Protocol Brief

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Rapid scoping review of the effectiveness and safety of treatments for COVID-19 and other coronaviruses that cause serious respiratory tract infections

Rationale

As there are currently no approved treatments for the Coronavirus Disease 2019 (COVID-19) and a surge of new information is being published, there is a need for a comprehensive examination and synthesis of the literature to identify potential treatments and therapies

Implications

The results of this rapid review will be shared with Health Canada to address their query on the effectiveness and safety of treatments for Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), and (COVID-19)

OSF registration: https://osf.io/ypz7x

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

Objective

- To identify what treatments have been studied for Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), and Coronavirus Disease 2019 (COVID-19)

Methodology

- **Eligibility Criteria using the PICOS framework:**
  - **Population:** Individuals of any age being treated for COVID-19, SARS or MERS
  - **Interventions:** Medications and other compounds under investigation in human clinical trials as potential COVID-19 therapies. Chinese medicine and complementary and alternative medicine will be excluded
  - **Comparators:** Any of the listed interventions, no intervention, or placebo
  - **Outcomes:** Hospitalization, ICU admission, mortality, lab-confirmed coronavirus infection, and adverse events
  - **Study designs:** Randomized controlled trials (RCTs), non-RCTs, and observational studies will be included. Studies must have a control or comparator in order to be eligible for inclusion
  - **Other:** All periods of time and duration of follow-up will be included
- **Literature Search:** Literature searches will be developed by an experienced librarian for EMBASE and an automated search and citation screening tool will be used for MEDLINE, pre-print servers, and grey literature sources (e.g., trial registries)
- **Study Selection:** Pilot tests will be conducted prior to full-text screening and subsequent screening will be completed by a single reviewer and independent verifier. The same search and screening process will be used for ongoing updates.
- **Data Abstraction/Collection:** A calibration exercise will be conducted prior to data abstraction. Single reviewers will abstract included studies and a second reviewer will verify the data. For the ongoing update, data from relevant articles will be abstracted into an online form to make the data immediately accessible to knowledge users
- **Synthesis:** The synthesis will involve a descriptive summary of included studies with summary tables and detailed tables of study results

Knowledge Translation Strategy

- Summary of results will be sent to Health Canada and other relevant DSEN policy-makers as a brief summary report and 1-page policy brief. This work will also be submitted to an open-access, peer-reviewed journal for publication

Funded by Canadian Institutes of Health Research (CIHR) through the Drug Safety and Effectiveness Network (DSEN)

CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada