Authors' Reply: Collaboration facilitates the implementation of Mobile Technologies in healthcare

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Abstract

Not applicable

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Letter to the Editor

Authors' Reply: Collaboration facilitates the implementation of Mobile Technologies in healthcare

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Keywords: mobile apps; fitness trackers; SMS; SMS text messaging; physical activity; exercise; sedentary behavior; Middle East; Africa, Northern; movement; physical inactivity; smartphone; mobile phone; mobile health; mHealth; digital health; behavior change; intervention

We are responding on behalf of the group of authors to a letter to the editor [1] regarding our recent article, “The Use of Mobile Technologies to Promote Physical Activity and Reduce Sedentary Behaviors in the Middle East and North Africa Region: Systematic Review and Meta-Analysis” [2]. We thank the letter’s author(s) for the interest in our article and the journal editor for providing us the opportunity to respond. Our response is limited to the four aspects of critique.

Firstly, regarding the database search, we agree with the letter’s author(s) that the more databases searched, the more comprehensive the results would be. In our review, we conducted a search across five major databases, including Medline, Embase, CINAHL, Scopus, and Global Index Medicus. This is in line with the standard practices outlined by the Cochrane Handbook for Systematic Reviews of Interventions, which recommends at least three databases are used [3]. Given the focus of the review on Middle East and North Africa, Global Index Medicus was searched to enhance comprehensiveness. Moreover, a gray literature search was also conducted, in Google Scholar, to ensure that we identified the relevant studies. Paradoxically, the letter’s author(s) referred to a systematic review [4] that used less databases in search than we did to argue the database search point.

Secondly, we agree that frequency and duration of the intervention are important aspects. Indeed, we analyzed this information and discussed it in Table 1 and 2 of our article, as well as in main text: “The average duration of experimental studies was 20 (SD 14.4; range 6-52) weeks.”; “Half (11/22, 50%) of the interventions used SMS text messaging to deliver educational content…; the frequency of delivery varied from 2 messages per day to 1 message per week” [1].

Thirdly, we agree with the letter’s author(s) that potential confounding factors can influence the findings of the reported studies. However, we found that important confounders were not reported in the many studies. While we planned to explore the role of confounders via planned meta-regression [5], it would have been methodologically flawed to do so, given that the meta-analysis

would have been based on seven studies only. At least ten studies should be available for each characteristic modelled [3]. The influence of some reported confounders was discussed in the article, including socioeconomic status, context fit, and cultural appropriateness.

Finally, we agree with the authors that social workers can facilitate mobile technologies deployment. However, exploration of the social workers' role in this process was not an objective of the review nor a primary focus of the articles included in our review. We would welcome future publications that discussed specifically the role of social workers in mobile technologies deployment.

Conflicts of Interest

None declared.

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