L. Fillette & I. Varescon
Université Paris Cité- Laboratoire de Psychopathologie et Processus de Santé, F92100- Boulogne Billancourt, France

Lead author :
Laure Fillette
Université Paris Cité- Laboratoire de Psychopathologie et Processus de Santé, F92100- Boulogne Billancourt, France

laure.fillette@etu.u-paris.fr

To what extent can the effectiveness of self-help smoking cessation programs be enhanced by the advent of new technologies ? Findings from a systematic review.

Context and aims Many therapeutic self-help smoking cessation programs have been developed to assist smokers in quitting. The concept of self-help, previously associated with paper-based programs, has predominantly shifted towards a technological approach. Today, the majority of self-help smoking cessation programs are web-based, app-based, or utilize text messaging. Although these new formats seem as accessible as print materials and as cost-efficient, they are not always more effective in helping smokers quit.
Method We conducted a systematic analysis of the literature from 2000 to 2023 to review the studies investigating the efficacy of self-help programs on smoking cessation outcomes. Using the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) method, 17 studies were included in this review.
Main results Out of 17 studies in a systematic review, 8 provided compelling evidence of their efficacy in improving smoking cessation outcomes. Three out of the four programs utilizing print materials, which were included in the review, demonstrated effectiveness. Conversely, none of the six studies evaluating web-based interventions established their effectiveness in achieving smoking cessation outcomes. In both investigations of text-messaging programs, they were found to be more effective than websites for smoking cessation. Findings regarding apps were inconclusive.
Discussion Self-help programs must be engaging and offer substantial support comparable to that provided by an actual professional. Interestingly, new technologies aren't necessarily the most effective means to engage participants in such programs. Engagement involves more than just time spent on a website or application. Programs must be structured, with limited autonomy and follow a guided progression to align with the psychological phases experienced during smoking cessation and technology-based programs ought to actively or systematically steer users towards smoking cessation. But in practice, they often emphasize too much flexibility, undermining their effectiveness. Many challenges remain to be addressed in the field of virtual self-help.