Chapter 5
Effective Use of Virtual Communities for Health-Purposes in the Elderly

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ABSTRACT

New strategies must be developed to adequately answer the growing health needs of the elderly. Virtual communities targeted to older adults may represent interesting tools, ranging from providing health-related information to operating preventive programs, or simply reducing social isolation and thus increasing the quality of life of the elderly. Besides generic issues shared with any eHealth virtual community (e.g., user engagement, participation, acceptance), the use of virtual communities by the elderly also bears some specific challenges, including limitations related to access to care or the presence of individuals with (age-related) disability. This Chapter describes some of the factors which should be taken into consideration when designing eHealth strategies aiming at developing or supporting virtual communities targeted to elderly population, and emphases the importance of integrating health-oriented senior-targeted virtual communities into holistic approach to allow for the communities to optimally develop and consolidate, and reach its goal in terms of health benefits.
**INTRODUCTION**

With the well-documented aging of the population, senior citizens represent an increasing proportion of the demographic pyramid of Western societies. From a public health point of view, this situation leads to major concerns. Indeed, an aging population has higher needs in terms of health, particularly a higher vulnerability to chronic diseases and associated co-morbidities. Furthermore, as people age, they typically require more social support, while being at the same time subjected to more social isolation. Therefore, this aging of the population imposes a growing burden on public health systems – a burden which is likely to grow even heavier in the coming decades. In a global context of limited resources, a major challenge to address this issue is to develop innovative solutions in order to assist this specific demographic population while taking into consideration its special needs.

In this context, the use of virtual communities targeted to elderly may represent an interesting health promotion tool. Online health-related communities might have several implications for clinical practice, enabling collaboration, in terms of exchanging experiences and sharing knowledge, between interdisciplinary health professionals from various institutions (van der Eijk, Faber, Aarts, Kremer, Munneke & Bloem, 2013). These tools can be useful to enhance the expertise of health professional, which in turn have a positive impact on patients themselves. Virtual communities are also created to be used directly by elderly patients. Indeed, Internet-based communities can be used to provide health-related information, to implement and operate preventive programs, or simply to reduce social isolation and thus increase the quality of life of the elderly. Over the last two decades, numerous studies have explored the association between Internet use among elderly people and well-being. For example, Internet use decreases loneliness and increases social contacts in assisted and independent living communities (Cotton et al., 2013). Internet use might affect well-being directly, or through its benefits toward other social variables such as loneliness and social support, and may differ according to living settings. Other studies focused more on physical health in creating online programs for various specific pathologies such as lung cancer (Brown-Johnson, Berrean, Cataldo, 2015), chronic pain (Berman, Iris, Bode & Drengen, 2009) or specific pathologies that are more frequent with increase of age such as cognitive impairment (Gigler, Blomeke, Shatil, Weintraub & Reber, 2013). Interventions aiming at encouraging the adoption of healthy life habits have been the object of a few studies again focusing on specific behaviors toward prevention of specific pathologies, such as sun protection (White, Starfelt, Young, Hawkes, Cleary, Leske, & Wihardjo, 2015) or more general health related-habits such as physical activity.
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