After a comprehensive literature search until January 1st, 2020, this review included 80 documents from different countries that presented 78 strategies to improve the communication of scientific health evidence.

Digital and social media growth redefined the concept of communication in health. Since then, different strategies have been developed to increase knowledge about scientific research results targeting policymakers and the community. As a vital part of health knowledge translation, the communication of scientific studies results, the effects of therapeutic interventions and health risks estimates represent the need to reduce the gaps between science and practice.

This scoping review mapped and analyzed health scientific evidence communication strategies to policymakers and the community, on individual or group levels, in public or private health scenarios, and at any level of care.

The strategies were organized into the following categories:
1. communication of risk/benefit on health;
2. communication of uncertainty in health;
3. evidence synthesis frameworks using plain language;
4. guidelines for elaborating/evaluating communication products.

Key messages

- Health evidence must be communicated and disseminated clearly so that different decision-makers understand it.
- A broad scientific literature mapping (scoping review) identified strategies to communicate the results of scientific health studies.
- 78 strategies were identified, most of them addressing the communication of health risks and benefits, for example, the use of frequency (e.g. 1 in 10) is preferred to the use of percentage (e.g. 10%), and the communication of numbers (e.g. 9 in 10) is preferred to nominal description (e.g. the majority).
- Evidence synthesis in plain language effectively facilitates comprehension and improves critical thinking skills for interpreting scientific studies results.
- The findings of this scoping review contribute as much to the knowledge translation process, identifying communication strategies with immediate implementation potential as to future research.

About the scoping review

The findings of this scoping review contribute as much to the knowledge translation process, identifying communication strategies with immediate implementation potential as to future research.

Background

Digital and social media growth redefined the concept of communication in health. Since then, different strategies have been developed to increase knowledge about scientific research results targeting policymakers and the community. As a vital part of health knowledge translation, the communication of scientific studies results, the effects of therapeutic interventions and health risks estimates represent the need to reduce the gaps between science and practice.

Which strategies of communication of evidence were found?

- After a comprehensive literature search until January 1st, 2020, this review included 80 documents from different countries that presented 78 strategies to improve the communication of scientific health evidence.
Communication of risk/benefit on health
Greater comprehension with natural frequencies than with percentages.
(e.g. “Among 10 people who use this drug, one may experience drowsiness” versus “10% of people who use this drug may experience drowsiness”).

Greater comprehension with absolute risk than relative risks and number need to treat (NNT).
(e.g. “Among 100 elderly who practice physical activity, five developed the disease and among 100 elderly who are sedentary, 50 developed the disease” versus “The elderly who practice physical activity have 10 times lower risk of developing the disease”).

Greater comprehension and behaviour change with numerical communication than with nominal communication.
(e.g. “Alcohol consumption reduces the likelihood of this drug to work by five times” versus “Drinking alcohol greatly reduces the likelihood that this drug will work”).

Greater comprehension of mortality than survival.
(e.g. “The mortality after five years is one person in 1000” versus “Survival after five years is 999 people out of 1000”).

Communications with negative or loss content appear more useful for comprehension, satisfaction, and behaviour change than those with positive or gained content.
(e.g. “An inadequate diet increases the risk of disease progression” versus “A balanced diet increases the likelihood that the disease will not progress”).

Evidence synthesis templates and other plain language documents
Plain language summaries to communicate the results of evidence synthesis, as systematic reviews, were perceived to be more reliable, easier to find and understand, and better to support decisions than the original summaries of the studies.

Teaching/learning
The combination of different tools (such as the Informed Health Choice initiative’s resources for communication and learning of key health evidence concepts) appears to improve critical thinking skills in health immediately after their use; however, these effects were not observed after one year.

Theoretical-practical training for parliamentarians on scientific evidence in health seems to be a strategy with the potential to raise awareness and improve the comprehension of this subgroup of managers on health-related evidence.

Implications for practice
Some of the 78 strategies for communicating health evidence to different decision-makers can improve understanding of scientific evidence concepts in health and their outcomes, with immediate applicability in the area of evidence-informed policy.

The results of this scoping review may support future efforts to standardize, improve the report of strategies and evaluate relevant outcomes for the individual, the society and the health systems.