

# UPTAKE OF THE COVID-19 VACCINATION IN A SECURE PSYCHIATRIC HOSPITAL POPULATION

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## INTRODUCTION

Evidence is emerging regarding the factors that may influence uptake of COVID-19 vaccine<sup>1</sup>, but little is known about the uptake in people with mental disorder who have a high risk of severe health outcomes in SARS-CoV-2 infection<sup>2</sup>. In the United Kingdom, all adult mental health in-patients are being offered the COVID-19 vaccine as they can be considered to be in at least 'Category 6' as defined by the Joint Committee on Vaccination and Immunisation (JCVI) advice on priority groups for COVID-19 vaccination<sup>3</sup> due to having a serious mental disorder. There is limited research into the uptake of COVID-19 vaccines in patients with severe mental illness and we are not aware of any involving psychiatry patients in secure hospital settings.

We undertook a rapid service evaluation within the medium secure hospital in which we work to examine the proportions of patients who have, and have not, had the COVID-19 vaccine, and explored the reasons for this.

## METHODS

All patients in the hospital had a capacity assessment and physical health evaluation completed by their consultant forensic psychiatrist.

Age, gender, ethnicity and consent status to receive the vaccine (yes/no) was recorded for each patient, along with any reasons for refusal to consent to the vaccine. Descriptive statistics and odds ratios were calculated with a cut-off for statistical significance set at  $p < 0.05$ .

## RESULTS

Of the 96 inpatients, four were ineligible for the vaccine due to recently having a COVID-19 infection. Of the 92 eligible patients (72 men and 20 women; mean age = 38.7 years; age range 19 - 62 years), three were assessed as being in 'Category 4' of the JCVI system and the remainder were in 'Category 6' by reason of their serious mental illness.

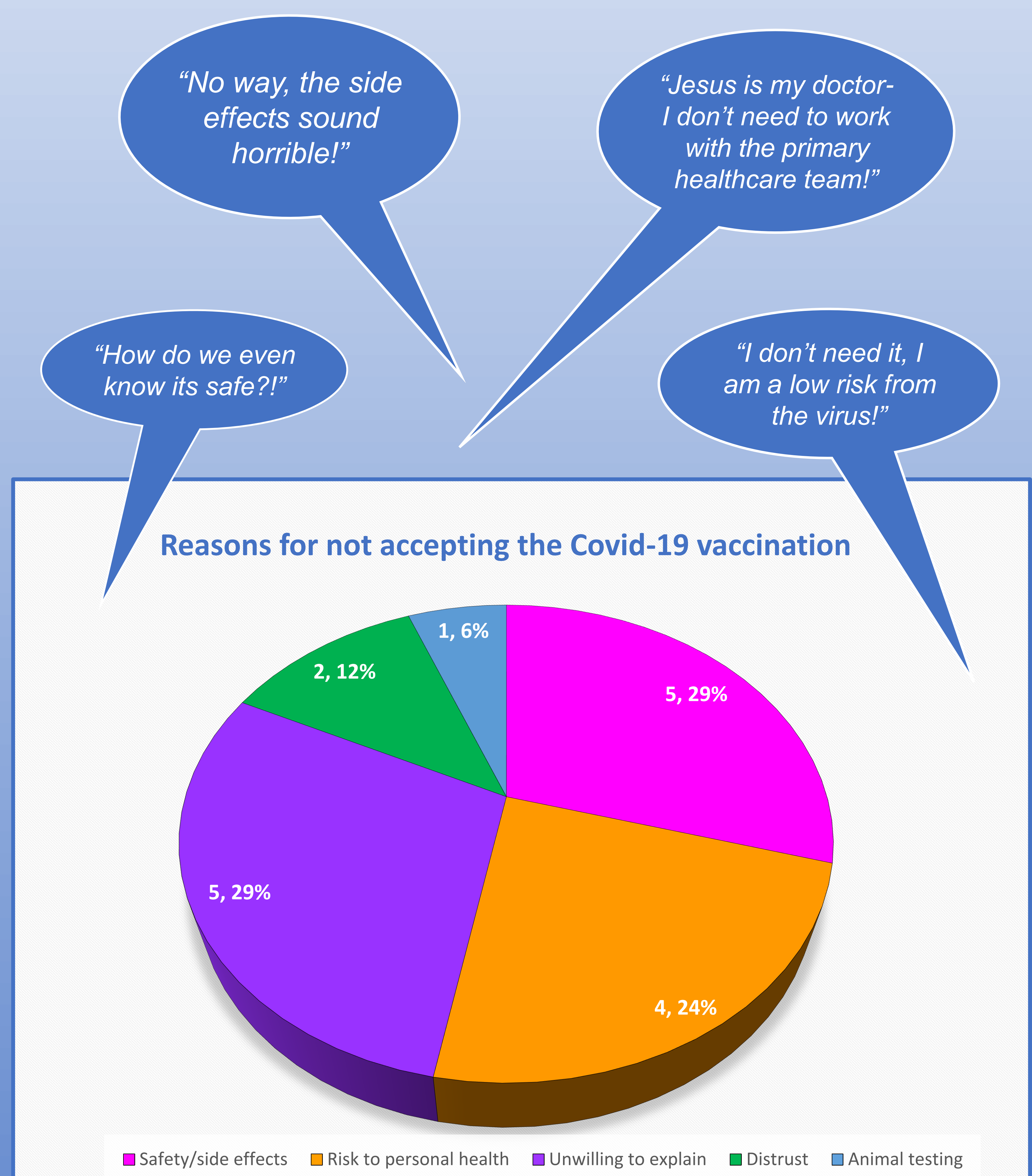
Of the 92 patients who were eligible, 68 (73.9%) consented to take the vaccination and 17 (18.5%) declined to consent.

Seven patients (7.6%) lacked capacity to make the decision regarding the vaccine. For two of these patients it was judged by their clinical team to be in their best interests to be given the vaccine; for the other five patients, the clinical team judged it not to be in the patients' best interests because they would require physical restraint which would cause disproportionate distress and negatively impact upon therapeutic relationships.

A similar proportion of patients aged under and over 40 years old (73.6% vs. 74.4%) consented to have the vaccine.

Those from a Black Asian Minority Ethnic (BAME) background were 2.14 times more likely to decline the vaccine than White British patients, though this result was not statistically significant ( $p = 0.20$ , 95% CI 0.66 - 6.68).

Of those patients who gave capacious refusal to have the vaccine ( $n=17$ ), the most commonly cited reasons were concerns about the safety profile/side effects of the vaccine ( $n=5$ ) and patients' perception of having a low risk to their personal health from COVID-19 ( $n=4$ ). Five patients were unwilling to explain their decision, two (11.8%) cited broader distrust of healthcare services and one had concerns about animal testing.



## DISCUSSION

This small scale study in a real world population shows that among a group of patients who are detained in a secure setting (due to their combination of mental health problems and risk to others), immunisation with the COVID vaccine was broadly acceptable and most patients gave valid consent to receive it.

The prevalence and rationale for capacious refusal of vaccine appear similar to those that have been seen in the general UK population thus far.

## REFERENCES

- Kreps S, Prasad S, Brownstein JS, et al. Factors Associated With US Adults' Likelihood of Accepting COVID-19 Vaccination. *JAMA Netw Open*. 2020;3(10):e2025594. doi:10.1001/jamanetworkopen.2020.25594
- Jeon HL, Kwon JS, Park SH, Shin JY. Association of mental disorders with SARS-CoV-2 infection and severe health outcomes: nationwide cohort study. *Br J Psychiatry*. 2021 Jan 7:1-8. doi: 10.1192/bjp.2020.251.
- Department of Health and Social Care, UK [Internet]. Joint Committee on Vaccination and Immunisation: advice on priority groups for COVID-10 vaccination, 30 December 2020. Available from: <https://www.gov.uk/government/publications/priority-groups-for-coronavirus-covid-19-vaccination-advice-from-the-jcvi-30-december-2020/joint-committee-on-vaccination-and-immunisation-advice-on-priority-groups-for-covid-19-vaccination-30-december-2020>

## ETHICS & ACKNOWLEDGEMENT

This study was a Service Evaluation with local permission from Nottinghamshire Healthcare NHS Foundation Trust. The authors would like to acknowledge and thank all of the staff and patients at Arnold Lodge who participated in this study.