Effectiveness of Mobile-Based Interventions on Smokers Health Behaviour Change: An overview of Systematic Reviews

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Background /objective

The Cochrane Tobacco Addiction Group published an update to a review on mobile-based interventions for smoking cessation in April 2015. However, most studies under review were conducted in high-income countries with good tobacco control policies. In this study reviewing systematic reviews, we assessed the effectiveness of mobile-based interventions for smoking cessation in a variety of contexts.

Methods

We considered systematic reviews (SR), and meta-analyses that were published since 2006 in peer-reviewed journals or the Cochrane Library, in which mobile-based interventions were the only or one of the main interventions under study. Out of 325 retrieved records from electronic search, 17 systematic reviews were eligible and included in this review.

Results

The systematic reviews included studies on both high-income and low-income populations from New Zealand, USA, Norway, UK, Germany, Switzerland, Spain, and China. The most common mobile-based interventions were various kinds of text-messaging (tailored, text &videos messages, bidirectional, text message & online communication, text message & interactive website with educational module), smartphone app and cell phone–delivered smoking cessation counselling. Text messaging was a common intervention that could be effective in smoking cessation if continued for six months or more. Combinations of text message with video clip, interactive web site or online consultation based on a behaviour change theory were the most effective for smoking cessation. The common behaviour change theories were Social cognitive theory and Behavioural self-regulation theory.

Conclusion

Mobile-based interventions for smoking cessation, especially text messaging, are more effective if designed based on behaviour change theory and last at least six months.

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