Research Brief



Preventing the transmission of Coronavirus (COVID-19) in older adults aged 60 years and above living in long term care: A rapid review

Summary

A comprehensive literature search of both electronic databases and grey literature sources as well as references leveraged from a prior review resulted in one ongoing trial, one primary study and 5 clinical practice guidelines (CPG) addressing infection control and prevention for COVID-19 or SARS in long-term care facilities. Results of the primary study suggested preventing entry of COVID-19 into facilities and screening/testing all staff, residents, and visitors is the best first-line approach. The 5 CPGs most commonly recommended strategies such as establishing surveillance monitoring and evaluation systems, consulting with health professionals, regular or increased disinfection of surfaces. educating individuals on infection control and hand or respiratory hygiene, mandating use of personal protective equipment (PPE), ensuring adequate supplies for facilities, and employing social distancing/isolation or cohorting for residents.

Implications

Current guidelines on preventing transmission of COVID-19 or SARS in long-term care facilities mostly suggest that surveillance and monitoring programs accompanied with environmental cleaning measures and supporting the use of PPE, hand/respiratory hygiene, and social distancing are the ideal approach to protect older adults.

For more information, please contact Dr. Andrea Tricco: Andrea.Tricco@unityhealth.to

What is the objective?

The overall objective of this rapid review was to examine the control and management of COVID-19, SARS, or MERS in adults 60 years or above living in long-term care facilities

How was the review conducted?

- MEDLINE, EMBASE, the Cochrane Library, and biorxiv.org/ medrxiv.org databases, and relevant grey literature sites (e.g. clinicaltrials.gov, guideline repositories) were searched in early April 2020 using a combination of manual and automated search and screening procedures
- A supervised machine learning tool was used to fetch relevant items from electronic databases and grey literature sites and then rank citations for relevance to be passed to full-text screening
- Single reviewers with an independent verifier screened full-text articles and completed data abstraction and quality appraisal (AGREE II Checklist, Newcastle Ottawa Scale)

What did the review find?

- 36 full-text articles were screened for relevance resulting in one ongoing trial, one primary study, and 5 clinical practice guidelines (CPG) included in the review
- The ongoing trial (NCT04343248) aims to examine the effectiveness of nitazoxanide versus placebo as post-exposure prophylaxis for individuals in long-term care exposed to COVID-19; it has not begun recruitment at the time of this writing
- The primary study was conducted in a skilled nursing facility in the USA, a total of 167 COVID-19 cases were identified in relation to the facility resulting in 66 hospitalizations and 35 deaths
- Infection control measures employed at the facility included screening and regularly testing all staff, residents, and visitors; contact tracing for confirmed cases of COVID-19; additional training for staff on infection control and use of PPE; and reviews of environmental cleaning/ disinfection practices
- The infection control and prevention measure most commonly recommended by the CPGs (n=4) was establishing surveillance, monitoring, and evaluation within long-term care facilities
- Other measures recommended by three or more CPGs included: consulting with or notifying relevant health professionals, disinfecting surfaces, educating staff and/or residents on infection control and hygiene, promoting hand hygiene, mandating use of PPE, ensuring adequate supplies for facilities, promoting respiratory hygiene/cough etiquette, and employing social distancing/isolation or cohorting measures among residents of a facility

Funded by the Canadian Frailty Network and conducted through the SPOR Evidence Alliance

Based on prior work funded by the World Health Organization