Primary care approach to frailty: Japan’s latest trial in responding to the emerging needs of an ageing population

Megumi Rosenberg 1, Katsunori Kondo 2, Naoki Kondo 4, Hiroyuki Shimada 3, Hidenori Arai 5

Frailty is a common clinical syndrome in older adults associated with an increased risk for poor health outcomes including disability, hospitalisation and mortality.1 The global burden of frailty is increasing with the worldwide trend of population ageing.2 Based on a recent meta-analysis involving data from 28 countries on more than 120 000 community-dwelling older adults, 60 years old and above, the incidences of frailty and prefrailty were estimated at 43.4 and 150.6 new cases per 1000 person-years, respectively.3 In Japan, where nearly one-third of the population is 65 or older, frailty’s adverse outcomes and increased healthcare costs and use are already a significant public health concern. Frailty prevalence in Japan among people aged 65 and older is reportedly 7.4%, increasing to 20.4% among those aged 80–84 years and 35.1% among those aged 85 and older.4 Although there are still no gold standards for its assessment, prevention or treatment, there is a general consensus about the severe impact of frailty on older adults, their caregivers and on society as a whole. It is a condition that cannot be ignored as countries adjust their course toward realising universal health coverage in response to rapid social and demographic change. In fact, there is growing recognition in the Japanese healthcare community that the key to extending healthy life years may lie as much, or perhaps more, in frailty prevention and management as it does in the prevention and control of noncommunicable diseases in adulthood, including metabolic syndrome.

In this context, in 2014, the Japan Geriatrics Society adopted the English term ‘frailty’ in Japanese (ふれいり) to renew the understanding of this phenomenon emphasising that it is reversible and that its progression can be prevented through appropriate intervention. It replaced previous equivalent Japanese terms that implied an individual’s natural, inevitable state of physical, mental and social weakness or decline with ageing. The adoption of the new term effectively medicalised frailty with both positive and negative consequences. On one hand, it promoted a shared understanding among health professionals and the public that frailty warrants medical attention and care, replacing the prevailing view that frailty be accepted as an outcome of normal ageing. On the other hand, medicalising frailty may have misled the public into thinking that it is a condition for which there is a prescribed course of treatment. It also led the healthcare community to focus on detecting high-risk individuals in clinical settings and providing them with individual support to improve their physical health and functioning. However, this approach had little success in Japan, indicating that the awareness of and countermeasures for frailty were still unsatisfactory.

Until recently, frailty has largely remained a physical health issue in the realm of geriatricians, both in Japan and elsewhere. However, as the understanding of frailty and its complexity improves, there is growing recognition within the broader medical community, globally, that all types of healthcare professionals should be involved to prevent and manage frailty.5 Moreover, there is growing evidence from Japan about the importance of the psychosocial dimension of frailty and its impact on health outcomes.6 7 Studies also show that social participation, which enables people to have a meaningful role in society, interact with others and gain access to social support, helps prevent functional disability and reduce health inequalities among older Japanese people.8–10 Globally, participation is also recognised as a major component of the International Classification of Functioning,
Disability and Health\textsuperscript{11} as well as a core dimension of Age-friendly Cities and Communities.\textsuperscript{12}

Considering this, the approach to frailty in Japan has taken a major turn and now embodies a primary healthcare approach. Primary healthcare is a whole-of-society approach to health and well-being that addresses the broader determinants of health while also offering comprehensive care for the interrelated aspects of physical, mental and social health and well-being as close as possible to people’s everyday environment.\textsuperscript{13} Consistent with this concept, frailty care in Japan has expanded beyond the clinical arena of geriatric care across the spectrum of health and social care sectors and care settings to provide a continuum of comprehensive care. It still includes a strong clinical care component that identifies high-risk individuals and provides personal consultation and guidance focusing on evidence-based physical activity interventions.\textsuperscript{14} However, this is bolstered by a multidisciplinary, multisectoral approach that brings frailty care into the everyday life of all older people. Home-based healthcare services delivered by interprofessional teams increasingly include frailty prevention and management for both the older patient and their family caregiver, who is often an older person themselves. National pharmacy chains are training their pharmacists to assess frailty and provide frailty consultations and referrals when patients fill their prescriptions at their local pharmacy. Moreover, various community-based programmes that go beyond the health sector are run for and by older people to promote social participation, often in combination with the promotion of physical activity (through group exercises) and healthy diets (through group meals), giving the community and its members a role in their own care. These exemplify the extensiveness of the efforts taken to integrate all kinds of medical, public health and social approaches at the community level to address the determinants of frailty and provide care for frailty, and thereby improve the quality of daily life for older people, their families and the communities.

To give further perspective, this reorientation toward a primary healthcare approach to frailty is taking place within the broader context of Japan’s policy on long-term care. Japan established the national long-term care insurance system in 2000, independent of the existing medical insurance system, recognising that a separate system of resources, financing and service delivery was necessary to meet the needs for daily care and support among the growing number of older people who experience a physical and functional decline. In 2006, the policy was reformed to strengthen the prevention of functional disability to reduce the need for long-term care. These prevention efforts were led not by health professionals but by municipal governments who were the insurers of long-term care. During the initial years, these efforts relied on a secondary prevention strategy that aimed to identify individuals at high risk of becoming dependent on long-term care through annual health examinations and mail surveys and refer them to prevention programmes focused on physical health and functioning. These programmes failed to achieve adequate population-level effects for several reasons.\textsuperscript{9,15} It was difficult to accurately assess risk, and the target population was in the millions, making screening very costly. Participation rates among those referred to prevention programmes were very low, and even participants who showed some functional improvement relapsed after the programme ended.

Hence, in 2015, based on the accumulating evidence about social participation as a determinant of older people’s well-being and its preventive effects on functional decline, the central government made a radical shift in their policy to move away from secondary prevention. Instead, it placed importance on the primary prevention of functional disability by creating places in the community for older people to regularly gather and socialise, in principle, through citizen-led, community-organising efforts. Since then, this emphasis on mobilising the community and its resources, that is, social capital, to enhance social participation and thereby prevent functional decline and promote well-being has been reflected in various Japanese policies on older person’s care, including frailty care, with some demonstrable success.\textsuperscript{15} More recently, there has been a push for greater integration between the community-based social programmes and existing health promotion programmes. All this is happening within a broader mandate for local governments to develop so-called ‘community-based integrated care systems’ that are intended to provide the full spectrum of care for older people from prevention to palliation through integrated health and social care services within the everyday life sphere of all older people in the community.\textsuperscript{16}

In summary, the evolving approach to frailty care in Japan reflects a profound effort to build and realign systems so that the emerging needs of the rapidly ageing population are addressed through an integrated, multidisciplinary and patient-centred approach. Some of the challenges that lie ahead include ensuring citizen inclusion and empowerment\textsuperscript{17}; identifying appropriate roles and responsibilities for various professionals within citizen-led programmes; accurately differentiating high-risk individuals who would most benefit from more resource-intensive care; creating financial incentives for healthcare providers to manage frailty; and evaluating the success of this multimodal approach to frailty. Japan could be a model for much needed research on the effectiveness of community organising on population health outcomes\textsuperscript{15} and the reorganisation of health and social systems to focus on frailty and the development of frailty care programmes.\textsuperscript{2}

Japan continues to push the boundaries of individual longevity and population ageing. We have yet to see how far it can extend the years that can be lived without the familiar signs of physical, mental and social decline which commonly define ageing, often leading to unjustified ageism. As the global community embarks on the Decade of Healthy Ageing (2020–2030) on its way to realise universal health coverage by 2030, it could be helpful to take stock of the experiences that led Japan from first regarding frailty
as an inevitable and irreversible condition due to ageing, then focusing on clinical care and prevention among high-risk individuals, and now pivoting to a primary healthcare approach that addresses frailty through a whole-of-society strategy and brings its care into the hands and lives of the people. They signal a caution against relying on a wholly medical/clinical approach when awareness about frailty is generally low, the techniques for risk assessment, case finding, prevention and management are still imperfect, and the problem is fundamentally multidimensional.

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ORCID iD Megumi Rosenberg http://orcid.org/0000-0002-0226-2229

REFERENCES

1 Xue Q-L. The frailty syndrome: definition and natural history. Clin Geriatr Med 2011;27:1–15.

2 Hoogendijk EO, Afilalo J, Ensrud KE, et al. Frailty: implications for clinical practice and public health. Lancet 2019;394:1365–75.

3 Ofori-Asenso R, Chin KL, Mazidi M, et al. Global incidence of frailty and prefrailty among community-dwelling older adults: a systematic review and meta-analysis. JAMA Netw Open 2019;2:e193398.

4 Kojima G, Iiiffe S, Taniguchi Y, et al. Prevalence of frailty in Japan: a systematic review and meta-analysis. J Epidemiol 2017;27:347–53.

5 Lancet. Bringing frailty into all realms of medicine. Lancet 2019;394:1298.

6 Tsutsumimoto K, Doi T, Makizako H, et al. Social frailty has a stronger impact on the onset of depressive symptoms than physical frailty or cognitive impairment: a 4-year follow-up longitudinal cohort study. J Am Med Dir Assoc 2018;19:504–10.

7 Yamada M, Arai H. Social frailty predicts incident disability and mortality among community-dwelling Japanese older adults. J Am Med Dir Assoc 2018;19:1099–103.

8 Kanamori S, Kai Y, Aida J, et al. Social participation and the prevention of functional disability in older Japanese: the JAGES cohort study. PLoS One 2014;9:e99638.

9 Saito J, Haseda M, Amemiya A, et al. Community-based care for healthy ageing: lessons from Japan, Bull World Health Organ 2019;97:570–4.

10 Kondo K, Rosenberg M. Advancing universal health coverage through knowledge translation for healthy ageing: lessons learnt from the Japan Gerontological Evaluation Study. Geneva: World Health Organization, 2018. https://apps.who.int/iris/handle/10665/279010

11 World Health Organization [Internet]. International classification of functioning, disability and health. Available: https://www.who.int/classifications/icf/en/ [Accessed 20 May 2020].

12 World Health Organization [Internet]. Fact sheet: primary health care. Available: https://www.who.int/news-room/fact-sheets/detail/primary-health-care [Accessed 20 May 2020].

13 Fried LP. Interventions for human frailty: physical activity as a model. Cold Spring Harb Perspect Med 2016;6:a025916.

14 Haseda M, Takagi D, Kondo K, et al. Effectiveness of community organizing interventions on social activities among older residents in Japan: a JAGES quasi-experimental study. Soc Sci Med 2019;240:112527.

15 Tsutsui T. Challenges and opportunities in the development of the community-based integrated care system in Japan: significance of social capital within community-based integrated care system. Journal of the National Institute of Public Health 2012;61:96–103.

16 Dahl N. Social inclusion of senior citizens in Japan: an investigation into the ‘Community-based Integrated Care System’. Contemporary Japan 2018:30:43–59.