



## Executive Summary:

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**Title: Exploring Vaccine hesitancy for COVID-19 amongst Health and Social Care Professionals/Students: an Exploratory Study**

**Background:** Vaccine hesitancy (refusals or delays) is a major public health issue globally with anti-vaccine sentiments apparent. Since the Covid-19 pandemic, vaccination efforts were a priority especially amongst high priority groups such as frontline health and social professionals. Previous public health efforts to vaccinate health staff, for example in Scotland against annual influenza have not always reached vaccine uptake targets. Vaccine hesitancy amongst health and social care professionals and students are less widely known especially concerning the Covid-19 vaccine. Given their roles as high priority recipients for such vaccines but also as advocates for vaccines amongst the public, vaccine views amongst health and social professionals and those in-training are important to consider.

**Aim:** This study aimed to explore vaccine hesitancy amongst health and social care professionals and those in-training (students).

**Methods:** A mixed-methods online study was conducted which comprised a concurrent research design where quantitative and qualitative research data was collected simultaneously. An online quantitative survey was adapted from Freeman et al.'s (2020) *7-item Covid-19 Vaccine Hesitancy Scale* and the *14-item Vaccine Complacency and Confidence Scale*. Qualitative online focus groups were also conducted with a purposive sample of participants including health and social care professionals and students in order to explore vaccine hesitancy (delays or refusals) in more depth. Following informed consent procedures, these online discussions were recorded on MS Teams and the transcripts obtained for analysis were analysed by Thematic Analysis (Braun & Clarke, 2006).

**Results: Quantitative Data:** There were 49 fully completed surveys in total (57 partially completed surveys) from a range of health and social care professionals and students from one large Scottish University. Nearly 90% of respondents (44/49) reported having been vaccinated for Covid-19 with at least two doses of the vaccine at the time of the survey July – September 2022. There were 10% of respondents that reported not being vaccinated at all for Covid-19 (5/49) and that rated strongly hesitant on the Vaccine Hesitancy Scale. The overall mean on the Vaccine Hesitancy Scale was 14.7 (SD 6.3) which compared similarly with the original Freeman study (2020 of 13.6; SD7.3 amongst a large sample in the general population).

**Qualitative Data:** 17 participants from the survey volunteered to participate in the online discussions. Five focus group discussions were held in total. Two focus group discussions were conducted with four staff members and three focus groups were conducted with six students.



A total of 10 participants took part which included midwifery, child health, mental health and adult nursing disciplines. Overall, participants were mostly positively in favour of vaccination, including the Covid-19 vaccine. Qualitative data analysis showed that while participants were mostly positive towards the Covid-19 vaccine, there were circumstances where Covid-19 vaccination could be seen to be problematic. Professional and personal dilemmas over Covid-19 vaccination were highlighted.

**Overall findings:** Most health and social care participants in this study were positively in favour of vaccination for Covid-19 and had received at least two doses of the Covid-19 vaccine. There was a small proportion of respondents (10%) who reported that they had not been vaccinated for Covid-19 and were strongly hesitant with negative views expressed on the survey scales. These findings compared similarly with the general population in a previous large-scale study. In the qualitative online focus groups, most participants appeared to be strongly in favour of vaccination, including the Covid-19 vaccine. There were some instances where Covid-19 vaccination could be seen to be problematic, however. Such instances included: vaccination amongst vulnerable groups (e.g., such as pregnant women amid the Covid-19 vaccine when it was unclear whether this could be recommended); for multiple vaccines at once (e.g., for flu and Covid-19); for vaccines seen as less necessary. Participants did consider their own personal and professional dilemmas during the vaccine campaign considering moral and professional imperatives to be vaccinated against personal concerns.

Overall given the largely positive views expressed by participants in the focus group discussions, consideration must be given in future studies to how to recruit health and social care professionals (and in-training) who might express negative views about vaccination to engage with this small group for vaccine hesitancy. A longer recruitment strategy could be planned for example. The design of the study could include individual online interviews to express views rather than focus group discussions given the sensitivity of the topic for health and social professionals.

**Conclusion and recommendations:** Health and social care professionals (and in-training) are important in vaccination campaigns to encourage confidence given public trust in their opinions and advice about vaccines. Consideration should be taken in future vaccine programmes to engage with the small number of health and social care professionals who may be strongly opposed /hesitant to vaccines including the Covid-19 vaccine. Professional and personal dilemmas are apparent amongst this group and should be addressed in staff training (e.g., vaccination amongst vulnerable groups; common perceptions around 'overloading' the immune system; and stress the importance of vaccines). While only a small number of participants scored highly on the Vaccine Hesitancy Scale and reported not being vaccinated with at least two doses of the Covid-19 Vaccine, participants in online discussions did talk about everyday instances where vaccination could be seen as problematic. Vaccine hesitancy as a construct therefore may be seen as constructed rather than absolute. Discussions of everyday personal and professionals' dilemmas around vaccination could be explored in staff training to address this.