Living evidence synthesis: Plain language summary

Impact of strategies to mitigate health-related misinformation in diverse settings and populations

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What question did we want to answer?

What is the impact of strategies to reduce or address misinformation in diverse settings, and across diverse populations?

What are the key results?

- Educational strategies to develop media/information literacy (ability to recognize the need for information and to locate, evaluate the information found), and fact-checking (monitoring and exposing misinformation) can reduce misinformation across different settings
  - These can help change the beliefs of people exposed to misinformation and encourage action to protect against misinformation in the future

Key Terms

Misinformation: Information that is false, inaccurate, or misleading according to the best available evidence at the time

Disinformation: The intentional spreading of misinformation, like tricking people into believing something for financial gain or political advantage

- Technical and algorithmic strategies (for example, the of use machine learning and other artificial-intelligence methods to automate the identification of misinformation to support more timely responses to it), credibility labelling (to indicate good evidence sources), and counter-misinformation campaigns are also helpful in reducing misinformation
  - These can help people identify misinformation and be critical about the information they are exposed to
- Other strategies currently have little or no evidence for reducing misinformation, including:
  - Narrative (e.g., condemnations of misinformation and recommendations to address it), economic and legislative (e.g., bills and laws for approaches such as advertising bans and demonetizing specific content), and other policy strategies
- More research is needed to make conclusions about these strategies
- The living evidence synthesis shows these results visually across pages 8 and 9

Why was this done?

- Our digital and social media era creates both good and bad opportunities.
  - It helps communicate and spread helpful information and in personal networks of citizens, as well as between government decision-makers, leaders of systems, organizations and professional groups and in research communities
  - However, it also increases the risk of misinformation being introduced in the chain of communication in these networks
- Misinformation can delay or prevent effective care, affect mental health, disrupt health resources, and/or create or worsen public health crises
- Misinformation can affect some members of society more than others
  - These affected groups are more exposed to health threats, leading to greater social and health inequity
  - The increased impact of this on women, transgender, and nonbinary people has been highlighted

- Misinformation about COVID-19, vaccination, and other topics highlighted the need to stop the spread of misinformation that hurts public trust in evidence-based care

How up to date is this?

The authors last searched for the included evidence on 3 May 2023. Most studies were published between 2020 and May 2023. Only four studies were published before 2020. The next update to this living evidence synthesis will be released in Summer 2024, which will include any new studies published since the last searches were conducted.

How did we conduct the research?

A database search was done which identified 2,086 articles. After review for studies relevant to the question and the 10 broad types of strategies that can be used to address misinformation (see the main report for more details on these), 60 studies were included. The studies were not limited to any region and included a variety of approaches, but mostly experimental designs such as randomized controlled trials.

Studies were summarized and grouped to the ten responses/strategies to counter misinformation adapted from the Broadband Commission research report.

How confident are we in the results?

There has not yet been an appraisal of the strengths and limitations of the included studies, but this is prioritized for the next version of the LES.

This summary is based on a larger report that can be found at:

https://www.mcmasterforum.org/about-us/products/project/examining-types-of-misinformation-and-disinformation-practices-and-the-effectiveness-of-interventions-to-combat-misinformation-and-disinformation