Can shared decision making address COVID-19 vaccine hesitancy?

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Background
The COVID-19 pandemic continues to affect millions of people worldwide. While hygiene, behavioural measures and government-driven restrictions are in place, a globally implemented vaccination programme promises to mitigate the levels of illness and mortality caused by the virus.1

The exceptional magnitude of the pandemic, combined with the unprecedented speed of vaccine development has caused difficulty ensuring that information is neutral, standardised, coherent and evidence-based.2 As a result, misinformation about the virus and the COVID-19 vaccine, often combined with conspiracy theories, has become a major threat to uptake.2,3 A recent study about COVID-19 misinformation in national samples across five countries showed that misinformation negatively affected people’s self-reported compliance with public health recommendations and reduced people’s willingness to get vaccinated and recommend the vaccine to others.3 Misinformation increases vaccine hesitancy and threatens cooperation with vaccination programmes. Vaccine hesitancy designates the ‘delay in acceptance or refusal of vaccines despite availability of vaccination services’.4 Ensuring easy access to high quality evidence-based information about the potential harms and benefits of vaccination would increase knowledge. This in turn could help create better dialogue with healthcare professionals, minimise vaccine hesitancy and promote informed choice.

Potential of shared decision making
Shared decision making is an approach where health professionals, patients and caregivers share available evidence-based information while exploring the patient’s values and priorities to achieve informed preferences.5 It typically includes three elements: providing information, supporting deliberation and exploring patient preferences to form an informed choice.6,7 This process may or may not be supported by a patient decision aid; a patient-facing, evidence-based intervention proven to improve decision outcomes.8 The public access Option Grid for the COVID-19 vaccine is an example of such an effort,9 with French and Spanish versions available. It is worth noting the importance of transparency in the development and evaluation of patient decision aids, by, for instance, describing funding, evidence summarisation methods and potential conflicts of interests.10,11 In the context of vaccination, shared decision making could address vaccination barriers by providing neutral, evidence-based information that people can trust and facilitating informed discussions with healthcare professionals.12 Further, shared decision making aligns with strategies to promote vaccination equity by fostering effective communication and respecting the self-determination of minority groups and other socially disadvantaged populations.13 This approach may therefore be particularly relevant and effective in communities that are showing higher levels of vaccine hesitancy (such as minority groups, nurses, long-term care workers).14-16

Key shared decision making principles could be integrated in health professionals’ speech to offer and discuss vaccination, by: (1) providing evidence-based information about the harms and benefits of vaccination; (2) deliberating about the patient’s questions and potential concerns (thus addressing potential vaccine hesitancy, as detailed below) and (3) forming a preference that addresses patients’ priorities and concerns.8

What does the evidence show?
A recent meta-analysis evaluating the impact of shared decision making on influenza vaccination rates suggested a positive effect on vaccination rates, especially when the discussion occurred with multidisciplinary teams of health professionals.13 Patient knowledge also increased significantly in the intervention groups. Vaccine hesitancy was not measured. Over half of all included studies (17/21), however, had at least one risk of bias (with 10 studies accumulating several). Further, a systematic review of patient decision aids in vaccination published in 2020 assessed the impact of those interventions on vaccine coverage.14 Eight patient decision aids for vaccination were found, many of which addressed childhood vaccination (five out of eight). In this review, the effect of patient decision aids on vaccine coverage appeared uncertain. Risks of bias were not assessed.

Tackling vaccine hesitancy
Although not directly examined in published reviews, promoting shared decisions when offering COVID-19 vaccinations may be pertinent to address vaccine hesitancy. Vaccine hesitancy can cause continued or resurgent epidemics while suboptimal vaccination uptake persists.

A growing body of evidence suggests that multi-component interventions that promote a dialogue using evidence-based information are most effective to address vaccine hesitancy.15-17
Promoting shared decision making to foster an informed dialogue (with or without a patient decision aid) may thus improve trust and address vaccine hesitancy.20 By following key shared decision making principles, health professionals can encourage their patients to present and discuss reasons for vaccine hesitancy, including concerns about vaccine safety such as the risks and side effects (short term and long term), impact on the immune system, efficacy over time and so on.6 Other concerns specific to COVID-19 vaccination may include the lack of long-term follow-up data, lack of trial data for specific subgroups (pregnant women, children, immuno-compromised patients) and use of mRNA vaccines.

Should COVID-19 vaccination become mandatory in the future, an approach combining motivational interviewing with shared decision making may become required.21 Motivational interviewing aims to address ambivalence towards a recommended behaviour. It involves exploring perspectives, perceived risks and barriers. Shared decision making principles can be used to present information about the harms and benefits, while motivational interviewing would be used to explore barriers, and support vaccine uptake.

**Addressing health literacy and risk communication**

The question of risks inherent to vaccine education and hesitancy could also benefit from risk communication principles and graphic displays developed and evaluated in the context of shared decision making research, training and implementation.22–26 Consistent with the principles of evidence-based medicine and especially relevant in a context of uncertainty and hesitancy, communicating risks in a way that all patients understand appears essential in the context of COVID-19 vaccination. As extensively demonstrated in the shared decision making and related risk communication literature, three elements come into play when sharing risk information with patients: (1) the probability that the risk will occur; (2) the importance attributed to the damage, or its risk and (3) the uncertainty linked to the use of data that may be incomplete (as is currently the case for COVID-19 vaccination).21 In addition, risks will be understood according to each individual’s ability to process and act on health information (health literacy) as well as their ability to interpret numerical data (numercy). It is therefore imperative, in the context of COVID-19 vaccination, that health professionals communicate risks in a way that is adapted to people’s variable numeracy and health literacy levels. Health professionals should be made aware that their target population will perceive COVID-19 vaccination risks differently. Their ability to present and discuss these risks will be important in addressing vaccine hesitancy and promoting informed choice. For example, using plain language, natural frequencies and bar charts, in combination with the teach back technique in a stepwise approach could help health professionals integrate recognised risk communication principles in their routine practice.25 27 28

**Conclusion**

The development of trustworthy information is a first and essential step towards shared decision making.21 Evidence-based tools however are only part of the solution. They need to be used by skilled and empathetic health professionals, who have learnt how to respect the concerns of an increasingly anxious public. There is good evidence that the combination of trusted evidence sources in the hands of competent professionals provides the best chance of dealing with vaccine hesitancy.

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