



HOW WILL TECHNOLOGY BE USED FOR AGED PEOPLE'S HEALTH RELATED NEEDS?

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Twenty first century has changed life in many aspects one of which is very linked to the technological improvements (1). Technology, if used in "good/intended" direction, is expected to help aged people to maximize their potential in life (2) and to maintain independency in their lives even they have chronic diseases (1). Aged people may need any type of external support in two basic situations including the need for continuation of successful and healthy aging as well as ill/sick/disabled elderly people's needs (1).

Successful aging has three dimensions including less frequency in disease and disabilities, sufficient capacity in cognitive and physical dimensions of health, and social activity participation (3). The independency and the social inclusion of the elderly people determine their quality of life very closely (4). Nevertheless, aged people frequently face with more than one disease concurrently and such conditions make the situation complex to achieve the goal of successful aging.

There are also inequalities between the countries in disease profiles of the aged population. Low and middle income old age people triplicate the number of years lost to premature death caused by heart diseases, stroke, and chronic lung diseases. Visual and hearing loss problems are also more frequent compared to the high income countries (5). Long term care need increases every day as the population is aging all around the world (6). Comorbidity is frequently associated with dying risk, lower functional status, lower quality of life and more frequent health service utilization (7). Almost 80% of the older people has at least one chronic condition whereas the percent decreases to 50 who have at least two chronic conditions (8). Another study highlights the multi-morbidity range in the elderly as 55 to 98%. Being women and belonging to low socio-economic status make the situation worse (9). The chronic conditions like cognitive impairment, falls, incontinence, vision or hearing impairment, low body mass index, dizziness increase the limitation of daily living (10).

In such chronic conditions, medication optimizing, patient monitoring, post-acute care transition are among prior aspects of technology use among elderly (11). There are many examples in different countries. For example, In New York City, a group of elderly people whose ages are between 64 and 94 use the interactive online games to dance. The program they use help them to monitor the benefits of activity, and to manage with their chronic conditions via a number of information like glucose level, blood pressure, etc (12).

Briefly, technology can be used in prior items for aged people written below:

1. Hearing aids
2. Visual aids
3. Bed-chair-sitting-standing-walking aids
4. Bathroom aids to prevent falls
5. Warning sensors for smoke, fire, etc especially in the kitchen
6. Early warning technological aids to remind aged people the hours of medication, etc.
7. Aids developed in emergency situations including disasters

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8. Early warning technological aids linked to emergency departments in case of emergency situation occurred at home
9. Technology developed for clinical settings including internal, surgical medicine practices
10. Smartphone reminders used for aged people with memory difficulties (13)
11. Outside environmental arrangements for aged people

All types of recommendations/interventions using technology should be experimented via evidence based medicine principles before being available and eligible. Technology in any form should not be used as a threat to privacy (14). Furthermore, any condition(s) causing/ending with any ethical dilemmas should be avoided. Finally, health services which the aged people need should be accessible and covered by the social security systems. Therefore, strong regulations are required which the state bodies are expected to take the major roles.

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