Effective Exercise Programs among Frail Elderly: Establishing Community-based Long-Term Care Prevention Programs

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In 2007, those aged 65 or older accounted for 22% of Japanese entire population, and Japan is now facing the advent of a “Super-aged” society earlier and more rapidly than any other countries in the world. Geriatric syndrome (e.g. falls, physical frailty, urinary incontinence, and dementia) and locomotive syndromes (e.g. low back pain, osteoarthritis, and osteoporosis) are well-known and highly prevalent ageing-specific functional and cognitive symptoms and high-risk condition for receiving the long-term care services among older adults. Considering the further continuing increase in the elderly population in Japan, developing the effective programs or strategies for preventing such geriatric and locomotive syndromes are urgently required for maintaining health and independence in elderly people and consequently reducing the cost for medical care and long-term care in Japan. Over the past decades, many exercise interventions for older adults with the geriatric and locomotive syndromes have been developed. Several studies have validated that such interventions can achieve high rates of participation and improve their physical functioning and fitness such as muscle strength, walking and balance ability in the short-term. However, some additional considerations may need to develop the effective and feasible interventions in community practice settings. This presentation will identify such considerations through introducing our previous studies. These considerations are as follows:

• Many of exercise interventions are often entirely-focused on “improving physical functioning and fitness in one structured setting during in its intervention period”. Thus, the older adults often fail to maintain the exercise or functional training after the intervention has ended. Including lifestyle approach in the intervention could provide a solution for it. An advantage of lifestyle approach is that people learn to integrate exercise and functional training into their daily lives.

• Most of these studies focused on physical functioning and fitness as outcomes in the short-term. However, it may be necessary to evaluate an impact of its intervention on their physical activity level on daily life, the economic effectiveness of its intervention such as the certification of long-term care need when viewed from the perspective of a long-term care.

• In previous studies, evidence-based interventions have not been widely applied and tested in public health practice and other non-research setting. It is unclear whether evidence-based interventions produce similar outcomes and reach broad target populations when delivered in community practice settings. It would be necessary to understand and evaluate translational efforts of efficacious intervention to determine their public health impact.