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Conference Abstract

The use of apps to support Pelvic Floor Muscle Exercise

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Abstract

Introduction: Urinary Incontinence is socially isolating and debilitating condition affecting millions of women worldwide. Pelvic floor muscle exercise (PFME) is the first line of treatment and can prevent or delay the onset of symptoms. However, there is a lack of understanding about motivation and adherence to PFME.

The use of mobile devices in ICT has increased exponentially over the last decade; the use of mobile devices in healthcare is referred to as mHealth. Early indications suggest that there are opportunities for mHealth to be effective in resource poor health settings and for health behaviour interventions. Smart phones with apps for PFME have the potential to discreetly support and conveniently remind women to exercise their pelvic floor muscles.

Aims and Objectives: Research was undertaken to find out more about motivation and adherence to PFME and the role of smart phone apps.

Methods: An exploratory trial was conducted in Moray in the North East of Scotland with twenty eight community dwelling female participants, half of whom were provided with apps for PFME (ten participants received an iPod Touch for the duration of the trial, four used their own device).

Data was gathered using questionnaires at the start and the end of the three month trial period and a year later. In addition, participants were asked to complete an adherence chart and to make notes of their experience. A sample of participants was interviewed by telephone at approximately six months in order to gather qualitative data about the experiences of the participants.

Of the women who entered the trial, sixteen had incontinence symptoms at the start. At month three, five participants withdrew from the trial and at month twelve a further six participants withdrew.

Results: There was broad range in the level of use of apps by participants in the intervention group. Some gave up after a few days saying that the technology was distracting them from exercising. Others had fun using the apps and this helped them to start exercising; they discarded the apps as they developed habitual exercise. A small number of participants heavily relied on their favoured app to help them to exercise and, when they no longer had the app at the end of the trial, their adherence reduced.

As well as usability and the functions of the apps which were useful in prompting and reminding participants to exercise, sensory elements of the apps were found to promote adherence.

Conclusions: Although smart phone apps have huge potential for individuals in prevention, self-care and management of urinary incontinence, there is lack of knowledge about how people engage with the technology in the course of their everyday lives. In this study the technology was found to be a barrier to exercise by some, to support the instigation of exercise by others and to be integral to successful adherence by participants who found an app they liked. “One size does not fit all” and apps should be offered along with other interventions in planning a tailored PFME intervention programme. For the potential of apps to be realised, further research is required on the characteristics of people likely to benefit from apps, the influence of specific elements in the app and how these can be used to engage with individuals to support the desired health behaviour.

Keywords

pelvic; floor; muscle; exercise; apps
