Mobile Health Application as a Modern Tool of Prevention and Health Education in Poland

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Dear Editor-in-Chief

Mobile applications are modern tools use to facilitate time management, work, finances affairs and even health. Such technologies serve communication and task organization, so they are more and more popular among the society. There is a variety of special applications categories downloaded through the Internet by many type of devices such as smartphones or tablets. However, applications on health topics, taking into account prevention, treatment or diagnosis, are not popular bearing in mind mobile applications in general.

"E-health is defined as efficient, cost-effective and secure use of information and communication technologies to support all activities related to health care, including health services, observations systems of health-related areas, health education and development of research in the field of heath" (1, 2).

Provided information include medical records, documentation in the form of electronic images, scans or recordings. With the possibility of such transfers, disease diagnosis or diseases prevention could be very quickly (3). Consequently, patient safety and quality of care increases. Among diseases, supported by mobile applications in the coming years, experts indicate diabetes, hypertension, obesity, coronary heart disease, mental, and other chronic diseases (4, 5).

E-health provides safe and fast access to information - for both physicians as well as patients. Moreover, it leads to the ability to better care for patient's health and to create a partnership between the doctor and the patient who has the knowledge and facilitate decision-making regarding treatment. Therefore, e-health could be a successful method to obtain information about health (6, 7).

The concept of e-health is relatively unknown in Poland; hence, the level of acceptance and the desire to use e-health tools is rather low. Studies to identify the degree of knowledge and use of e-health in Poland, especially, in the context of a mobile application about health have not been conducted to date. The results of this study are only some types of projections, assumptions and plan for implementation the European Union projects.

For the evaluation of progress in the implementation of tasks related to e-health, statistics surveys on the use of e-health tools in medical facilities as well as among patients are very useful. Results indicate the increasingly widespread use of so-called Medical Internet. Nearly half of the respondents in that survey believe World Wide Web an important source of information on health (8). More than half of people search health information in this way at least once a month (8). These

results are consistent with the trends observed in Europe.

However, Poles use mobile applications in the context of health infrequently and only 5.4% of medical Internet users contact with a general practitioner (GP) specialist or other physicians (8). The main reasons for contacts are to present a health problem, make an appointment or obtain access to medical data. Taking into account all users of mobile applications, that number decreases to 2.9% (8). However, above-mentioned results seems to be interesting, given the high interest in the possibility of contact with a doctor via mobile devices indicated in own study. Willingness to submit questions to the doctor via the Internet expressed more than 50% of respondents. As a comparison, in the study including seven European countries indicated that the most common reasons to use the Internet in health matters were to read information and decide whether to see a doctor or to prepare for and follow up on doctors' appointments (9).

The Internet and mobile applications are still not an effective tool for communication in the healthcare system in Poland. The reasons for that fact could be an unavailability of the most popular electronic services among patients and medical centers such as electronic appointments or e-prescription.

Describing the rapid advances in technology, the emergence of the telemedicine and e-health concepts, the society is not sufficiently prepared to adapt their habits related to prevention, treatment or diagnosis for technological solutions available among the majority of young generation.

The use of e-health applications in Poland has reached a lower level than in other countries (10), although there is observed an increasing interest in that subject over the years. The community declares its willingness to use mobile health applications in everyday life. The main concerns for use of such devices are an unknown credibility and lack of confidence to those types of solutions.

The growing trend in the interest of modern mobile solutions allows managing peoples' health. In view of that phenomenon, in the coming years, the mobile applications have a chance to become a key tool for prevention, rapid diagnosis and treatment support, so that the availability, quality and effectiveness of health care will increase.

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