

CONFERENCE ABSTRACT

Using Participatory Design to design and develop mHealth for women with osteoporosis

European Telemedicine Conference 2016, Oslo 15-16 November

Pernille Ravn Jakobsen¹, Uffe Kock Wiil², Jens Søndergaard³, Pernille Hermann⁴, Jane Clemensen⁵

1: Centre for Innovative Medical Technology, University of Southern Denmark, Odense University Hospital, Denmark

2: The Maersk Mc-Kinney Moller Institute, University of Southern Denmark

3: Research Unit for General Practice, University of Southern Denmark

4: Dept. of Endocrinology, Odense University Hospital, Denmark

5: Centre for Innovative Medical Technology, Denmark

Correspondence to: Pernille Ravn Jakobsen, T +45 20775905, prjakobsen@health.sdu.dk

INTRODUCTION

Osteoporosis is a global health and economic burden. Early detection and treatment of osteoporosis is essential in preventing fractures, disabilities and premature death (1). Being diagnosed with osteoporosis before having a fracture often leaves women in a grey zone between healthy and sick, and the women should be aided in learning to live with osteoporosis and how to prevent fractures (2). The effects of mHealth on self-care and self-management appear to be promising (3). Involvement of users in health care research is important, especially when developing new technologies, to ensure that these technologies meet the needs of the users (4).

PURPOSE

Design and development of mHealth to increase self-care and self-management among postmenopausal women newly diagnosed with osteoporosis. We combine user driven innovation and research in a participatory design process.

METHODS

The design and development of mHealth is based on a participatory design process. In the first phase, needs among the users are identified using qualitative methods as participant observations (10 hours), semi structured interviews (n=17) and focus groups (n=3). In the second phase, ideas and concepts are generated through creative and mutually learning processes involving users and designers in three workshops, with focus on designing a viable solution based on the identified needs. A team of women with osteoporosis, researchers, health care professionals and designers (n=15) participated in the workshops.

RESULTS

A prototype consisting of an app for newly diagnosed women with osteoporosis is developed. The prototype will be tested in an intervention involving health care professionals and women with osteoporosis in the Region of Southern Denmark in 2017.

REFERENCES

1. Kanis JA, McCloskey EV, Johansson H, Cooper C, Rizzoli R, Reginster JY. *European guidance for the diagnosis and management of osteoporosis in postmenopausal women*. Osteoporosis International. 2013; 24:23-57
2. Hansen C, Konradsen H, Abrahamsen B, Pedersen BD. *Women's experience of their osteoporosis diagnosis at the time of diagnosis and 6 month later: A phenomenological hermeneutic study*. International Journal of Qualitative Study on Health and Well-Being. 2014; 9
3. Peeters JM, Wieggers TA, Friele RD. *How Technology in Care at Home Affects Patient Self-Care and Self-Management: A scoping Review*. International Journal of Environmental Research and Public Health. 2013; 10: 5541-5564
4. Clemensen J, Larsen SB, Kyng M, Kirkevold M. *Participatory design in health sciences: Using cooperative experimental methods in developing health services and computer technology*. Qualitative Health Research. 2007; 17: 122-30

Keywords: participatory design; user involvement; self-management; self-care, osteoporosis; mHealth
