

Title: Development of multimedia educational intervention to promote pneumoconiosis prevention among South Asian construction workers in Hong Kong

Background:

Pneumoconiosis is one of the most prevalent occupational lung diseases among Hong Kong construction workers. Despite advances in medical technology, no effective treatment for pneumoconiosis has been developed. Educating workers about pneumoconiosis and its preventive measures can help reduce the incidence of the disease. However, most of the educational interventions accommodate local workers only. With the increasing number of South Asians engaged in the construction industry, developing a relevant educational intervention for them is urgently needed.

Aims:

This project aims to: 1) develop a multimedia educational intervention to South Asian workers from Pakistan and Nepal, which consists of an onsite health talk, a video clip, a pamphlet, a webpage, a Facebook page, and a smart-phone application, to educate them on pneumoconiosis and proper preventive measures; 2) implement and evaluate the effectiveness of this multimedia educational intervention.

Methods:

A one-group pretest-posttest design. According to the Census and Statistics Department (2015), there were around 3,240 Pakistanis and Nepalese engaged in “construction” section in 2011. A convenience sample of 1,000 South Asians (Pakistani or Nepal) who aged 18 and above, holding Hong Kong identity card, and working in construction sites will be recruited from construction sites and South Asian community centers. Their family members will also be recruited.

Results:

During the period from October 2017 to March 2019, 86 health talks on prevention of pneumoconiosis were successfully held, with a total of 1,492 South Asian construction workers and their families attended the talks. More than 60 non-governmental organizations and minority groups support this programme. After receiving multimedia educational intervention, both construction workers and their

family members reported a significant increase in knowledge on pneumoconiosis ($p < 0.00$), health beliefs toward pneumoconiosis and implementation of preventive measures ($p < 0.00$), as well as perceived knowledge and attitude on pneumoconiosis and implementation of preventive measures ($p < 0.00$). Overall, both groups were satisfied with the multimedia educational intervention.