



PAPER COMPETITIONS

Addressing Factors Associated with Public Compliance Towards Quarantine Measurements as A Breakthrough Way Fighting Covid-19 Pandemic: A Meta-analysis

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Introduction

Quarantine strategy is implemented to prevent COVID-19 transmission and other infectious disease pandemic. Multiple concerns, such as economic, psychological, and social impacts have risen due to the policy which may lead to protocol violation, which is shown by low adherence to self-isolation.

Objective

To assess factors related to quarantine compliance in COVID-19 pandemic.

Methods

Systematic search through PubMed, Google Scholar, Cochrane, EBSCO, Medline, and Scopus, were done until November 11th 2021. Critical appraisal of included studies were performed using the JBI I (Joanna Briggs Institute) tools. We analyzed pooled Odds Ratio (OR) and its p-value using fixed effects models.

Results

Nine studies of 13,282 subjects were included in this review. Better compliance was significantly associated with unmodifiable factors, namely female sex (OR=1.26[95%CI:1.15-1.37],p<0.00001), single marital status (OR=0.79[95%CI:0.69-0.90],p=0.0006), elderly (OR=1.01[95%CI:1.01-1.02],p=0.002), and city residents (OR=1.19[95%CI:1.03-1.37],p=0.02), and modifiable factors including existing emergency regulations (OR=1.80[95%CI:1.49-2.17],p<0.00001), perception to protect own families (OR=1.67[95% CI:1.25-2.22,p=0.0004]), higher education degree

(OR=1.29[95%CI:1.10-1.52],p=0.002), trust in government (OR=1.44[95%CI:1.33-1.55],p<0.00001), and worry or distress over COVID-19 (OR=1.44[95%CI:1.34-1.56],p<0.00001). We recommend widening broadcast of quarantine regulations, ensuring consistent and trustworthy government policies with disease containment along with socioeconomic considerations, providing better education in efforts to reduce disease spread. Therefore, decreasing overloaded healthcare burdens and prepare the public not only during COVID-19 but also for future outbreaks.

Conclusion

Compliance toward quarantine orders are influenced by several modifiable and nonmodifiable factors. We hope that strategies to further increase people compliance toward quarantine may be formulated based on this comprehensive assessment.

Keywords

Factors Associated, Public Compliance, Quarantine, COVID-19 pandemic, Meta-analysis