



Motivational interviewing: A powerful tool to address vaccine hesitancy

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Abstract

According to the World Health Organization, vaccine hesitancy is among the top threats to global health and few effective strategies address this growing problem. In Canada, approximatively 20% of parents/caregivers are concerned about their children receiving vaccines. Trying to convince them by simply providing the facts about vaccination may backfire and make parents/caregivers even more hesitant. In this context, how can health care providers overcome the challenge of parental decision-making needs regarding vaccination of their children?

Motivational interviewing aims to support decision making by eliciting and strengthening a person's motivation to change their behaviour based on their own arguments for change. This approach is based on three main components: the spirit to cultivate a culture of partnership and compassion; the processes to foster engagement in the relationship and focus the discussion on the target of change; and the skills that enable health care providers to understand and address the parent/caregiver's real concerns.

With regard to immunization, the motivational interviewing approach aims to inform parents/caregivers about vaccinations, according to their specific needs and their individual level of knowledge, with respectful acceptance of their beliefs. The use of motivational interviewing calls for a respectful and empathetic discussion of vaccination and helps to build a strong relationship.

Numerous studies in Canada, including multicentre randomized controlled trials, have proven the effectiveness of the motivational interviewing approach. Since 2018, the PromoVac strategy, an educational intervention based on the motivational interviewing approach, has been implemented as a new practice of care in maternity wards across the province of Quebec through the Entretien Motivationnel en Maternité pour l'Immunisation des Enfants (EMMIE) program.

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Introduction

Trying to convince vaccine-hesitant parents/caregivers to vaccinate their infants by simply providing the facts about vaccinations may backfire and make them even more hesitant (1). A Cochrane review by Kaufman *et al.* concluded that a face-to-face intervention that is strictly based on providing practical and logistical information regarding vaccination but does not take into consideration parents' beliefs is likely to be ineffective (2). However, another Cochrane review that assessed parents' and caregivers' views and experiences with communication about routine childhood vaccination found that parents did want more information compared to what they were

receiving, but they were looking for simple, context-specific facts provided in a timely manner by a trusted health care provider (3).

The take-home message, according to the literature, is that while parents/caregivers want more information, traditional educational methods fail to meet their needs. This being the case, how should we provide parents/caregivers with facts about vaccination? This is of critical importance as, according to the World Health Organization, vaccine hesitancy is among the top 10 threats to global health (4). Until recently, few strategies have been found to effectively address the growing problem

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of vaccine hesitancy (i.e. the reluctance or refusal to vaccinate despite the availability of vaccines) (1).

The motivational interviewing (MI) technique is one of the few strategies that has resulted in an increase in infants' vaccine coverage and a decrease in parents' vaccine hesitancy (5–10). MI is a person-centred communication style used to enhance internal motivation for attitudinal change by exploring and solving inherent ambivalences (11). It has been described as a promising tool in health promotion (12), and the National Advisory Committee on Immunization (NACI) currently recommends its use for vaccination (13).

Evidence for the effectiveness of MI on vaccine hesitancy is strong. Gagneur and other researchers developed an educational intervention based on the MI approach for parents in maternity wards during their postpartum stay (the PromoVac strategy) (5–8). A regional pilot study found that this strategy led to a 15% increase in mothers' intention to vaccinate, a 7% increase in infants' vaccine coverage at seven months, and a 9% greater chance of a complete immunization status among children two years or younger if their parents received the intervention in the maternity ward (6–8). A provincial randomized controlled trial found that vaccine hesitancy scores were reduced by 40% (5,6). Vaccine-hesitant mothers benefited the most from the intervention, with 97% reporting that they were satisfied with the intervention and would recommend it to all parents (7).

Dempsey *et al.* also demonstrated the effectiveness of a vaccination promotion strategy that used MI to increase human papillomavirus (HPV) vaccine uptake among adolescents (10).

In 2018, the PromoVac strategy was implemented in all maternity wards in Quebec through a provincial public health program called EMMIE (Entretien Motivationnel en Maternité pour l'Immunisation des Enfants). With an increase of 11% in vaccination intention and a decrease of 30% in vaccine hesitancy score, the preliminary results of the evaluation of the PromoVac strategy confirmed findings of previous studies (14).

The objective of this article is to define motivational interviewing and to show how it could be helpful against vaccine hesitancy. This article highlights the impact of this approach on vaccine hesitancy and vaccine coverage, and its use in a public health program in maternity wards in the province of Quebec (12).

This is the third of a series of articles produced by the Canadian Vaccination Evidence Resource and Exchange Centre (CANVax) (15). This centre includes a group of multidisciplinary professionals that identify and create useful resources to foster vaccine uptake (16).

Best practices for motivational interviewing

MI is an interviewing technique that aims to reinforce the motivation and commitment of the person being interviewed. It is less about the health care professional talking to the patient/caregiver and more about working with them. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion (11).

MI is based on three main components: the spirit to cultivate a culture of partnership and compassion; the processes to foster engagement in the relationship and focus the discussion on the target of change; and the skills that allow health care providers to understand and address individual patient/caregiver's real concerns.

1. Cultivate a culture of partnership and empathy

The four elements of the spirit of MI enable health care providers to provide a respectful relationship with empathy:

- Partnership — Achieving equality, strengthening collaboration
- Acceptance — A positive, empathic attitude that reinforces autonomy
- Evocation — Having the individual verbalize the change
- Compassion/altruism — Acting in a caring way

2. Foster engagement in the relationship and target the goal of the intervention

Four successive MI processes enable engaging in a relationship with the patient/caregiver and moving towards a goal of change within the patient/caregiver's abilities (Table 1).

Table 1: The four successive processes of motivational interviewing

Processes	Objectives	Questions to address
Engaging	Strengthen the link, show empathy and interest	What is the actual reality of the individual?
Focusing	Define and focus the discussion on the target of change	What should we address as a target of change?
Evoking	Objective 1: Reasons and abilities to change (the importance of change) Objective 2: Change talk (the confidence to change)	How relevant would it be to go towards change? What abilities, strengths does the individual have to get there?
Planning	Engagement talk. How to change	How will the individual get there?



These are not linear processes or a step-by-step guide to MI. Engaging in the relationship comes first because engagement is necessary prior to having a conversation about change. If at any point engagement is lost, the health care provider steps back to the engaging process to re-engage the client.

3. Understand the patient/caregiver and adapt to their specific needs

The health care provider identifies and understands the patient/caregiver’s real concerns and can strengthen their motivation to change through the use of MI skills. MI skills include asking open-ended questions, using reflective listening, and affirming and reiterating statements back to the interviewee (Table 2). Such skills are used in a dynamic where the health care provider actively listens to the patient/caregiver and then repackages their statements back to them while highlighting what they have done well. This way, the patient/caregiver’s confidence can improve with regard to change.

Table 2: Motivational interviewing skills

Skills	Objectives	Examples
Open questions	To evoke responses and avoid doubts	Open-ended questions: (“What did you understand?”/“What do you think?”) Closed questions: (“Did you understand?”/“Do you think it’s important?”)
Affirmation	To encourage the individual and highlight their strengths	“The health and safety of your children are important to you.” “You already have a lot of knowledge.”
Reflective listening/ summaries	To allow the individual to add nuance to and correct what they have just said Simple reflection: what the individual says Complex reflection: what the individual means	“You have read articles about the relationships between vaccines and disorders such as autism.” “What matters most to you is that your child is as healthy as possible.”
Elicit–Share–Elicit	How to give information/ advice: ELICIT = ask what the parent/caregiver knows and ask permission to complete their knowledge SHARE = provide the information /advice on the subject ELICIT = verify what the parent/caregiver has understood and what they will do with this information	“What do you know about ...?” “If you agree, I could complete ...” “Does this new information make sense?”

Why motivational interviewing works with a vaccine-hesitant parent/caregiver

Using MI in an educational session fosters a patient/caregiver-oriented relationship and, importantly, a tailored session that welcomes parents at their individual level of knowledge while

remaining respectful of their beliefs (5–8). The use of the MI approach calls for a respectful and empathetic discussion about vaccination and helps build a strong relationship between the patient/caregiver and the health care practitioner (9). Parents can freely discuss their concerns and ask questions about vaccination without feeling judged (6,9). Health care practitioners can then identify and target parental concerns or misconceptions about vaccination and provide tailored information (6).

Targeting concerns and tailoring information are the most prominent distinguishing features of this approach compared to currently available interventions in the field of vaccination promotion. This distinguishing feature may explain why the MI technique has had such positive results in curbing vaccine hesitancy and improving vaccine coverage (5–8). The educational session with MI is adapted to parents/caregivers’ individual needs and their concerns and questions about vaccinating their child. Using MI techniques, health care professionals help individuals explore their own ambivalence, find their own arguments for change and make their own informed decision about vaccinating their child. In a study on parents/caregivers’ decisional process in vaccination, Paulussen *et al.* showed that most parents/caregivers did not actively process the information provided on benefits and drawbacks prior to deciding whether to have their child vaccinated (17). A parent’s attitude towards vaccination and high vaccination intention may, therefore, be susceptible to uninformed and informed counterarguments. By eliciting and exploring a parent’s personal reasons for vaccination, the MI approach enhances their personal motivation to vaccinate via a robust decisional process. Moreover, MI is a short intervention and could easily be integrated into the usual vaccination consultation once health care practitioners are trained.

Table 3 shows a case example of how vaccine education between a health care provider and a parent could occur with the traditional versus motivational interviewing approach.

Table 3: Example of traditional approach and use of motivational interviewing in a dialogue about immunization

Traditional approach based on education and counselling	Motivational interviewing approach
<p>HCP: It’s important to immunize your child. If not, you’re putting him in danger. Do you know there are still cases of measles in Canada? This disease could be very dangerous. And what about meningitis? It could be fatal, you know? You should update your child’s vaccinations as he is already late according to the schedule. We could do that now if you want.</p> <p>Mother: I don’t see the urgency. And autism is worse than measles! There are more problems than solutions with this vaccine. Moreover, it’s completely unbelievable to give so many vaccines at the same time!</p>	<p>HCP: What do you think about the advantages of vaccination? [Open-ended question]</p> <p>Mother: Well, I know that vaccines protect children against several diseases that we don’t see anymore. My child received all his first vaccines but I’m worried that the measles vaccine could cause autism. For other vaccines, I have fewer doubts but I’m still hesitating.</p>



Table 3: Example of traditional approach and use of motivational interviewing in a dialogue about immunization (continued)

Traditional approach based on education and counselling	Motivational interviewing approach
<p>HCP: Studies have demonstrated that there is no link between autism and the measles vaccine. The vaccine is safe, I assure you. You should be aware of the information that you could find on the Internet. Giving several vaccines at the same time is safe and is not associated with more pain. We should update his vaccines now.</p> <p>Mother: I've heard something else and not only on the Internet. I've read a lot, and vaccination is not mandatory, I can do what I want.</p>	<p>HCP: As you said, vaccines have reduced diseases in such an important way that they are now much less frequent. It's why you have vaccinated your child when he was a baby. If I understood you correctly, with the exception of measles vaccine, other vaccines seem safe to you. [Summary; Complex Reflection]</p> <p>Mother: Yes, I know it's a good thing to prevent those infections. But about measles, I'm conflicted. You know, I've read a lot of books and articles. Lots of people are worried about the link between the measles vaccine and autism.</p>
<p>HCP: Yes, you're right, it's not mandatory, but you're putting him and other children who cannot receive vaccines in danger. The risks of diseases are much higher than the risks of vaccines. If I take this time to speak with you, it's because it's very important.</p> <p>Mother: It's easy for you! Quick, quick! But what if he gets autism? I'm worried about the risk of the vaccines but you don't seem to be worried about the health of my child.</p>	<p>HCP: So, you find that it's important to protect your child against diseases when the vaccines are safe, but you're worried about what you've heard regarding autism and measles vaccine. [Summary] I see that you've done a lot of research about the subject. [Affirmation] If you agree, I could give you some additional information for studies on autism and measles. [Elicit]</p> <p>Mother: Sure! I want to know exactly what happened.</p>
<p>HCP: Of course I am! And I'm worried about the fact that he could get diseases that could be prevented by vaccines.</p> <p>Mother: I think we do not understand each other. Let's talk about this another time.</p>	<p>HCP: In fact, you're right. One study had hypothesized a link between measles vaccine and autism, but this study was fake and the author lost his medical licence. More than 500 additional studies around the world have demonstrated that there is no link between the vaccine and autism. The frequency of autism is the same in vaccinated children as in nonvaccinated children. [Share] What do you think? [Elicit, last step of Elicit-Share-Elicit]</p> <p>Mother: Well, so I'm not crazy to be worried about that?</p> <p>HCP: Of course not, you're totally right. [Affirmation]</p> <p>Mother: Thank you for taking the time to understand my concerns. I think it's a bit clearer now.</p>
<p>Summary: The HCP adopted the role of the expert and used a directive intervention approach based on argumentation and righting reflex. This type of intervention led to an opposition.</p>	<p>Summary: MI allowed the mother, in a nonjudgmental way, to express her concerns and her ambivalence. Using an Elicit-Share-Elicit method allowed the HCP to give solicited information that could be accepted by the mother.</p>

Abbreviations: HCP, health care provider; MI, motivational interviewing

Conclusion

MI is a powerful tool that has been shown to be effective at increasing vaccine acceptance and curbing vaccine hesitancy (18,19). It is a new best practice that the World Health Organization recommends integrating into the training of immunization providers and health care providers involved in immunization counselling (20). The several available workshop or academic training materials on applying motivational interviewing to immunization could be very helpful in assisting health care providers in integrating motivational interviewing into their daily practice (18–22).

Author's statement

AG — Writing—original draft, review and editing

Conflict of interest

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