Seniors' attitude to e-health

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Abstract

Currently, a number of elderly people is rising all over the world. It is expected that by 2020 the percentage of elderly people aged 60+ years will reach 30% of the total number of population living in the developed European countries. This demographic trend brings about other serious issues such as an incidence of aging diseases, out of which the most common is dementia. At present its development can be delayed for some time by medications and by a few other non-invasive alternative approaches (e.g., music therapy or physical activities). Also technological devices can assist elderly people in obtaining information about their state of health and providing information for its improvement. Therefore the purpose of this article is to describe the concept of e-health and discuss seniors' attitude to this application with highlighting its main benefits.

Keywords: E-health, technological devices, seniors, attitude, benefits.

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1. Introduction

Currently, there is a rising number of elderly people worldwide. By 2020 the percentage of elderly people aged 60+ years should reach 30% out of the total number of population living in the developed European countries (Benacova & Valenta, 2009). This demographic trend causes other serious problems such as an incidence of aging diseases. The most frequent aging disease nowadays is dementia (Pohanka, 2011). At present there are about 47.5 million of people suffering from this disease worldwide and every year this number is increasing by new 7.7 million (Langa, 2015). Dementia is a neurodegenerative disease which manifests itself by significant memory loss, orientation difficulties, communication disorders, worsening decision-making process, depression, apathy, agitation, behavioral changes, confusion, or sleeping difficulties. Dementia is caused by several reasons such as an impediment of blood flow which circulates into the brain, multiple small strokes, malnutrition, brain tumors, metabolic diseases or trauma. At present the most frequent type of dementia is Alzheimer's disease which covers 70% of all dementia cases (Klimova & Kuca, 2015). Although the symptoms of the dementias listed above can be partially delayed thanks to the relevant medications, they eventually worsen and result in patient's death. Therefore researchers all over the world look for another alternative ways that can assist them in maintaining patients' quality of life and reducing the overall economic burden (Maresova, Klimova, & Kuca, 2015). This can be, for example, done by exploiting information and communication technologies, which can help these people with their health issues by using the so-called e-health services.

2. E-health

At present there are several definitions of the e-health concept (Bujnowska-Fedak & Pirogowicz, 2014; Oh, Rizo, Enkinit & Alejandro, 2005). E-health can be defined as the use of information and communication technologies, particularly the Internet, to enable healthcare and improve people' health. This concept is relatively new. It originated at the end of 1990's. E-health can have different forms such as electronic health records, electronic prescriptions, clinical decision support, telemedicine, mHealth, or consumer health informatics (EHealth, 2015). As Bujnowska-Fedak & Pirogowicz (2014) claim, e-health technological devices can increase access to healthcare, cut healthcare and administration costs, reduce patient's visits at the doctor, provide a complex overview of patient's state of health, raise information exchange, and improve public and individual health by personalized medical approach. E-health technologies are nowadays on their rise since they can help to overcome geographical barriers between the patient and the healthcare provider and address specific patient's needs. In addition, the market with these e-health technological devices is rapidly developing and there are now numerous such devices at affordable prices.

At present particularly the so-called mHealth which can provide remote healthcare with the help of a mobile device is evolving very fast. And most people, including the seniors, own some mobile device nowadays. For example, in 2010 86% of the world's population was using mobile phones. As Fiordelli, Diviani, & Schulz (2013) indicate, the use of mobile devices can improve diagnosis and compliance with treatment guidelines, patient information and administration efficacy. Furthermore, these mHealth devices are used especially by chronically ill patients for monitoring and control of their disease (cf. Evans, Abroms, Poropatich, Nielsen, & Wallace, 2012).

Thus, as it can be seen from the information discussed in this section, e-health applications can offer many benefits for both healthy and unhealthy individuals. Therefore, the following sections focuses on the attitude of seniors to eHealth because they seem to be one of the biggest consumers of health information nowadays.

3. Seniors and their attitude to eHealth

Studies (Hernandez-Encuentra, Pousada, & Gomez-Zuniga, 2009; Sayago, Sloan, & Blat, 2011) show that elderly people, aged 58-77, are now much more digitally aware than they used to be ten years ago. This is caused not only by acquiring more experience through different kinds of community and nationwide projects (e.g., Bishop, 2009; or Godfrey & Johnson, 2009) aimed at older people, but also their desire to communicate with their family, e.g. grandchildren, or to find the information they need such as health information. In addition, eHealth undoubtedly has a big potential for the seniors since it can enable them easier access to better and more effective healthcare. And with the demographic trend of aging population, there is an urgent need to use e-health services. Specifically, the elderly people are among the most eager consumers of health information.

As the most recent study by de Veer et al. (2015) confirms, two thirds of community-dwelling older people are open-minded towards the use of eHealth application. They can see its benefits such as improved access to health care services and potential cost cuts (cf. Arief, Nguyen, & Saranto, 2013). These elderly people start to use selected eHealth services which include, for example, obtaining information on their health, receiving reminders for scheduled visits, medication instructions, or consulting a doctor at a distance. Furthermore, they use Internet for searching health information about the right nutrition, exercise or weight issues, diseases such as cancer, heart disease, or arthritis, high cholesterol, and health providers (cf. Kaiser Family Foundation, 2003).

However, there are still many seniors who are not willing to take advantage of using the Internet, including the eHealth application. As de Veer et al. (2015) claim, this might be given by age, lower education, gender or place of living. Other factors involve data protection, privacy and digital divide (cf. Arief, Nguyen, & Saranto, 2013). Therefore Sheng & Penny (2013) point to the fact that it is desirable to improve seniors' Internet knowledge and eHealth literacy in order to enable them to search for health information that can improve their health behaviour, respectively quality of their life. Stroetmann et al. (2002) add that if eHealth application should succeed, each senior should have the Internet access, be connected to a telephone, and have the relevant skills. People should be also informed about the main benefits of eHealth services and have a chance to practice this application (cf. de Veer et al., 2015). Tse, Choi, & Leung (2008) in their study provide a practical example on how to train the elderly people in the use of eHealth applications. In a four-week program they managed to teach 30 elderly people basic computer skills and search for health information via the Internet. They also emphasize the need for collaboration between community partners in sponsoring similar technology oriented eHealth programs.

4. Conclusion

As the findings, based on the literature review, show, present seniors seem to be well-equipped with technological devices and access to the Internet. Furthermore, they can see what opportunities and benefits are open to them if they start using these devices, in this case for the improvement and maintenance of their states of health. Specifically, by personalized medical online services they can easily obtain medical information, receive reminders for their scheduled visits, obtain electronic prescriptions, or be monitored if that is necessary. Nevertheless, being able to do so, they need to be trained first in the use of e-health applications. In addition, there should be a cooperation among all involved stakeholders (i.e. government, industry and researchers) in order to proceed in the innovations in this field.

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