The expectations and acceptability of a smart nursing home model among Chinese elderly people: a mixed methods study protocol

ABSTRACT

Nursing homes integrated with smart information such as the Internet of Things, cloud computing, artificial intelligence, and digital health could improve not only the quality of care but also benefit the residents and health professionals by providing effective care and efficient medical services. However, a clear concept of a smart nursing home, the expectations and acceptability from the perspectives of the elderly people and their family members are still unclear. In addition, instruments to measure the expectations and acceptability of a smart nursing home are also lacking. The study aims to explore and determine the levels of these expectations, acceptability and the associated sociodemographic factors. This exploratory sequential mixed methods study comprises a qualitative study which will be conducted through a semi-structured interview to explore the expectations and acceptability of a smart nursing home among Chinese elderly people and their family members (Phase I). Next, a questionnaire will be developed and validated based on the results of a qualitative study in Phase I and a preceding scoping review on smart nursing homes by the same authors (Phase II). Lastly, a nationwide survey will be carried out to examine the levels of expectations and acceptability, and the associated sociodemographic factors with the different categories of expectations and acceptability (Phase III). With a better understanding of the Chinese elderly people's expectations and acceptability of smart technologies in nursing homes, a feasible smart nursing home model that incorporates appropriate technologies, integrates needed medical services and business concepts could be formulated and tested as a solution for the rapidly ageing societies in many developed and developing countries.