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Usage and acceptance of digital health among Dutch physiotherapists: a cross-sectional study C. J. J. Kloek, P. A. S van de Hoef, C. Veenhof

Purpose Digital health is a broad and ever-changing field with technologies that can fulfill a variety of purposes (e.g. diagnoses, measurement, coaching, assisting, replacing). Just like other health care professions, physiotherapists are facing challenges related to the ageing population, shortage of personnel and available resources. Worldwide digital health is seen as one of the solutions in handling these challenges. With the arrival of international and national digital health statements, guidelines and competence frameworks, technology is not just for the geeks, but is supposed to be used by the majority. The purpose of this study is to gain a general overview of nowadays usage of different types of digital health, and the acceptance and attitude towards digital health, among Dutch physiotherapists. Method For this cross-sectional study, a survey was developed in collaboration with international researchers in the field of technology and physiotherapy. For nine categories of digital health (Technology to... 1. Record and share data; 2. Communicate asynchronous; 3. Communicate synchronous; 4. Make therapy engaging; 5. Inform and socially support; 6. Measure; 7. Perform physical tasks; 8. Support with AI; 9. Replace (part of) face-to-face guidance of a physiotherapist) physiotherapists were asked whether they used the type of technology and, if yes, for what percentage of their patients. For measurement of the acceptance of digital health, a translated version of the Ehealth Acceptability Scale was used (Hayotte et al., 2020). Physiotherapists working in all kind of settings were invited to participate using social media, the newsletter of the professional organization of physiotherapists and the researchers' network. Descriptive statistics were used to analyze the data in SPSS. Results and discussion Responders (N=270) were mostly female (62%), had a variation in numbers of years working experience (0-5 years N=36 (13%) up to 31-35 years N=27 (10%); and worked mostly in a large primary care practice with 6 or more physiotherapists N=164 (61%). Almost all (98%) therapists reported to use technology to record patient data or to share patient data using a secured system. 87% make usage of public health webpages and social media, and 73% of therapeutic apps with exercises. Less than half reported to use video consultations (42%) and activity monitors (43%) or motion capturing sensors (36%). Gamification technology was used by 20% of physiotherapists. Overall, physiotherapists reported to use the technologies in 1-33% of their patients. These results provide a general insight in current usage and acceptance of digital health among physiotherapists and are relevant for researchers, policy makers and healthcare professionals. Digital health is seen as one of the solutions for rising healthcare costs in an ageing society (WHO). By repeating this survey each year, the researchers aim to get insight into developments over time. Increased numbers of participants will facilitate performing subgroup analyses for physiotherapists working with for example older adults. In the near future this survey will be distributed in other countries as well, which will result in an international comparison between countries.

References

Hayotte, M., Thérouanne, P., Gray, L., Corrion, K., D'Arripe-Longueville, F. (2020). The French eHealth Acceptability Scale Using the Unified Theory of Acceptance and Use of Technology 2 Model: Instrument Validation Study. *J Med Internet Res [Internet]*, 22(4):e16520. Available from: http://www.ncbi.nlm.nih.gov/pubmed/32293569
World Health Organization. Global Strategy on Digital Health 2020-2025.

Keywords: digital health, technology, ehealth, telemedicine, physiotherapy

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