

LETTER TO THE EDITOR

The untapped potential of a low cost evidence based smartphone application for smokeless tobacco cessation

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Dear Editor

Students aged 13–15 years surveyed in 132 countries were more likely to report using smokeless tobacco products (11.2%) than to report smoking cigarettes (8.9%)¹. Smokeless tobacco is used in various forms, from chewing tobacco alone to a mixture of tobacco with other ingredients such as betel quid, areca nut, Naswar, paan-masala, Gutkha, snus, qiwam and Mishri¹. The tobacco industry misleadingly encourages smokers to switch to smokeless tobacco as an alternative in places where smoking is not legalized or as an alternative to quitting smoking, and flavoured tobacco products have also been marketed to further attract adolescents and women².

Mobile phones are now well integrated into daily life, with more than 6.8 billion mobile subscriptions present globally, of which 1.08 billion are smartphone users³. Increasing

competition among manufacturers has resulted in a drastic reduction in smartphone costs, which has made it much easier for users in lower and middle income countries to access them³. Mobile phones, especially smartphone applications (apps), are effective and useful tools for the delivery of health programmes that deliver interventions for various diseases and health conditions such as smoking cessation. The advantages are portability, promotion of interactivity, opening new channels of communication between patients and ‘experts’, and provision of instant access to information and assistance. The current evidence shows that mobile phone based smoking cessation interventions (predominantly of text messaging) are beneficial for long term outcomes⁴. Therefore, it seems logical to hypothesize that a smartphone app will be a useful tool to offer additional support when a young adult wants to quit using smokeless tobacco³.

Although there is increased public awareness about the importance of smoking cessation and many smoking cessation



apps are available, there is a need for constant antitobacco media messages and interventions regarding smokeless tobacco use. The authors suggest the use of a smartphone app for quitting smokeless tobacco use, similar to those for quitting tobacco smoking, as there is little research on the effectiveness of smartphone apps for cessation of smokeless tobacco use. The app could enable users to track the type of smokeless tobacco product, how many times they have kept tobacco in their mouth and for how long, and the approximate quantity of tobacco used.

The outreach of mobile technology could play a vital role in extending healthcare support and services to populations living in even the remotest of locations that are typically associated with smokeless tobacco chewing. However, there are limitations, including bias, attrition rates, accessing web based services, lack of biochemical verification, lack of acceptance by the patient and, most importantly, the lack of evidence based apps⁵. More research, in collaboration with what the patients actually require, is needed to capitalize on mobile technology for designing effective mobile phone based interventions for smokeless tobacco cessation, factoring in lower income countries, ethnic factors, literacy levels and cost–benefit ratios.

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