

# **Epidemiological survey on spinal alignment and exercise capacity/nursing care in the older people.**

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Excessive deterioration of spinal alignment leads to impairment of activities of daily living. However, the relationship between age-related changes in spinal alignment and diminished physical function in the general population is still unclear. We investigated the spinal sagittal alignment, physical function, and nursing care conditions in a general population cohort consisting of residents in their 50s to 80s selected by random sampling, called the Obuse Study Cohort. As a result, it became clear that deterioration of spinal sagittal alignment, that is, postural changes, is associated with diminished physical function, and diminished physical function is associated with frailty. In addition, it was found that frailty is highly likely to occur with anteriorization of spinal balance in females. Thus, we propose that deteriorating posture in older adults may lead to declining physical function and the need for nursing care.