Conference Abstract

Exploring patients' perspectives of an mHealth application: a qualitative study as part of EDGE COPD

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Abstract

Introduction: Previous qualitative research into telehealth and chronic conditions has identified opportunities and challenges of such interventions as perceived by patients. Since people with COPD tend to be over the age of 60 years, there is a preconception that this patient group may find the use of mobile Health (mHealth) systems more challenging than younger patients. The EDGE COPD project aims to evaluate the efficacy of a multi-component mHealth intervention to improve quality of life in patients with COPD. As part of this, a feasibility study has been conducted to optimise this intervention, and this included a qualitative component to explore opportunities for, and difficulties of, using this system as identified by patients themselves. This paper presents the qualitative findings of the feasibility study.

Aims: To explore the expectations and experiences of using an mHealth application of people living with COPD in the community; and how such a system may impact on their perceived well-being and ability to self-manage at home.

Methods: We carried out a qualitative study to which patients were recruited using purposive sampling to achieve maximum variation. Patients, meeting the inclusion criteria (diagnosis of COPD, > 40 years of age, MRC dyspnoea scale ≥ 2, smoking history > 10 pack years) and consenting, were interviewed when given the mHealth system and after a 6 month period. Interviews followed a semi-structured interview guide to explore participants' experience of their condition and use of the mHealth application. Data were audio-recorded, transcribed verbatim, imported into NVivo (a software programme facilitating qualitative analysis) and analysed using a grounded theory approach, incorporating constant comparative analysis, open, axial and selective coding to identify similarities and differences of participants' interview accounts.

Results: Nineteen participants with moderate to very severe COPD were interviewed pre and post mHealth intervention. The sample consisted of 10 men and 9 women with an age range of 50- 85

International Congress on Telehealth and Telecare 2013, London, July 01-03, 2013.

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years and different levels of computer skills. Participants identified no particular difficulties in using the mHealth application regardless of their computer skills and experience and the use of the mHealth application appeared to fit well with participants' everyday routines. The main themes encapsulating participants' experience of using the mHealth application related to increased awareness of the variability of their symptoms (onset of exacerbation and recovery time), reassurance through monitoring (continuity of care) and improved management of COPD information.

Conclusion: These findings provide further insight into how telehealth can improve patients' perceived well-being and ability to self-manage. In addition, the mHealth application may be able to provide improved continuity of care as perceived by patients. The findings will also inform the design and conduct of the randomised controlled efficacy trial to ensure the system can be used by patients regardless of their previous experience with communication technologies.

Keywords:

copd, mobile tele-health, qualitative

Presentation available at**:** http://www.kingsfund.org.uk/events/third-annual-international-congress-telehealth-and-telecare

International Congress on Telehealth and Telecare 2013, London, July 01-03, 2013.