

Using Mobile Health Technology and the Impact on Health-related Quality of Life

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Keywords

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1. Introduction

Digital health technologies such as mobile health (mHealth) technology is considered to have the potential to support the physical and mental health of older adults' [1, 2]. Studies have shown that the adoption of mHealth technology can offer older adults with cognitive impairment support in daily activities, relationship, memory, leisure activities, health and safety [3]. In people with cognitive impairment i.e., dementia, self-rated health is associated with the subjective view of quality of life (QoL) [4]. Thus, the concept of health-related quality of life (HRQoL) is appropriate to use when focusing on the effects of technology on health and QoL. However, the evidence for improving health with the use of mHealth technology in older adults with cognitive impairment is of limited quality [5] and few studies have reported on the consequences of technology use concerning the older adults' QoL [6]. Hence, the purpose of this study was to describe perceptions of mHealth technology and its impact on HRQoL among older adults with cognitive impairment.

2. Methods

The study was conducted using a qualitative design with a phenomenographic approach. A total of 18 older participants, aged 55 or above, with cognitive impairment were interviewed semi-structured. The inclusion criteria were based on the mini-mental state examination (MMSE) where the older adults needed to score between 20-26 points to be included [7] and having experience of using mHealth technology. The interviews were analyzed in consecutive steps in accordance with Sjöström and Dahlgren's guidelines [8] in order to apply phenomenography in a home-care context.

3. Results

The preliminary results showed variations in the older adults' perceptions of mHealth technology and its impact on HRQoL. These variations reflected perceptions of having the ability to use, manage, understand and access mHealth. Also, perceptions of using mHealth technology to support memorization, health monitoring during illness, communication with family members and relatives and to create feelings of security and well-being was described. Together, these perceptions indicate that mHealth technology was perceived as supportive in everyday life and had an impact on the older adults' HRQoL, although this was dependent on their technological abilities which seems to vary significantly.

4. Conclusions

The results imply that the ability to use, manage, understand and access mHealth technology among older adults with a cognitive impairment needs to be addressed on a societal level to reduce social inequalities and avoid the risk of digital exclusion. Further, the development and design of future mHealth technologies need to be tailored based on older adults' needs in order to be understood and perceived as useful in a home care context. For mHealth technology to support HRQoL in older adults

with cognitive impairment, healthcare should be provided in a way that encourages various forms of communication and interaction. Thus, the use of mHealth technology may to some extent support aging in place for this population.

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