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Training of Students for Critical Evaluation of Mobile Health Applications

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Abstract

Medical and nursing students need to be trained in critical evaluation of mobile health applications (m-health apps) in order to see their potential and to understand the need for their validation and certification. Students should develop positive attitudes but also critical views on such apps in order to be prepared for responsible and ethical use of m-health in their future professional practice.

Keywords:

Education, Medical; Mobile Applications; Telemedicine

Introduction

Health and social care systems are facing an upsurge in chronic diseases and multi-morbidity as a consequence of population ageing, at least when the European Union and broader European Region is considered. There is a growing need for supportive tools and practices that will enable elderly people to be active and independent. Mobile applications for health (mhealth apps) have been recognized for their great potential to improve the health and wellbeing of patients by empowering them to take responsibility for their own health [1,2]. Likewise, m-health apps hold a promise for innovative health promotion interventions targeted at younger generations. Therefore, health professionals need to take into account the advantages of mhealth apps, but also to be aware of their limitations and even harmfulness. Students need to be trained in critical evaluation of m-health apps in order to be prepared to utilize the potential of m-health in their future professional practice.

Methods

Fifth-year medical students and second year Master programme nursing students were asked to download m-health apps for smartphones and test them according to given guidelines. Each student has to review and report (in the form of an oral presentation acompained with PowerPoint) on the selected application regarding the following points:

- · target population: patients or healthy subjects
- aim and function: information and education only / health promotion / health care and disease control
- need of Internet connection: all the time or occasionally
- possibility of connecting measuring and tracking units (e.g. heart rate, Fitbit, belt, watch)
- communication with other persons: caretakers, healthcare personnel or social networks

• authors/publishers, availability, languages, price, etc.

Results

Students have proved their capability for testing m-health apps and understand the need for their evaluation, validation and certification. They successfully documented test results, presented them during seminars and have discussed the apps' advantages and drawbacks, as well as their potential, from the perspective of health care.

Conclusions

Medical and nursing students should be trained in critical evaluation of m-health applications in order to:

- develop positive attitudes towards their use, but also critically view and understand the necessity for their validation and certification
- be prepared for the responsible and ethical use of mhealth apps in future professional practice

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