University College London Hospitals NHS Foundation Trust

Staff Uptake and Attitudes Towards the Pfizer COVID-19 Vaccine

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Background

With the uncertainty of this pandemic, there is tragic certainty in the disproportionate numbers of Black, Asian and Minority Ethnic (BAME) group health and social care workers who have died from COVID-19. The vaccination programme intends to protect public health, particularly those at an increased risk of severe disease from COVID-19, and to relieve pressure on the National Health Service (NHS).

The Pfizer/BioNTech COVID-19 vaccine first dose was offered to staff in the first phase of the vaccine rollout at the Royal National Ear, Nose and Throat and Eastman Dental Hospitals.

Objectives

- The COVID-19 vaccination programme was initiated in December 2020, with all staff offered the Pfizer/BioNTech COVID-19 vaccine. At the time of writing, approximately 20,000 first-dose Pfizer/BioNTech COVID-19 vaccines had been administered.
- During this first phase of delivery, we conducted a study to investigate staff uptake and attitudes towards receiving a vaccine at this time.
- The study aims were to investigate health beliefs and opinions towards the COVID-19 vaccine, with the intention of utilising findings to dispel false information regarding the vaccine and to support staff in making an informed decision to receive this protection from serious disease.

Methods

- All staff were invited to participate voluntarily in an anonymous digital survey, irrespective of whether they wished to take the COVID-19 vaccine or not.
- The survey was distributed to staff through email, SMS and in-person utilising *Google Forms,* accepting responses from 18th- 25th January 2021.
- Data obtained over this period included information on respondent demographics and role of staff, alongside opportunity to share opinions towards the COVID-19 vaccine.

Results

- A total of 170 anonymous staff responses were received, of which 88% had or intended to receive the COVID-19 vaccine
- This is a sample of the hospital employees only and not necessarily representative of wider population groups
- Of those taking the COVID-19 vaccine, most selected '*I do not want to pass COVID-19 to my friends/family/colleagues'* (77%), followed by '*I think it will help prevent me from getting seriously ill if I catch COVID-19'* (75%). One respondent said it was a '*duty to society to protect one another'* and important to '*ensure lockdown lasts as short as possible'*
- Of the total sample, 56% affiliated with a BAME background, of which 13% did not wish to receive the vaccine at this time.

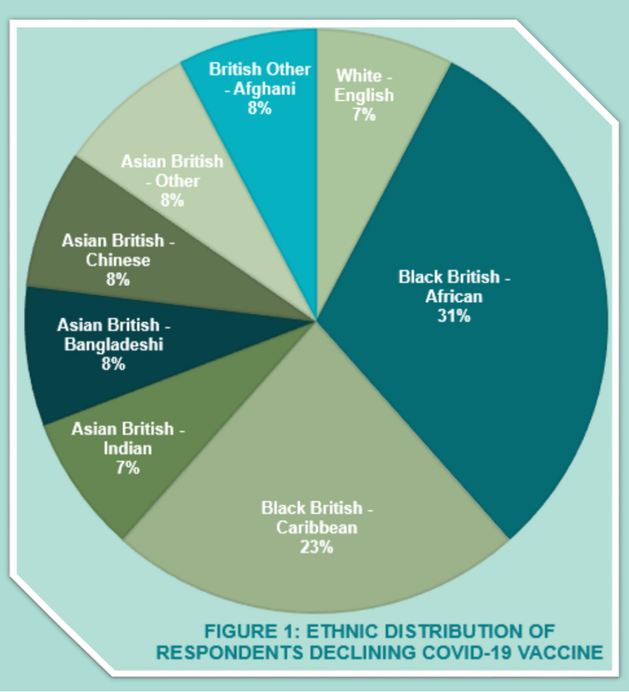


FIGURE 1: ETHNIC DISTRIBUTION OF RESPONDENTS DECLINING COVID-19 VACCINE

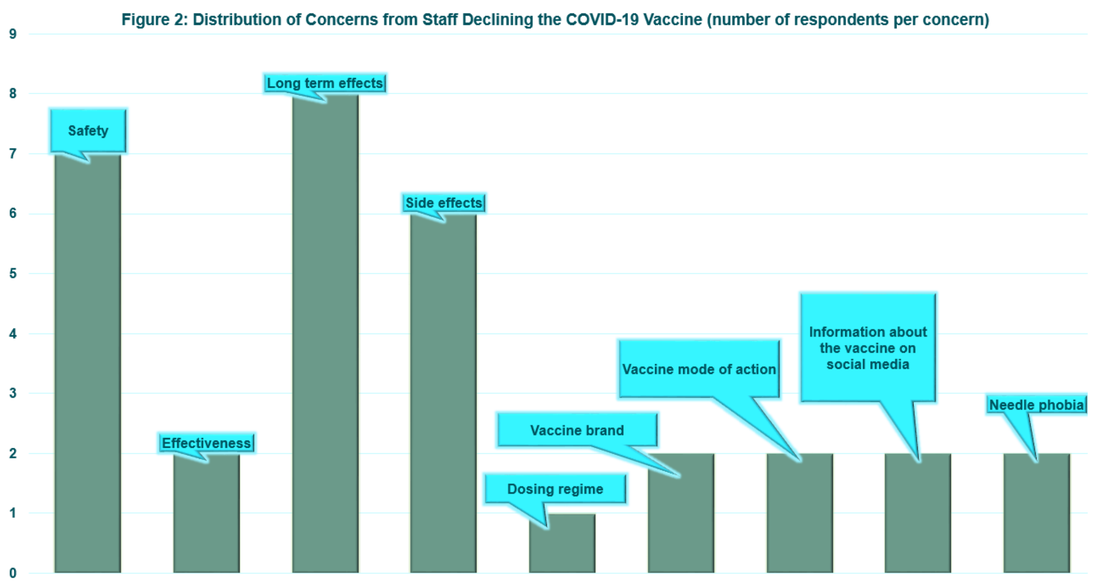
Discussion

- A successful vaccination programme relies on the willingness of individuals to participate in the intervention being introduced, with an estimated community-level vaccine coverage of at least 80% required for herd-immunity [1]
- The overall acceptance and uptake of the vaccine was reassuring, reflecting staff recognition of individual risk and trust in the benefits of a vaccine.
- The results of our study highlighted factors which may limit the vaccine uptake including the spread of misinformation and variations in opinions towards the vaccine across certain population groups
- We acknowledge that the data collected does not necessarily represent wider NHS staff attitudes and opinions towards vaccination

Pandemic of Inequality

- The NHS had 1.3 million employees at the end of March 2020, of which 77.9% were White and 22.1% from ethnic groups. BAME members accounted for 20% among nursing and support staff and 44% among medical staff, including doctors and dentists [2]
- Alarmingly, 76% of COVID-19 deaths amongst healthcare staff in England were in BAME individuals. [3]
- Data collected in this study demonstrated that only one respondent declining the vaccine was from a non-BAME group, suggesting variation across population groups in accepting the vaccine.
- Full distribution of concerns from staff opting *not* to have a COVID-19 vaccine at this time are shown in Figure 2.

Figure 2: Distribution of Concerns from Staff Declining the COVID-19 Vaccine (number of respondents per concern)



- BAME individuals are at greater risk of hospitalisation and death from COVID-19 infection. [4]
- Over-representation of ethnic minorities in occupations considered frontline, such as hospital staff and taxi drivers, poses increased risk of exposure, infection and death from the virus. [4]
- Socioeconomic disparity places BAME individuals at greater risk to COVID-19 exposure due to socioeconomic deprivation, including residence in densely populated areas, overcrowding and multigenerational housing. [4]
- BAME populations have increased rates of cardiovascular disease, obesity and diabetes. [4] Acute inflammatory processes from COVID-19 can exacerbate chronic inflammation from pre-existing health conditions such as these, triggering a cytokine storm and more severe outcomes in BAME individuals. [4,5]
- Concerns surrounding the vaccine should be considered to ensure that all population groups are adequately informed about the benefits of the vaccine and protect the most vulnerable population groups from fatal disease.

Information Transmission and Fake News

- Many respondents reported reading online that the vaccine contains a microchip tracker or animal products, which may contradict religious or cultural beliefs. These theories are with confidence considered conspiracy, contributing to spread of false information and distrust
- Misinformation sharing on social media was noted by Facebook, the owner of WhatsApp, who resorted to limiting message forwarding feature, in an attempt to reduce sharing of false claims surrounding the pandemic. [6]
- Outside work, staff may consult local community or religious leaders for vaccine advice and may not engage with mainstream news. Thus, alternate information sources may instigate distrust in the vaccination programme.

Meeting The Needs Of Our Workforce

Measures taken at the trust to promote vaccine uptake and maximise staff support in a safe environment:

- Regular BAME Q&A sessions and focus groups facilitated by clinical experts, to ensure the integrity of vaccine information was preserved.
- To acknowledge worries and myth-bust where possible
- Tailored clinics to discuss individual issues regarding allergy, pregnancy and other concerns available.

Conclusion

Consideration must be given to population groups, who may suffer larger proportions of adverse outcomes with low compliance to vaccine uptake.
Deciding to take the COVID-19 vaccine should remain an individual choice. Identification of vaccine barriers is essential to support decision-making and protect health.

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