Perceptions, knowledge and attitudes of the adult populations towards COVID-19 : A scoping review protocol

Nathalie Clavel¹, Mathieu Seppey², Lara Gautier¹,², Mélanie Lavoie-Tremblay¹

¹McGill University; ²Université de Montréal

ABSTRACT

Perceptions, knowledge and attitudes of the adult populations towards COVID-19 are key factors in the community transmission of SARS-CoV-2. During outbreaks, populations play a key role in limiting the spread of infectious diseases by adopting preventive measures. In the context of COVID-19 pandemic, identifying the perceptions, knowledge and attitudes of the populations is important to implement appropriate and effective preventive measures that will help to control and stop the spread of COVID-19.

This scoping review aims to understand the perceptions, knowledge and attitudes of the adult populations towards COVID-19. We will conduct a comprehensive search of the following electronic databases: MEDLINE-Ovid, EMBASE-Ovid, PsycINFO-Ovid, Web of Science, and CINAHL (EBSCO).

The searches will be conducted in English. All study designs will be included in the searches, both qualitative and quantitative. A comprehensive search of the grey literature, including preprints, will also be undertaken through Google Scholar, Semantic Scholar, CADTH Covid-19, Faculty Opinions, Publons and Medrxiv. We will also search the World Health Organization, Centers for Disease Control and Prevention, Center for Infectious Disease Research and Policy websites and any other relevant COVID-19 related websites.

KEYWORDS

COVID-19, SARS-CoV-2, coronavirus, perceptions, knowledge, attitudes, populations, pandemic, outbreak, public health
Perceptions, knowledge and attitudes of the adult populations towards COVID-19: A scoping review protocol

Nathalie Clavel\(^1\), Mathieu Seppey\(^2\), Lara Gautier\(^2,3\), Mélanie Lavoie-Tremblay\(^1\)

1 Ingram School of Nursing, McGill University
2 School of Public Health, University of Montreal
3 Department of Sociology, McGill University

Rationale

Perceptions, knowledge and attitudes of the adult populations towards COVID-19 are key factors in the community transmission of SARS-CoV-2. During outbreaks, individuals play a key role in limiting the spread of infectious diseases by adopting preventive measures\(^1\). In the context of COVID-19 pandemic, identifying the perceptions, knowledge and attitudes of the populations is important to implement appropriate and effective preventive measures that will help to control and stop the spread of COVID-19.

Review objective

This scoping review aims to understand the perceptions, knowledge and attitudes of the adult populations regarding COVID-19.

Search strategy

We will conduct a comprehensive search of the following electronic databases: MEDLINE-Ovid, EMBASE-Ovid, PsycINFO-Ovid, Web of Science, and CINAHL (EBSCO). The searches will be conducted in English. All study designs will be included in the searches, both qualitative and quantitative. A comprehensive search of the grey literature, including preprints, will be undertaken through Google Scholar, Semantic Scholar, CADTH Covid-19, Faculty Opinions, Publons and Medrxiv. We will also search the World Health Organization, Centers for Disease Control and Prevention, Center for Infectious Disease Research and Policy websites and any other relevant COVID-19 related websites.

The search strategies for each database will be designed in consultation with a librarian from McGill University.

We will follow the PRISMA extension for scoping reviews (PRISMA-ScR) checklist to conduct our scoping review.

Search terms:

We will use the following terms to conduct the review:

- Adult populations, adult people;
- Perceptions which are forms of representations of COVID-19, perceived disease severity and vulnerability, level of worries, fear or concerns;
- Knowledge of the transmission of SARS-CoV-2, symptoms of COVID-19 and high-risk and vulnerable groups or communities in the populations;
- Attitudes that correspond to intentions to take preventive or protective measures, actual behaviours and factors limiting the adoption of preventive/protective behaviours;
- COVID-19, infection to SARS-CoV-2.

Participants/population:

Adult people who have been surveyed, interviewed or asked about their perceptions, knowledge or attitudes regarding COVID-19.
COVID-19.

Inclusion and exclusion criteria:

To be included in the review, articles need to measure or seek to understand perceptions, knowledge or attitudes of adult people towards COVID-19. Peer-reviewed journal articles, preprints, review articles and other published documents will be included if they:
- Focus on adult people;
- Focus on the general population and/or specific subgroups in the populations, for example, high-risk groups (e.g. older adults, persons with chronic diseases) or vulnerable groups or communities (e.g. immigrant with precarious status, ethnic minorities);
- Use quantitative, qualitative data or mixed methods;
- Have been published between January 2020 and August 2020;
- Have been published in English.

The exclusion criteria are as follows:
- Studies that only focus on children or adolescents (individuals younger than 18 years old);
- Publications that are not based on original research studies (excepting review articles), such as editorials, letters, short reports or commentaries.

Exposure:
Period of COVID-19 pandemic in countries that have been/are currently affected.

Comparator/control:
Not relevant

Main outcomes:
1- perceptions of the adult people towards COVID-19, which include forms of representations of the disease as well as risk perceptions such as the perceived disease severity and vulnerability, worries, fear or concerns towards the disease;
2- knowledge of the adult people of the transmission of SARS-CoV-2, symptoms of COVID-19, and preventive measures limiting the transmission of SARS-CoV-2;
3- attitudes of the adult people regarding preventive measures, which include intentions to take preventive measures, behaviours/actions taken, and factors limiting the adoption of preventive measures.

Measures of effects:
Not applicable

Additional outcomes:
Differences in (forms and levels of) perceptions, knowledge and attitudes between countries, age groups, socio-economic groups, ethnic or cultural groups, high-risk and vulnerable groups and communities.

Data extraction (selection and coding)
5 Based on search strategies designed for each database, all identified studies will be imported on Endnote referencing software to remove duplicates. Two reviewers will independently assess the relevance of all titles and abstracts based on the inclusion and exclusion criteria. Two other reviewers will act as referees in case of disagreements between the two reviewers. Non-relevant studies will be excluded. The full texts of included articles will be assessed against the eligibility criteria by two reviewers and any disagreement will be resolved through discussion with the third and fourth reviewers. At this stage, the two reviewers will extract data from the included articles and will assess the quality of studies and undertake the evidence synthesis.

Data extracted will include:
- Study characteristics (title, authors, year of study and publication, country of publication);
- Study population characteristics;
- Study design;
- Study variables or outcomes of interest: perceptions and/or, knowledge and/or attitudes;
- Main results: perceptions, knowledge and attitudes of the adult populations towards COVID-19; differences in perceptions, knowledge and attitudes between countries, age groups and socio-economic groups, ethnic or cultural groups, high-risk and vulnerable groups and communities.

This is an open access protocol distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
Risk of bias (quality) assessment

The quality of quantitative studies (survey data) will be assessed by creating a quality score based on response rate and sample methodology, as it was done in the systematic review of Bults et al\(^2\). The quality of qualitative studies will be evaluated using the synthesis of recommendations on standards for reporting qualitative research\(^3\). We will look specifically at the number of respondents, the sampling methodology as well as the use of appropriate data collection and analysis methods. Finally, the quality of mixed-methods studies will be assessed using the Mixed Methods Appraisal Tool (MMAT) developed by Hong et al\(^5\).

Strategy for data synthesis

We will use the PRISMA-ScR checklist to structure the data synthesis\(^4\). The criteria for the data synthesis will be based on the number of studies that have reported the outcomes of interests, i.e. perceptions, knowledge or attitudes of the adult populations towards COVID-19. The outcomes will be reported in a descriptive manner (percentage range of the population reported in studies) for quantitative studies and thematic analysis will be presented for qualitative studies (i.e. perceptions, representations of COVID-19 or factors limiting the adoption of preventive measures).

References


This is an open access protocol distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.