with local governments and public health centers that were responsible for public health activities, such as surveillance, distribution of medical equipment, and coordinating admission of infected persons. Furthermore, five reported that their facilities cared for infected persons because local hospitals were overwhelmed and could not admit them. Difficulties in implementing infection control measures, such as a lack of personal protective equipment and difficulties with zoning, have also been reported.

For the 14 facilities that answered that some cluster-infected persons had dementia, we asked about the difficulties in caring for infected dementia residents. The most frequent answers were obtaining residents' cooperation in precautions, such as wearing masks and hand sanitation, and ensuring that staff were available to work. The second frequent answers were for care in individual residence rooms and responses to worsening dementia symptoms, followed by refusal of hospitalization due to the infected person having dementia and difficulties transporting the infected PWD for hospitalization.

The present study revealed that COVID-19 cluster infections in medical and long-term care facilities for older adults led to a serious disruption in typical individualized dementia care and forced the facilities to practice care for infected persons normally provided by specialized hospitals on site due to overwhelmed community healthcare systems. PWD are vulnerable to changes in dementia care and their environment, resulting in increased psychological stress and worsening dementia symptoms with cluster infections. The infection itself can also affect psychosomatic conditions of PWD. Our findings suggest the importance of simulating cluster infections, including responses regarding PWD, and developing business continuity planning for one facility, multiple facilities and regional units to ensure continuity of dementia care according to the symptoms and conditions of PWD.

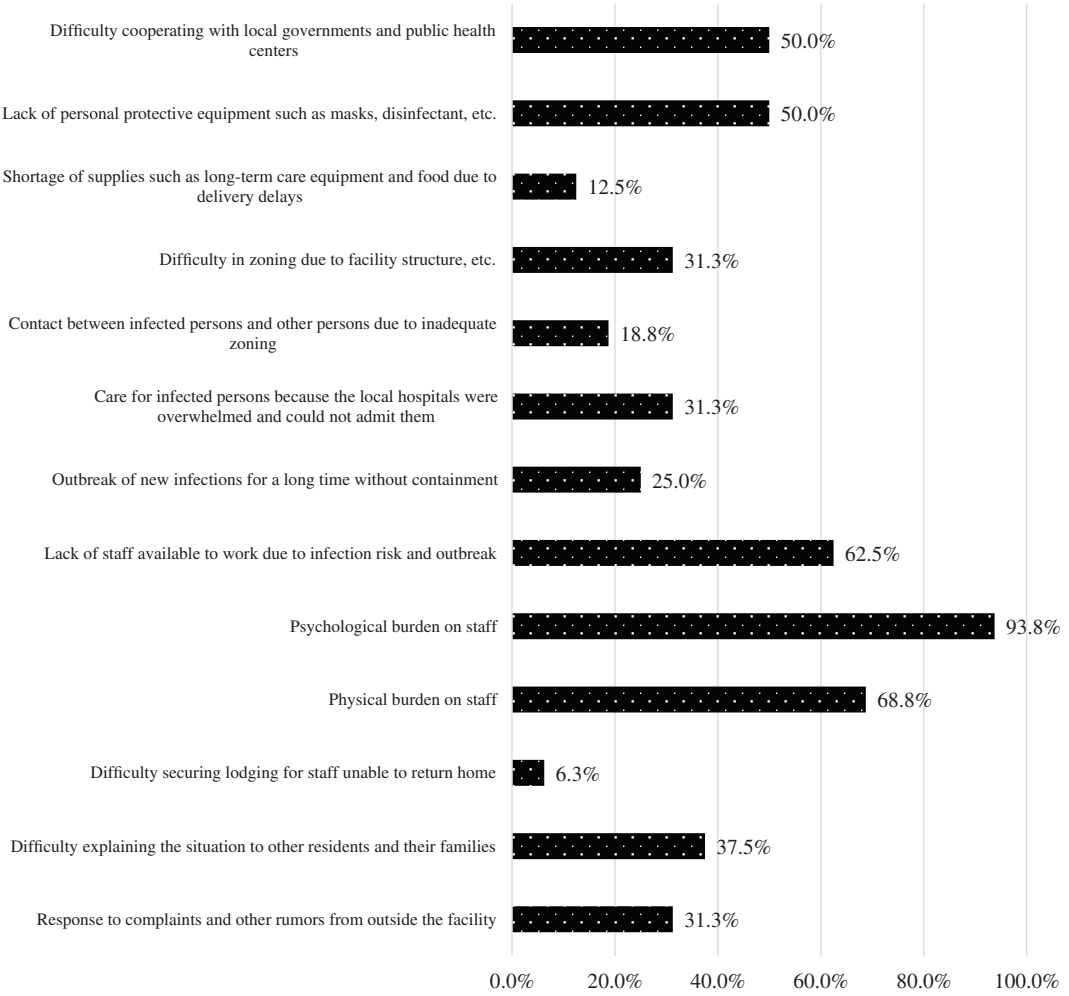

Figure 1 Difficulties experienced while responding to cluster infections in medical and long-term care facilities for older adults.

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Disclosure statement

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The datasets analyzed in the present study are not publicly available. This study was conducted by Hiroshima University in collaboration with the COVID-19 response team of the Japan Geriatrics Society. Informed consent for the secondary use of the data was not obtained from the participants.

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COMMENTS

Reply to the comments on "Five-repetition sit-to-stand test: End with the fifth stand or sit?"

Dear Editor,

We express our gratitude to Dr. Lim and Dr. Chew for their valuable suggestions[1] regarding our recent research letter, titled "Five-repetition sit-to-stand test: End with the fifth stand or sit?"[2] Our investigation determined the reference value for two types of measurements (final position of standing or final position of sitting) followed in the five-repetition sit-to-stand test (5CS) corresponding to a gait speed of <1.0 m/s, which is the cutoff slow gait speed recommended by the Asian Working Group for Sarcopenia (AWGS) 2019 using the receiver operating characteristic (ROC) curve. As a result, the reference values for the 5CS that corresponded to a slow gait speed were 10.0 s and 10.9 s when the final position was standing and sitting, respectively.

Lim and Chew indicated the limitations of using ROC curves to obtain reference values and then proposed that it is also useful to determine reference values from the regression equation for 5CS in terms of gait speed. We agreed with their point, so we determined the reference values based on the regression equations in each final position. The reference values corresponding to a gait speed of 1.0 m/s were 11.1 s and 11.7 s when the final position was standing and sitting, respectively (Fig. 1). These values are closer to the 12 s cutoff recommended by AWGS 2019.

In summary, for both final positions, a difference of approximately 1 s (with respect to the reference values) was noted between the values determined using ROC curve analysis and regression equation analysis. As a consequence, these results suggest that two cutoffs would be needed for different stop positions in future recommendations. It is difficult to determine which value should be used based on this study alone, and a longitudinal study is required to clarify the validity of these reference values.

Conflicts of interest

None.