Vaccination and the Prevention of Communicable Diseases in Healthcare Settings: Lessons from the Covid-19 Pandemic

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ABSTRACT: With the number of Covid cases and Covid-related deaths continuing unabated, achieving a high vaccination coverage is essential to ensure the safety of staff and patients and resume normal hospital care admissions and operations. This article questions current strategies around vaccination in healthcare settings and proposes ways to understand and address vaccination hesitancy among staff. It offers insights on how to develop a multifaceted vaccination strategy, which takes into consideration vaccination hesitancy among healthcare professionals and community-specific factors. Drawing from social psychological theories, we suggest that the root of vaccination hesitancy lies in conflicting representations or cognitive polyphasia. In addition, we argue that current communication strategies mostly rely on rational arguments and ignores the importance of a more emotion-based approach.

KEYWORDS: Vaccination, hesitancy, persuasion, resistance, Covid-19

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The mass vaccination campaign against Covid-19 that started in December 2020 in the UK and the United States offers hopes to frontline healthcare workers, who have been most severely affected by the pandemic, have suffered from high stress and pressure, and witnessed a high day-to-day toll among patients and colleagues. Across the UK, health and social care workers were one of the first groups to be offered a vaccine. Vaccine adoption rates have been encouraging so far, with between 79% (London) and 98% (in the North East and South West) of eligible staff accepting and receiving a first dose.[1] In addition, results to date point towards a marked reduction in the number of healthcare staff who need to be put in isolation or to quarantine once they've been vaccinated.[2]

Frontline health workers are, however, not exempt from vaccine hesitancy or low uptake. Seasonal vaccination against influenza typically sits at <30%.[3] Ensuring a high rate of vaccination among medical staff is essential for two reasons. Firstly, unvaccinated staff carry a risk of contaminating patients. Statistics suggest that Covid-19 cases contracted while in hospital remain important at around 17.5%.[4] Secondly, vaccinated healthcare professionals play a key role in persuading the general population to be vaccinated.

Debates have been initiated about whether to make the jab mandatory for NHS staff.[5] Beyond the legality of such practices, such a radical approach reflects misconceptions about vaccination hesitancy and a lack of understanding of persuasion and influence mechanisms. To date, approaches to vaccination have relied on three flawed assumptions. Firstly, that frontline health workers – be they in hospitals or care homes –would be more inclined to get vaccinated given their first-hand experience of the severity of the Covid-19 outbreak, as well as their scientific background. Secondly, that vaccine hesitancy was something only or mostly prevalent in the general population. Thirdly, that scientific arguments – such as the safety and efficiency of (mRNA) vaccines, explanations for a speedy development – would be sufficient to persuade medical practioners to adopt vaccination.

Drawing from ongoing research in care homes in Belgium, and previous research done in the context of the controversy that affected the MMR two decades ago and on persuasion strategies, we show, in this article, how social psychology may help to shed a different light on these questions and that it offers some elements of answer on how to counteract vaccine hesitancy in a healthcare setting.

Barriers to Adoptions Remain: Understanding the Social Psychological Roots of Vaccination Hesitancy

Based on previous research about the sense-making efforts of mothers of young children trying to decide whether to give the MMR,[6] we propose that resistance to vaccination is much more complex than what seems to be assumed with the current vaccine hesitancy over Covid-19.

Such complexity is best illustrated by the social psychological concept of cognitive polyphasia.[7-9] In her research on cognitive polyphasia, Provencher[6] offered a model (Figure 1), in which she argued that the decision to vaccinate or not is influenced by a mix of societal factors, such as people's core background beliefs, that is, a set of social representations[9,10] people may have about related issues (for instance, their social representations of medicine) and individual circumstances, such as

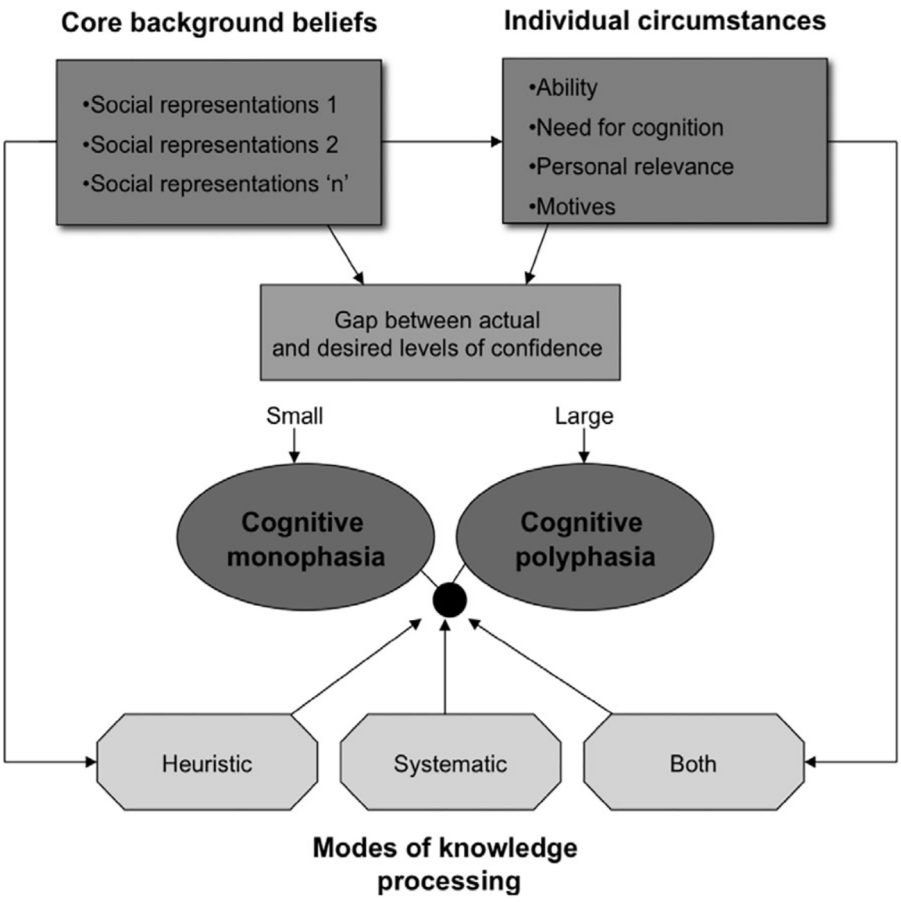

Figure 1. Modes of knowledge processing, reproduced from Provencher.[6]

their need for cognition and their motives. In the case of the MMR vaccine, Provencher[6] also suggested that different types of knowledge, such as 'political knowledge' and 'common-sense knowledge' were used by people to make sense of the controversy affecting this vaccine and this, even with people coming from a scientific background like doctors, nurses and other scientifically-trained individuals.

This highlights the complexity of the decision-making process over vaccination, which must be acknowledged and considered when addressing vaccine hesitancy amongst health professionals and beyond. As noted by Provencher[11]: "Controversies do not happen in a void and take their meanings from their connections with other aspects of society that may, at first sight, appear to be unrelated." (p. 274)

These findings also have important implications for the communication policies that must be put in place to overcome vaccine hesitancy, policies which are discussed in the next section.

Communication: No One-size Fits All Approach

Healthcare communication settings often rely on the common belief that if healthcare workers are presented with fact-based, scientific arguments, they will be convinced to follow safety measures, get vaccinated or wash their hands more often.[12] This approach relies on the assumption that healthcare professionals may engage with health-based information in a more rational way than the general population. As hinted at by Provencher's model and through persuasion research,[13] this rational, science and fact-based approach to healthcare communication may be misguided, or not capture the full spectrum of strategies requires to maximise vaccination uptake. Beyond the rational route to persuasion – sometimes referred to as the 'central route',[14] another form of persuasion – referred to as 'peripheral route' – relies on the use of heuristics, or mental shortcuts. Heuristics, when it comes to healthcare settings, can take the form of endorsements (eg, by an esteemed colleague) or the display of social norms and feedback (eg, communicating about the percentage of vaccination adoption rates within a hospital, care home, unit, etc. in order to create a social norm). The peripheral route to persuasion may also involve emotional messages, which have powerful effects on people that do not react to science-based health messages.[15]

Conclusion: Preparing the Future of Communication for Seasonal Campaigns

This article aims to show how a better understanding of social psychological mechanisms can help understand vaccine hesitancy among healthcare practitioners and highlight ways to further improve vaccination adoption through the adoption of better, more targeted communication means. With a growing consensus that coronavirus booster shots may become

necessary on a regular basis to contain future outbreaks and waves, a different approach is necessary. Health communication needs to become more targeted for each group – doctors, nurses, nursing assistants – and varied to ensure every 'vaccine hesitant' is addressed in a way that corresponds to their information processing style, without assuming a one-size-fit-all approach will work. The efficiency of campaigns and messages should be monitored for efficiency and reviewed for subsequent campaigns. Altogether, Covid-19 vaccination communication campaigns represent both a challenge and an opportunity to improve vaccination uptake in healthcare contexts, and to educate the broader population to the importance of regular vaccination.

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Author Contributions

All authors contributed to the manuscript preparation and writing.

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