Exploring the Evidence for the Effectiveness of Health Interventions for COVID-19 Targeting Immigrants: a Systematic Review

AUTHORS

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Introduction: The COVID-19 pandemic has amplified health disparities, particularly in populations with substantial vulnerabilities, such as international migrants and refugees. A thorough assessment of the value of the interventions for COVID-19 tailored to these populations is essential for defining equitable, inclusive, and effective healthcare strategies and policies capable of improving their health outcomes and promoting an effective control of the pandemic.

Objectives: To provide a rigorous, trustworthiness, and exhaustive evidence synthesis of the effectiveness of different health interventions for COVID-19 targeting immigrants.

Methods: Data sources included the bibliographic databases MEDLINE, EMBASE, LOVE Platform COVID-19 Evidence, and Cochrane Central Register of Controlled Trials (CENTRAL). Two reviewers independently reviewed citations and selected eligible studies, defined as cohort studies or randomized control trials evaluating health interventions for COVID-19 in immigrants. Two reviewers conducted independently the screening of the full texts, the data extraction, and the methodological quality assessment, with disagreements being resolved through discussion or arbitration. Data were reported according to methodological guidelines for systematic review provided by the Cochrane Collaboration and the PRISMA statement.

Results: The search strategy retrieved 1941 unique citations. After screening and the application of eligibility criteria, three studies were included. One study employed agent-based models of COVID-19 outbreaks in a refugee camp setting to evaluate four feasible non-pharmaceutical interventions, namely sectoring (i.e., dividing the camp into subunits with separate food lines and Services), face masks, remove-and-isolate (i.e., identifying and isolating infectious individuals and their families), and lockdown [1]. The Moria refugee camp, including 18,700 individuals, was used as the model population. The second study compared a 42-day prophylaxis regimen of either oral hydroxychloroquine (400 mg once, followed by 200 mg/day), oral ivermectin (12 mg once), povidone-iodine throat spray (3 times/day, 270 mg/day), oral zinc (80 mg/day)/vitamin C (500 mg/day) combination, or oral vitamin C, 500 mg/day for 3037 healthy migrant workers quarantined in a large multi-story dormitory in Singapore [2]. The third study evaluated the effectiveness of a community-centered, culturally-tailored, theory-informed vaccination strategy, including "mobilization, vaccination and activation" components, in increasing uptake of COVID-19 vaccination among the underserved Latinx population [3]. This program was implemented in the Mission District, home to a large Latinx and immigrant community in San Francisco,

California, with an estimated population of 72,380 individuals, 33.4% of whom are Latinx. The certainty of the evidence measured using GRADE was very low across all three studies.

Conclusions: There is currently insufficient evidence to draw reliable and generalizable conclusions regarding the potential effectiveness of interventions for COVID-19 precisely targeting immigrant populations. Further large, well-controlled studies are necessary to produce robust evidence-based knowledge to inform clinical practice guidelines and healthcare policies. The review was conducted within a program funded by the Italian Ministry of Health aimed at defining and implementing interventions to control the COVID-19 pandemic in Italy.

References
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