

Objectives

Pregnancy is considered a vulnerable condition and the effect of SARS-CoV-2 (COVID-19) on pregnancy is not fully understood.

To present the incidence and causes of late miscarriage (12 weeks of gestation to before 24 weeks) observed before and during the COVID-19 pandemic

Design

A comparative retrospective review of late miscarriages that occurred at North Middlesex University Hospital over a 4 year period.

Methods

Retrospective review of late miscarriages from 2018 to 2021.

The data was retrieved from our pregnancy losses data base and the total number of miscarriages and the causes of miscarriages occurring in the years under review were analysed using Excel spread sheets.

Results

The total number of late miscarriages in 2018 was 21, in 2019 there were 30, while in 2020 and 2021 there were 72 and 42 miscarriages respectively. There was an overall marked increase in the incidence of late miscarriage in 2020 compared to the other years.

Chorioamnionitis accounted for 30.5% (22/72) miscarriages in 2020 compared to 9.5% (2/21) in 2018, 30% (9/30) in 2019 and none in 2021.

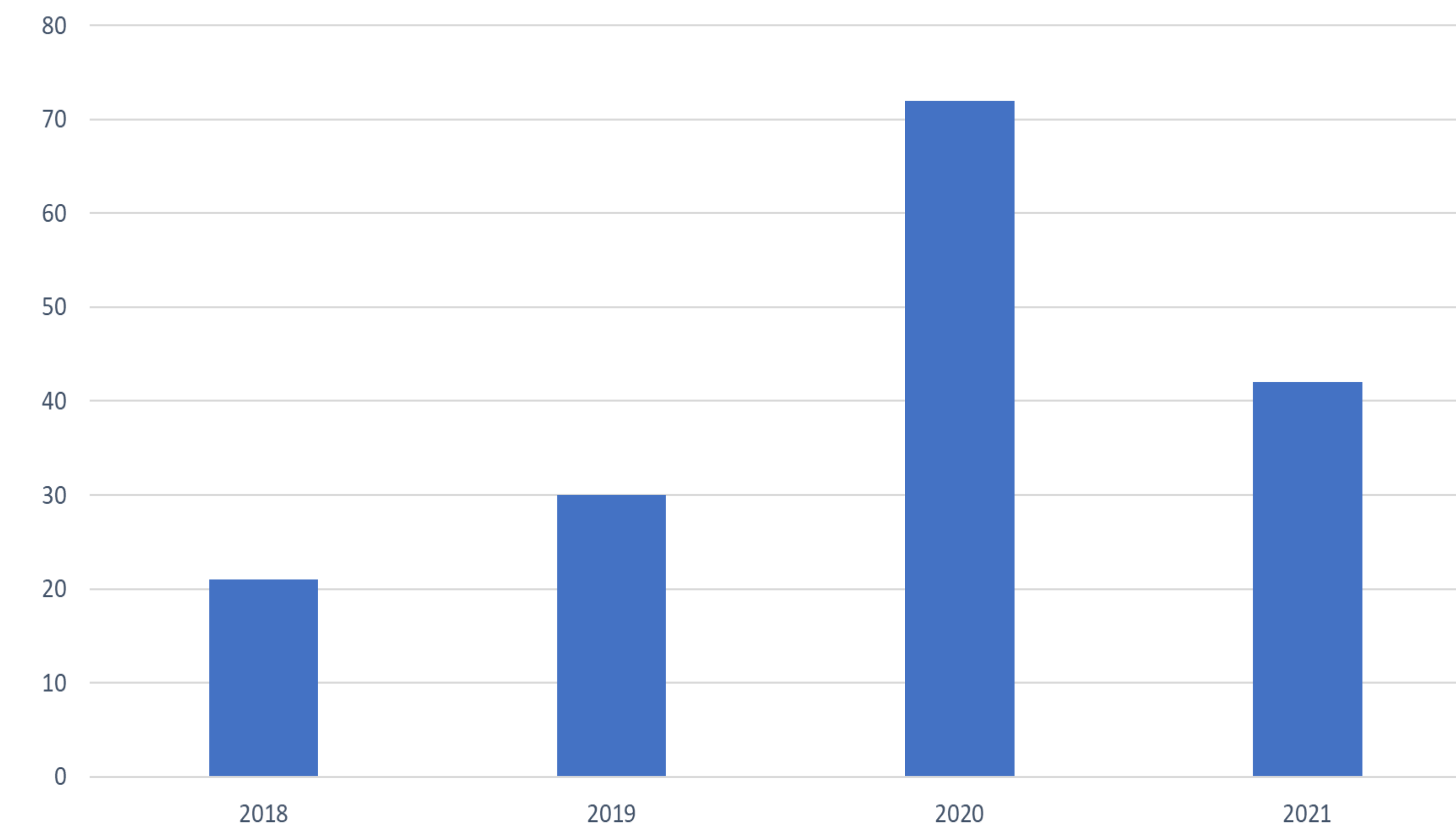
Spontaneous late miscarriages had a higher incidence at 30.5% (22/72) in 2020 compared to other years studied at 28.5% (6/21), 6.6% (2/30) and 19% (8/42) in 2018, 2019 and 2021 respectively.

PPROM occurred in 12/72(16.6%) in 2020, compared to 3/30(10%) in 2019 and 6/42(14%) in 2021. With spontaneous miscarriage (no identifiable cause) and chorioamnionitis being the commonest causes identified during the peak of the pandemic in 2020 followed by PPROM.

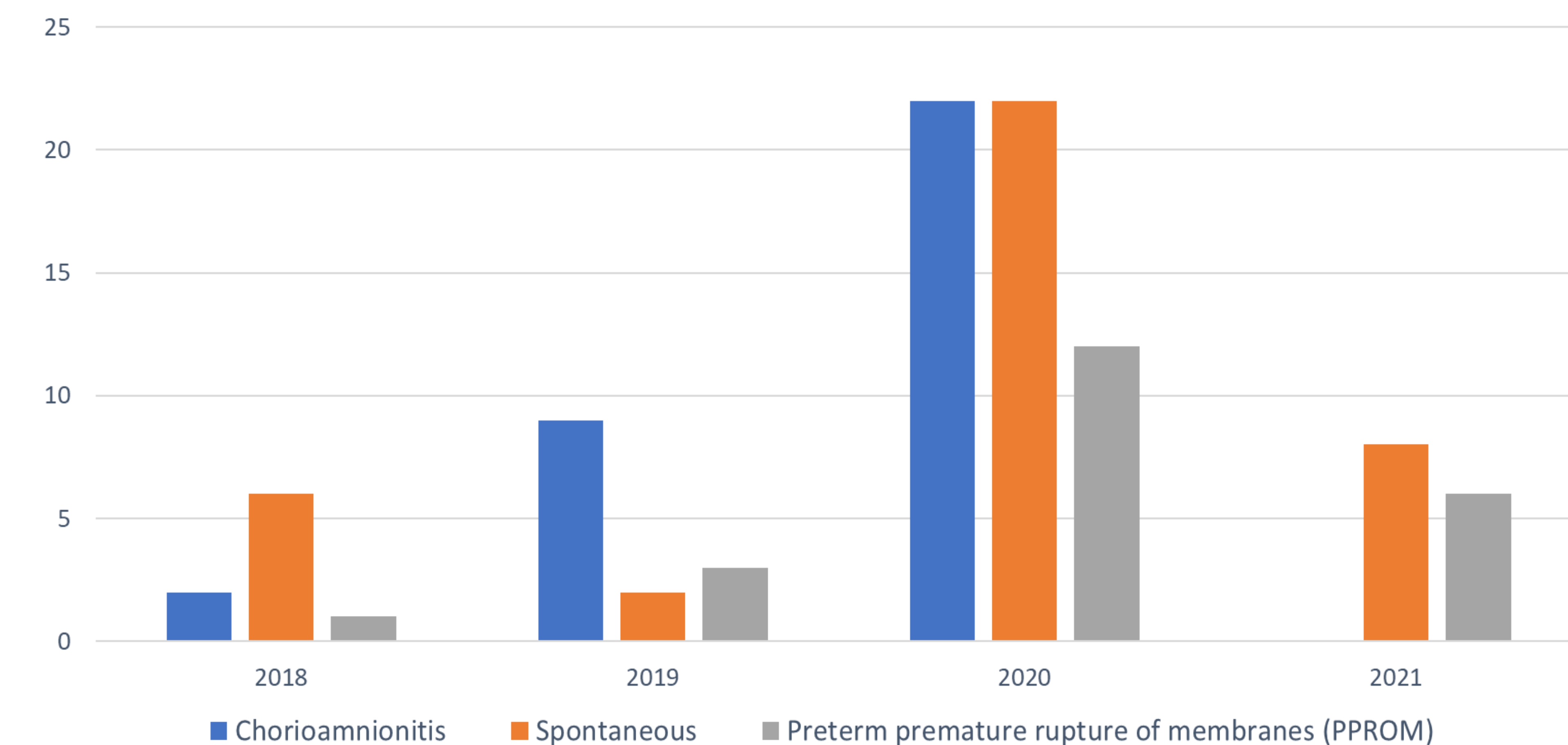
Other identified causes of late miscarriage during the study period included- cervical insufficiency, antepartum haemorrhage, anhydramnios/oligohydramnios, sepsis and complications of multiple gestation.

There was also an overall increase in chromosomal and congenital anomalies during the pandemic in 2020 and 2021 compared to 2018 and 2019.

Total number of late miscarriages 2018 - 2021 at NMUH



Causes of late miscarriage 2018 – 2021 at NMUH



Conclusion

The relationship between SARS-CoV-2 infection and risk of miscarriage remains unclear; however we noticed an overall increase in late miscarriages since the pandemic. More clinical studies will be needed to clearly establish the effect and co-relation of SARS-CoV-2 infection on pregnancy outcome, in all three trimesters.