



# The use of participatory, reflective, and creative methods in interventions on vaccine hesitancy targeted at healthcare professionals

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## Abstract

This article examines the role of participatory, reflective, and creative methods in developing interventions with healthcare professionals (HCPs) to effectively address vaccine hesitancy. By actively involving HCPs in the intervention process, participatory methods foster engagement and commitment, enhancing the implementation of effective strategies. Reflective practices encourage critical thinking and self-assessment, enabling HCPs to examine their communication styles and beliefs regarding vaccination. Additionally, creative methods, such as interactive workshops and visual aids, offer innovative ways to convey complex information and stimulate dialogue among HCPs. These methods provide HCPs with practical insights and tools to navigate challenging conversations with vaccine-hesitant individuals, ultimately promoting vaccine acceptance and uptake. The Portuguese case study underscores the importance of tailoring interventions to the specific needs and contexts of HCPs. This article advocates for the widespread adoption of participatory, reflective, and creative methods in developing interventions to address vaccine hesitancy among HCPs. By leveraging these approaches, interventions can empower HCPs with the necessary skills and confidence to effectively communicate the importance of vaccination and address concerns within their communities.

**Take-home message:** Adopting participatory, reflective, and creative methods offers an effective training approach for providing healthcare professionals with the essential tools to address vaccine hesitancy.

**Keywords:** Creative methods; engagement; health interventions; healthcare professionals; vaccine hesitancy.

## INTRODUCTION

Vaccine hesitancy has emerged as a significant global public health challenge[1], characterized by a "delay in acceptance or refusal of vaccines despite the availability of vaccination services"[2]. This phenomenon has evolved into a multifaceted and intricate issue, displaying variations in manifestation across different times, locations, and specific vaccines[3]. The gravity of this social challenge becomes even more alarming with its expansion in Europe[4]. Given their regular and direct interaction with this complex phenomenon, healthcare professionals (HCPs) are pivotal in mitigating vaccine hesitancy [5]. Therefore, it is imperative to equip these professionals with the necessary skills and resources to effectively address the challenges posed by vaccine hesitancy. The VAX-TRUST project has been specifically designed to meet this critical need by developing targeted health interventions aimed at increasing awareness of the complexity of vaccine hesitancy among HCPs.

Drawing on scientific evidence collected from 7 European countries, the project identified actionable strategies and crafted interventions tailored to the specific needs of HCPs across the various analyzed contexts. This article will draw on the Portuguese intervention as a case study by showing the role of participatory, reflective, and creative methods to develop effective interventions for vaccine hesitancy targeted at HCPs. We advocate for the effectiveness of employing these methods to heighten the awareness, sensitivity, empathy, and skills of HCPs in addressing vaccine hesitancy.

## DISCUSSION

### *The intervention: Context and objectives*

A series of five in-person educational sessions was developed to equip HCPs with the necessary tools to effectively address vaccine hesitancy. This intervention aimed to encourage HCPs to reflect on the differences between the widely used paternalistic model of communication—where the patient is seen as a passive agent expected to receive and follow specific instructions—and the motivational interviewing approach, which is collaborative and based on a patient-centered model of care. While the paternalistic model has proven ineffective in addressing vaccine hesitancy, the motivational interviewing approach has shown promising results in this domain[6]. This initiative targeted 66 HCPs, including doctors and nurses, working in various vaccination contexts across Portugal, such as public hospitals, healthcare centers, and higher education institutions. The contrast between these two models of communication was represented through different means, namely graphic medicine.

### *The use of graphic medicine: a participatory, reflective, and creative approach*

Participants were presented with a cartoon depicting a discussion on childhood vaccination between a couple with a newborn and a nurse. This interaction was shown in two different versions: one where the nurse used a paternalistic approach and another where the nurse employed motivational interviewing techniques. The combination of words and images helped to enhance the message, and the visual component significantly impacted and increased HCPs' empathy toward vaccine-hesitant parents. Different images throughout the story helped HCPs understand the different communication models more intuitively.

Following the reading of these stories, participatory activities were conducted, including a role-play based on the first cartoon. This exercise aimed to promote HCPs' reflection on their communication practices and foster empathy by putting themselves in the parents' shoes. This approach helped enhance their understanding of the experiences of vaccine-hesitant parents and the challenging interactions that may occur during vaccination discussions.

After the role-play, a focus group was organized to discuss the main differences between the two communication approaches, encouraging reflection on new and effective ways of engaging with vaccine-hesitant parents. Participants were asked to employ motivational interviewing skills, such as empathy and reflective listening[7], instead of the traditional paternalistic approach. This aligns with the assumption that complex communication situations in clinical settings often require creative solutions [8].

The diverse participatory, reflective, and creative methods used to enhance interactions between HCPs and vaccine-hesitant patients proved effective on multiple fronts. These methods facilitated the creation of an informal, familial, and collaborative training environment and fostered a sense of openness among participants, enhancing their communication skills and empathy.

***Methodological strengths: Offering alternative approaches to address vaccine hesitancy***

Individuals freely shared their aspirations, challenges, and apprehensions within the established supportive atmosphere. This openness provided a comprehensive view of their experiences, highlighting their triumphs, achievements, and noteworthy practices. Moreover, HCPs exhibited enthusiastic engagement in the diverse dynamics proposed during the training sessions, showcasing a remarkable absence of resistance. This active participation indicates a positive reception and a willingness to explore alternative approaches to addressing vaccine hesitancy. The fluidity and receptiveness observed during these interactions underscore the potential of these methods to break down communication barriers and create a more empathetic and understanding healthcare environment. The act of reflecting on both personal and patient experiences becomes a catalyst for innovation[8]. HCPs, armed with a nuanced understanding of their own behaviors and the emotional landscape of their patients, can devise novel and effective solutions tailored to each unique situation. This adaptive and introspective approach enhances the overall efficacy of HCPs in addressing the multifaceted challenges posed by vaccine hesitancy. The methods discussed in this paper, particularly incorporating reflective practices, are indispensable in cultivating a comprehensive skill set among HCPs. This holistic skill set includes heightened awareness, increased sensitivity, enhanced empathy, and refined communication abilities. These attributes empower HCPs to navigate the intricate landscape of vaccine hesitancy with poise and effectiveness.

**CONCLUSIONS**

The existing educational tools tailored for HCPs predominantly center on knowledge sharing and communication training. Consequently, there is a conspicuous lack of interventions that encourage reflective practices and provide HCPs with essential skills to self-regulate and manage their emotions when discussing with patients expressing hesitancy towards vaccination[9]. Reflective practice has been key to managing complex and ambivalent situations in clinical practice. Through the reflective training developed, HCPs become aware of the challenges of a given situation and are more open to changing their communicational approach. Reflecting on their own behavior and emotions, as well as on patients', allowed HCPs to find new and useful solutions to a given situation [8]. The methods discussed in this paper are crucial in promoting awareness, sensitivity, empathy, and skills among HCPs when addressing vaccine hesitancy.

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## References

1. Dubé E, Vivion M, MacDonald NE. Vaccine hesitancy, vaccine refusal and the anti-vaccine movement: Influence, impact and implications. *Expert Rev Vaccines*. 2015;14:99–117.
2. MacDonald NE, Eskola J, Liang X, Chaudhuri M, Dube E, Gellin B, et al. Vaccine hesitancy: Definition, scope and determinants. *Vaccine*. 2015;33:4161–4164.
3. Cardano M, Numerato D, Gariglio L, Marhánková J, Scavarda A, Bracke P, et al. A Team Ethnography on Vaccine Hesitancy in Europe: A Case Study of a Local Truth Construction. *Rass Ital Sociol*. 2023;615–642.
4. Gregory A. WHO issues measles warning as yearly cases in Europe rise more than 30-fold. *Guard* [Internet]. 2024. <https://shorturl.at/uzSX3>. Accessed 10 May 2024.
5. Vuolanto P, Bergroth H, Nurmi J, Salmenniemi S. Reconfiguring health knowledges? Contemporary modes of self-care as ‘everyday fringe medicine’. *Public Underst Sci*. 2020;29:508–523.
6. Gagneur A, Lemaître T, Gosselin V, Farrands A, Carrier N, Petit G, et al. A postpartum vaccination promotion intervention using motivational interviewing techniques improves short-term vaccine coverage: PromoVac study. *BMC Public Health*. 2018;18:1–8.
7. Zolezzi M, Paravattil B, El-Gaili T. Using motivational interviewing techniques to inform decision-making for COVID-19 vaccination. *Int J Clin Pharm*. 2021;43:1728–1734.
8. Lutz G, Roling G, Berger B, Edelhäuser F, Scheffer C. Reflective practice and its role in facilitating creative responses to dilemmas within clinical communication - a qualitative analysis. *BMC Med Educ*. 2016;16:1–9.
9. Lip A, Pateman M, Fullerton MM, Chen HM, Bailey L, Houle S, et al. Vaccine hesitancy educational tools for healthcare providers and trainees: A scoping review. *Vaccine*. 2023;41:23–35.



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