

Scoping review

Efficacy of facemasks in preventing transmission of COVID-19 in non-healthcare settings: A Scoping Review

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Abstract: Background: During the COVID-19 pandemic, an abundance of literature relating to the efficacy of face masks on reducing transmission of COVID-19 in non-healthcare settings emerged. **Aim/objective:** The aim of this scoping review was to allow the identification of: types of evidence conducted in this area; knowledge gaps and common concepts relating to mask efficacy in non-healthcare settings. **Methods:** A comprehensive literature search was conducted in PubMed, CINAHL, MEDLINE, Embase, and the Irish Management Institute bibliographic database on December 15th, 2021. All types of face masks were included. Of 722 records, 16 were included after full text screening. **Findings/results:** Themes from an adapted model of Howard et al. framework were used to group results and identify common concepts.. The grouped thematic results were then applied to the socio-ecological model. This illustrated the multifactorial elements determining the efficacy of masks themselves while also illustrating how other factors such as individual behaviours, social interactions, settings and national policy can influence the degree of the protective effect. **Discussion:** The findings from this scoping review indicate that an abundance of experimental literature is available indicating that masks are effective at preventing COVID-19 transmission but their degree of efficacy is impacted by external factors. This review highlights that the quality of the evidence available is low.