IMPROVING COVID-19 VACCINE UPTAKE IN PREGNANT WOMEN: A LOCAL QUALITY IMPROVEMENT PROJECT

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Introduction

- Guidance from the Joint Committee on Vaccination and Immunisation changed to offer pregnant women the COVID-19 vaccine in April 2021.
- Pregnant women who develop severe disease with COVID-19 are more likely to be admitted to critical care, need invasive ventilation and are at higher risk of death when compared with non-pregnant patients.
- Pregnant women who are unvaccinated are more likely to be admitted to critical care than those who are vaccinated.
- There remains vaccine hesitancy among pregnant women and a resultant surge in severe obstetric COVID-19 cases locally.[1,2]

Aim: To collect data from our postnatal inpatients in order to inform changes to practice and improve vaccine uptake in pregnant women.

Methods

- Survey of 50 postnatal inpatients during routine anaesthetic follow-up in July 2021, September 2021, November 2021 and January 2022.
- We collected information on vaccine uptake, demographics and reasons for vaccine hesitancy.
- Data was presented following each cycle to the Trust and Regional Maternity COVID-19 and vaccination groups and was used to inform changes to practice and improvements to the distribution of vaccine information.
- Approval for presentation was gained from the trust Caldicott Guardian.

Results

Vaccine uptake increased month by month (see figure 1). Themes for accepting the vaccine included doing their own research, working in healthcare, information provided by obstetricians/midwives and the updated government advice. Themes for not accepting the vaccine included concerns of risk to baby, sudden change in government advice, information provided was lacking, limited advice from obstetricians and midwives, concerns of long-term risks or side effects of vaccine, feeling at low risk from COVID-19 and concerns about lack of evidence for the vaccine in pregnancy. For the most recent cycle of data, 75% (12/16) had a partner who was also not vaccinated.

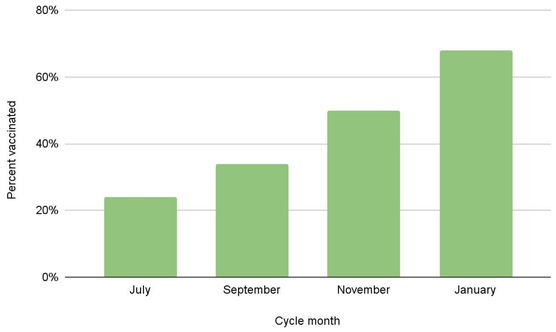


Figure 1: Vaccine uptake per data collection cycle

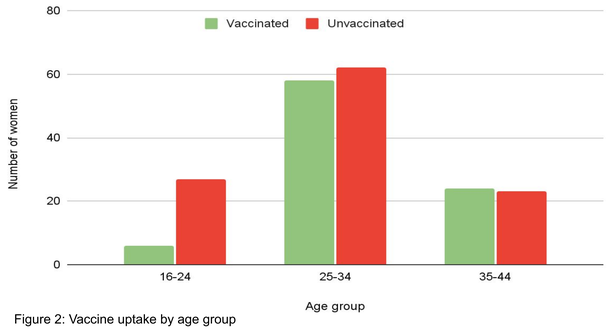


Figure 2: Vaccine uptake by age group

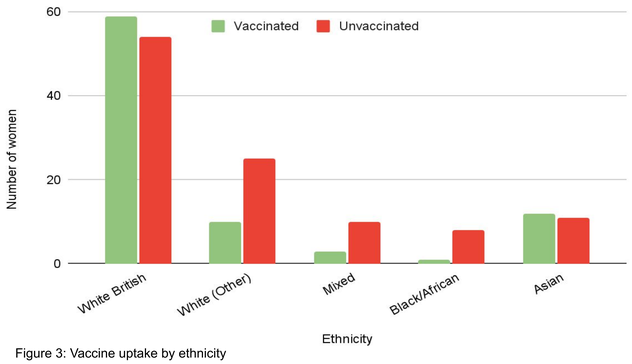


Figure 3: Vaccine uptake by ethnicity

We analysed the combined demographic data from all cycles. Vaccination uptake was higher in older age groups than the youngest age group (16-24) (see figure 2). Vaccine uptake was highest in White British (52%) and Asian patients (52%), compared to white (other) (30%), mixed (23%), and Black/African (11%) patients (see figure 3). Vaccination uptake was also higher in women living in a postcode with a lower index of multiple deprivation (see figure 4).

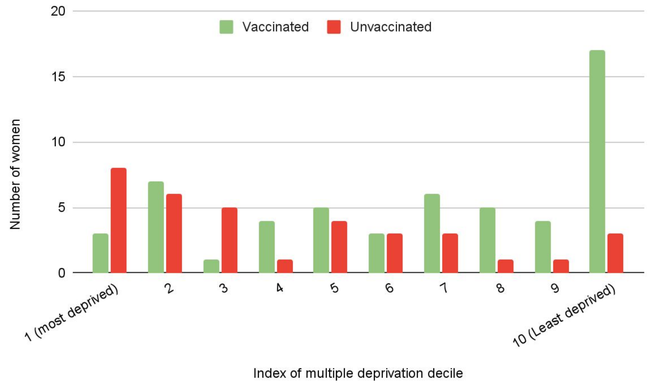


Figure 4: Vaccine uptake by index of multiple deprivation decile

Discussion

- Vaccination uptake in our group of patients increased with each cycle. Higher vaccination uptake was associated with older age, being White British or Asian and living in a postcode with a lower deprivation level.
- Although patients reported mainly pregnancy-related reasons for not accepting the vaccine, many had partners who were also not vaccinated.
- Recommendations to changes in practice and changes which have been implemented locally are included in table 1.

Recommendations	Local changes to practice
Clear and concise information for women through public health messages as well as individual discussions	• Displaying of public health posters • Communications sent out to newly pregnant women
Ensuring women are fully informed of the risks of COVID-19 as well as the vaccine	• Training package for staff • Live online question and answer sessions
Improving access to the vaccine in antenatal clinic	• Introduction of additional vaccinators for antenatal women
Targeting communities living in areas of higher deprivation and non-White British communities	• Work in progress

Table 1: Summary of recommendations and local changes to practice

Key Messages

- There remain improvements to be made in reducing inequalities in vaccine uptake between ethnic groups and in areas of higher deprivation
- This study shows the importance of collaborative work within the maternity services MDT and the contribution that anaesthetists can have

References:
1. UK Health Security Agency. COVID-19 vaccine surveillance report: week 76. 25 Nov 2021. Accessed at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1036047/Vaccine_surveillance_report_-_week_47.pdf
2. UK Obstetric Surveillance System. Key information on COVID-19 in pregnancy. 2021. https://www.npeu.ox.ac.uk/assets/downloads/MBRRACE-UK_Rapid_COVID_19_2021_-__Infographic_v10.pdf