

Consulting on the development of a novel visual intervention and activity plan to increase physical activity among inactive young people with asthma

Can visualisation encourage physical activity in patients with asthma?

Background:

In the UK asthma has increased significantly over the past 20 years. An estimated one in five children in the UK is now affected by asthma. The burden on health services from asthma is extensive. Asthma accounts for 1 in 5 of all child GP consultations, while within secondary care in England and Wales in 1999, there were over 30,000 asthma related hospital admissions and 25 child deaths.

Physical activity is particularly important for children and young people with asthma. Engagement in activity can lead to improvements in aerobic fitness and asthma-related benefits such as reduced hospital admissions, reduced absenteeism from school, fewer consultations with health professionals, reduced medication use and improved ability to cope with asthma

Aims and Objectives:

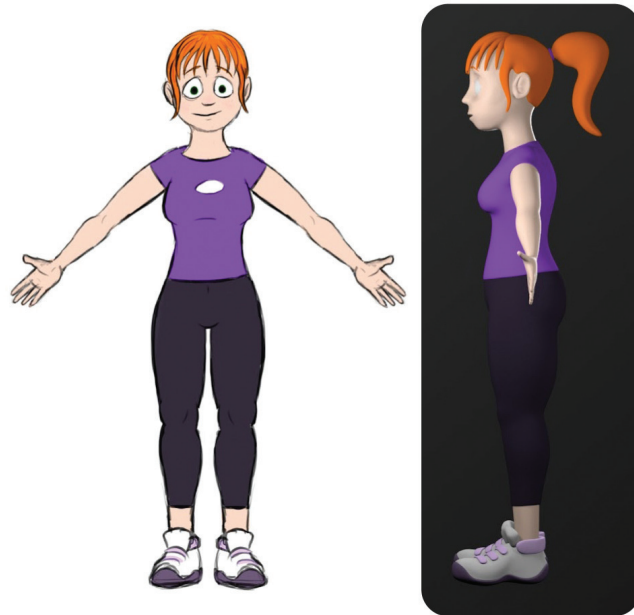
The over-arching aim is to inform the on-going development of an interactive visual intervention and associated activity plan for adolescents with asthma.

Methods:

Phase 1 – The initial consultation: The animation and action plan will be shown to 8 young people (aged 12-18 yrs) and 8 parents in order to assess their interpretation of the animation, perceived usefulness of the action plan, and identify any suggested improvements.

Phase 2 - The intervention will be tested further using web-based Intervention Modelling Experiments (IME): At baseline, the groups will receive the same scenarios and questions. At follow up (a month later) the participants will be in two groups; the intervention group will receive scenarios and questions including the animation and action plan and the control group will receive scenarios and questions only. Both recruitment and data collection will be done using the web, aiming to tease out areas of the intervention that may (not) be brought forward to the feasibility testing of the intervention in Phase 3 and investigating mediation variables. We aim to have 20-30 participants in each group.

Phase 3 – Field testing: A before-after design will be used to test the acceptability and feasibility of the revised intervention. Ten young people and ten parents, recruited from primary care, will receive the intervention.



An in-depth interview will be done immediately after, followed by a short telephone interview three weeks later (to test recall of the intervention).

Focus groups with health professionals who have delivered the intervention, in addition to teaching staff, will be conducted in order to explore the acceptability, practicality and feasibility of the intervention and perceived outcomes.

Implications:

We believe that the issues surrounding asthma and low physical activity levels may be effectively addressed through the development of an interactive educational intervention for use by primary care staff and children with asthma and their parents. This phase will consist of the development of a theory-informed animation to enable young people to be able to visualise the lungs and bronchi, the mechanism of asthma, the differences between asthma and breathlessness due to inactivity, and the impact of preventer and alleviator inhalers.

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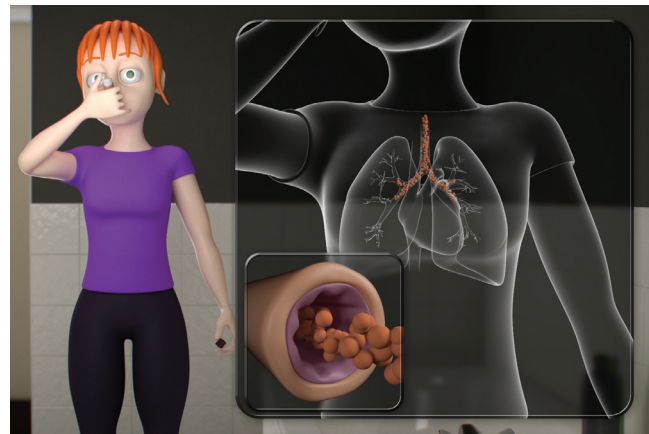
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