# The impact of Covid-19 on Maternity and Anaesthetic services In Luton and Dunstable University Hospital. A year survey.

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## Introduction

The Covid-19 virus can pose a serious threat to a mother and baby if contracted during pregnancy (1). We aimed to ascertain the impact of Covid on our maternity patients at Luton and Dunstable Hospital.

## Method

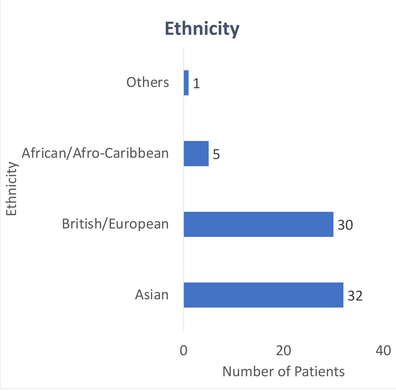
This was a retrospective, single centre study. The data was collected from the archived electronic files for a period of a year, from 31st March 2020 to 31st March 2021. The data collected included maternal age, BMI, ethnicity, comorbidities, antenatal or post-natal infection, gestational age, single or twin gestation, mode of delivery – vaginal or caesarean, anaesthetic involvement, location of patient care, oxygen requirement, type of respiratory support, need for critical care admission, duration of hospital stay, maternal mortality and neonatal impact.

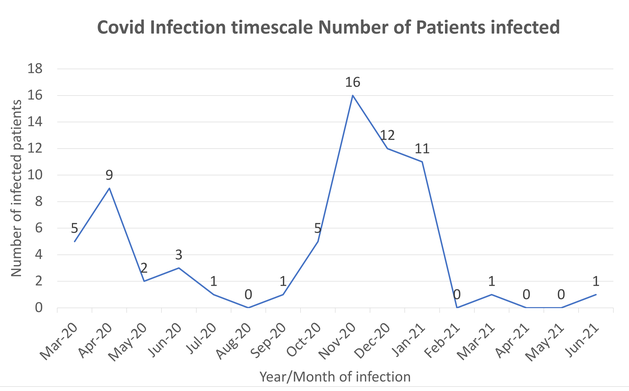
## Results

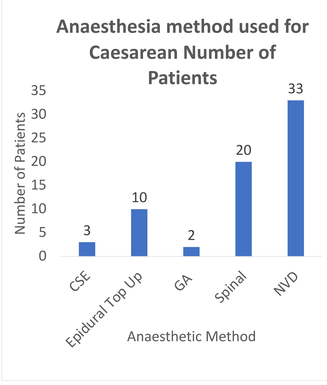
There were 68 obstetric patients who were Covid positive over the studied period. 72% patients had BMI <30. 54% of positive patients were of Asian or Afro-Caribbean origin and there was statistically significant difference with a P value 0.006 using Chi-Squared test. 85% of patients were positive antenatally with a mean gestation of 33 weeks (SD 4.79). Out of the 15% of postnatal infections, most occurred within first 5 days post-delivery, indicating possible cross infection.

With regards to treatment, 88.23%, were asymptomatic and did not require any oxygen support. 7.35% patients required O2 support, 2.94% required NIV support and 1.47% required invasive management and transfer for Extracorporeal membrane oxygenation (ECMO) to a higher centre.

Mortality in our study was 2.94% for mothers, both patients were of Black, Asian and minority ethnic (BAME) origin. However neonatal outcome was good with no associated mortality. 47% (n=31) of the patients had lower segment c-section (LSCS) out of which 20% (n=6) needed their caesarean expedited due to Covid, their mean gestation was 29 weeks (SD 4.7). Among the patients who had LSCS, 93% had a regional anaesthetic and 7% had a GA.




## Conclusion

BAME was a significant risk factor for pregnant Covid positive patients to be hospitalised. BAME category patients were more symptomatic and required prolonged hospital stay (1). BMI>30 was not found to be a significant risk factor. Covid caused a high incidence of CTG abnormalities and hence lead to a higher incidence of LSCS during this period. Regional anaesthesia was performed safely in these patients. Cross infections in maternity unit paved the establishment of Closed Monitoring Unit (CMU) at our centre. Due to the ongoing pandemic, further study is needed to see impact of vaccination on maternity.

## References

1. RCOG-Coronavirus (Covid-19) infection in pregnancy – guide for healthcare professionals v14.3 published 11th January 2022. Accessed on 09/02/2022. https://www.rcog.org.uk/globalassets/documents/guidelines/2022-01-11- coronavirus-covid-19-infecon-in-pregnancy-v14.3.pdf