Title: Behavioural interventions for COVID-19 protective behaviour: Preliminary results of a systematic review

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During the devastating COVID-19 pandemic, non-pharmaceutical interventions (NPIs) were central in controlling disease spread. But NPI mandates were often controversial. Therefore, much hope was put in behavioural interventions, that is, interventions to encourage NPI uptake or maintenance. Here, we present preliminary results of a systematic review on behavioural interventions for COVID-19 mitigation.

We searched for experimental studies that tested the effectiveness of behavioural interventions targeting eight distinct behaviours, including handwashing, wearing masks, and physical distancing. The information sources were Medline ALL, ERIC, PsycInfo, and CINAHL Plus. Screening, quality appraisal using the Cochrane Risk Of Bias In Non-Randomized Studies - of Interventions tool, and data extraction were divided between two teams with 20% double-checking. We plan to assess reporting bias, and, if possible, synthesize data using random effects models.

We identified 690 eligible papers. 37 studies remained after deduplication, abstract and full-text screening. The majority of studies showed some risk of bias, and three each low or high risk of bias. Most studies tested interventions utilizing persuasive messaging. The most frequent outcome behaviours were mask-wearing, physical and social distancing, and handwashing. Effects were variable, but mostly small to non-existent.

During the COVID-19 pandemic, scientists from many disciplines laudably aimed to find ways to increase NPI compliance. However, detecting, comparing, and interpreting results is somewhat difficult. This is partly due to a lack of shared terminology and methodology. Additionally, studies used mostly self-report data on behaviour, the measures used were seldomly validated, and often, intentions and attitudes were measured instead. To increase the impact of behavioural science on public health in future pandemics, standardization efforts are necessary.