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# Pregnancy Aged 45 years and above: Exploring Obstetric Outcomes in Later Reproductive Years

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## Background

- With Advanced Maternal Ages (AMA), the risks of obstetrical and neonatal outcomes are greater<sup>1</sup>
- Reproductive ages are increasing<sup>2</sup>
- With this, there is an increase in rates of caesarean sections - as primary choice for mode of delivery<sup>3</sup>

## Objective

- To assess obstetrical and neonatal outcomes for pregnant women aged at and over 45 years, at the time of their booking, in a large tertiary care unit in Ireland – Rotunda Hospital.

## Study Design

- Retrospective Observational Study
- Time period – January 2018 to December 2023
- Data obtained from Rotunda Hospital, MNCMS Online System
- Inclusion criteria – All women aged 45 years and older at time of their booking visit
- **A total of 304 patients were included** – 141 Primips and 163 Multips
- Primary Outcome Measures – **Timing and Mode of Delivery**
- Secondary Outcome Measures – **Pregnancy related, Maternal Birth and Neonatal Complications**

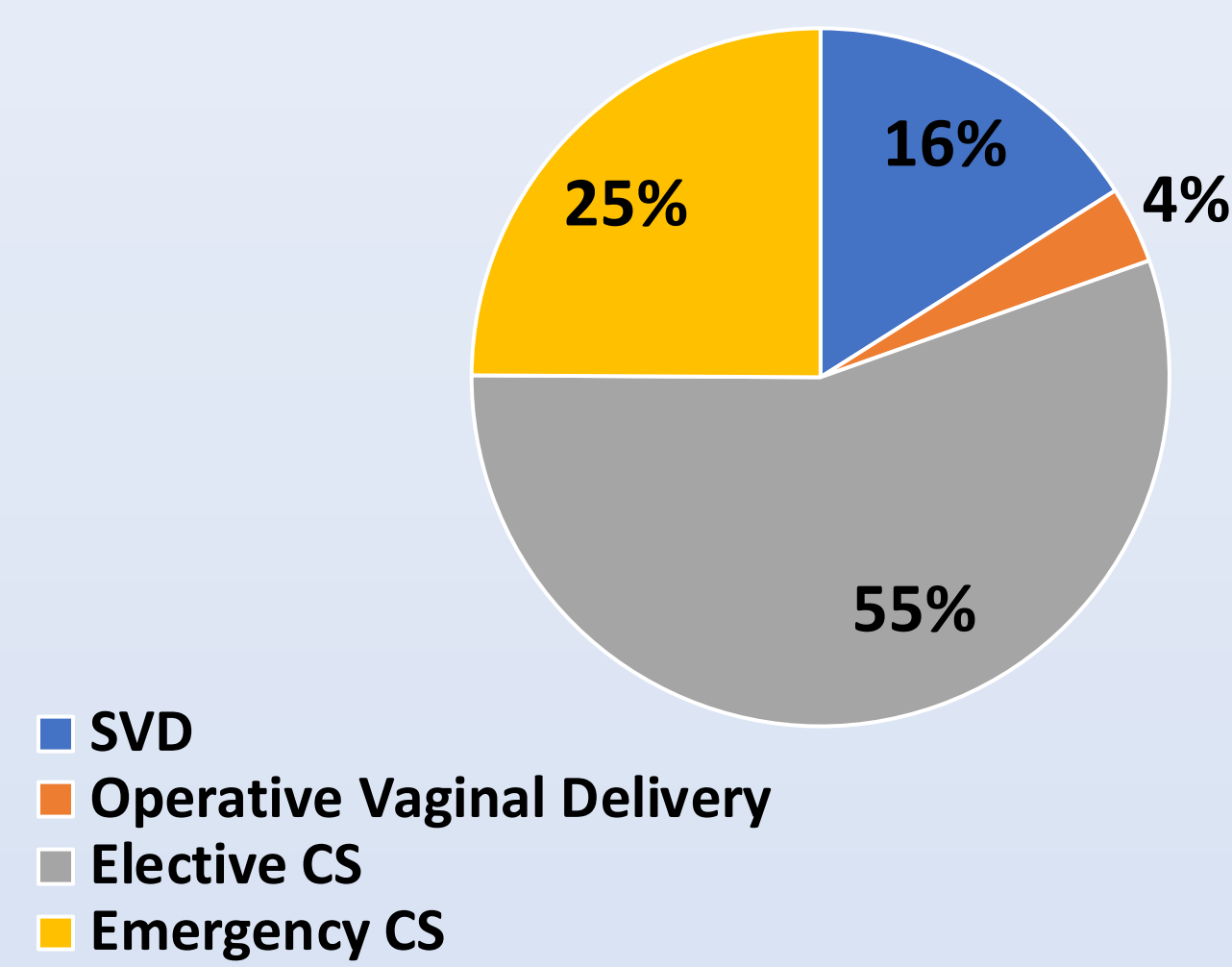
## Patient Characteristics

- Maternal age range – 45 to 55 years
- Majority women were of normal BMI - BMI 18 – 24: 30.6%; BMI 24 – 30: 44.4%
- 79.3% utilized ART to conceive, while 20.7% conceived spontaneously
- IVF was the most common method – 75.7% and 50.3% utilized a Donor Egg
- 10.5% were multiple pregnancy

## Primary Outcomes

### Mode of Delivery

Figure 1 – Mode of Delivery



### Timing of Delivery

- Majority of women delivered between 37 and 38 weeks of gestation

## Secondary Outcomes

- Number of women who had a live birth – 279 (91.8%)
- IUD rate – 0.66%

Figure 2 - Pregnancy complications

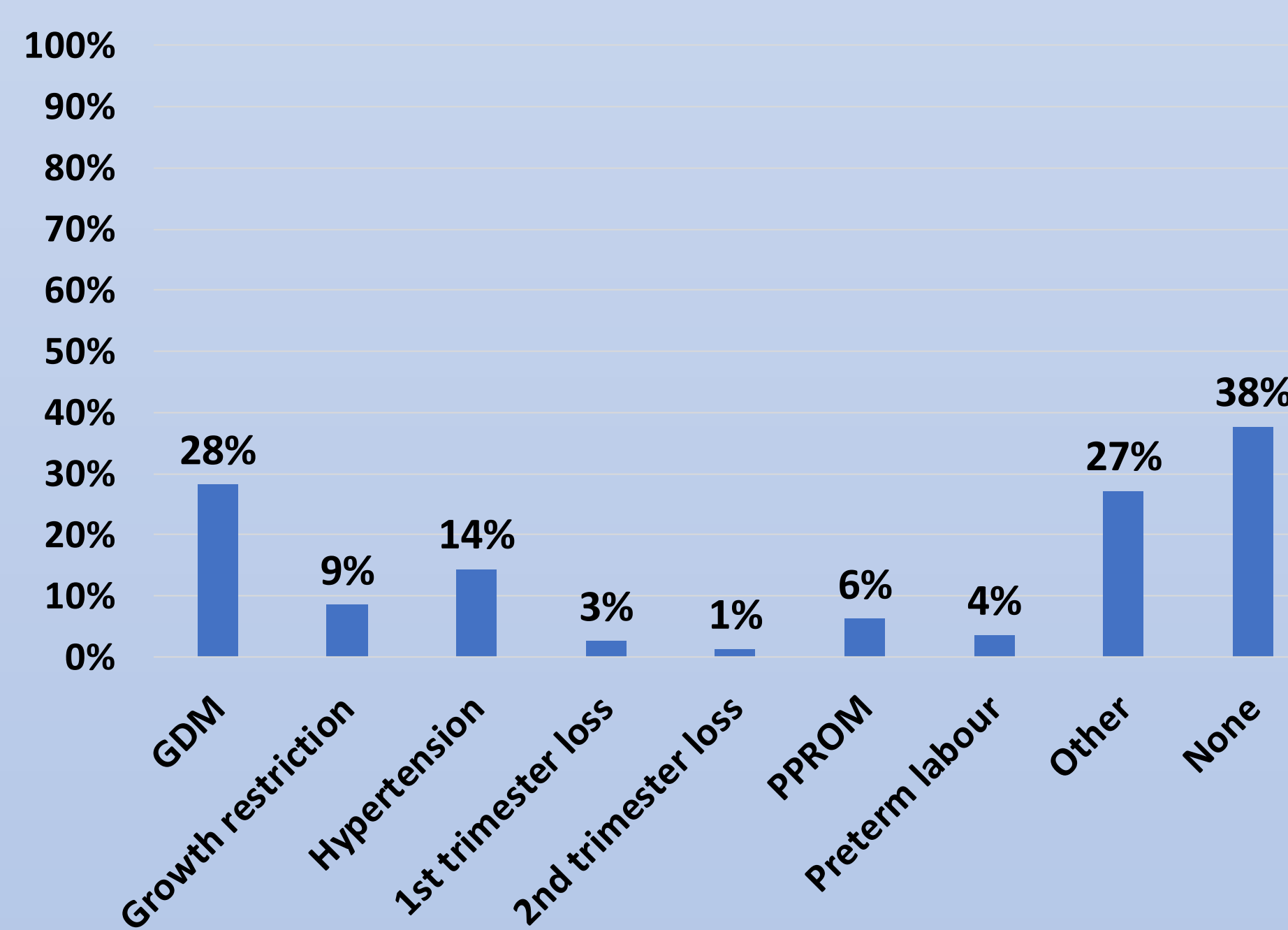
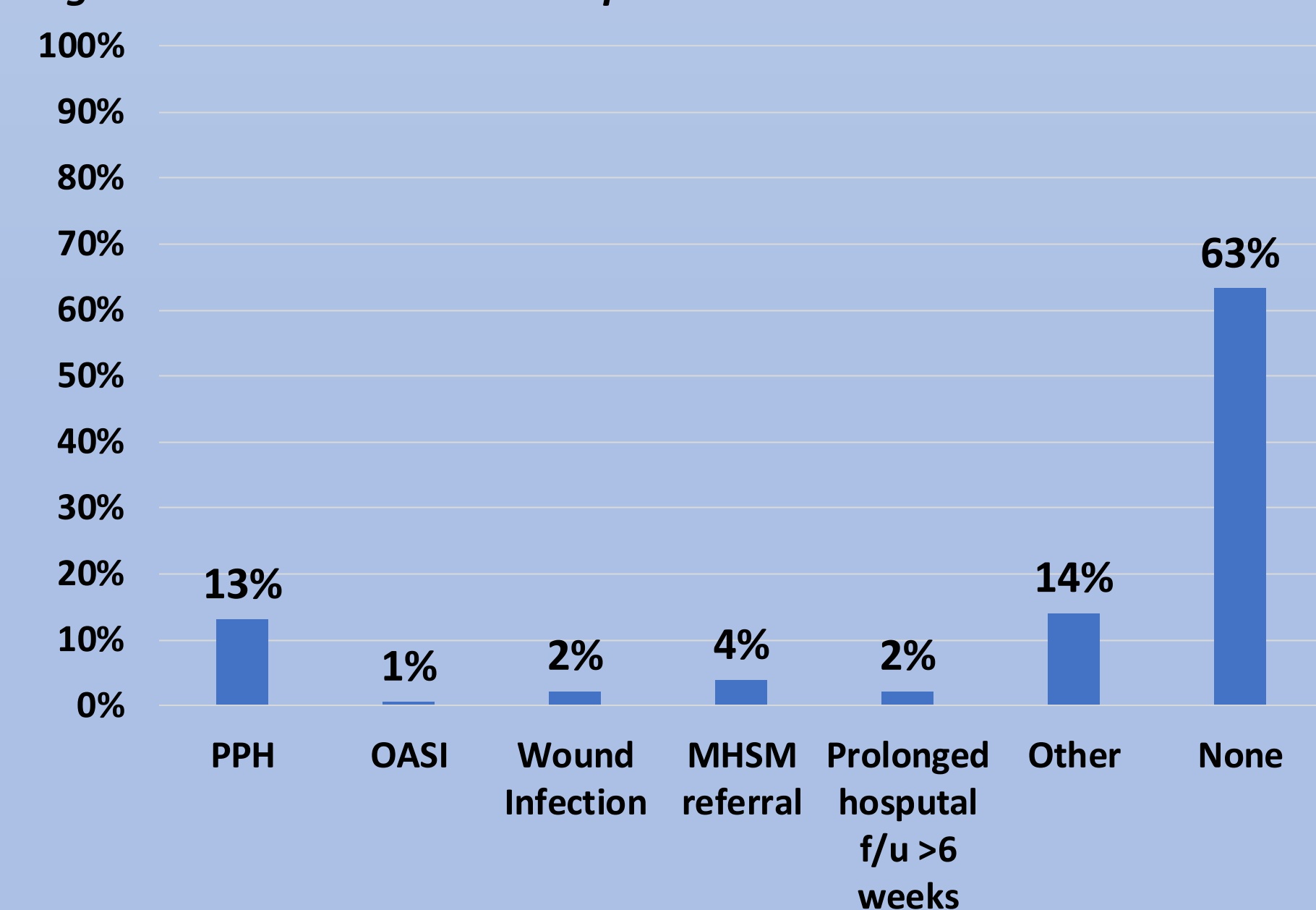


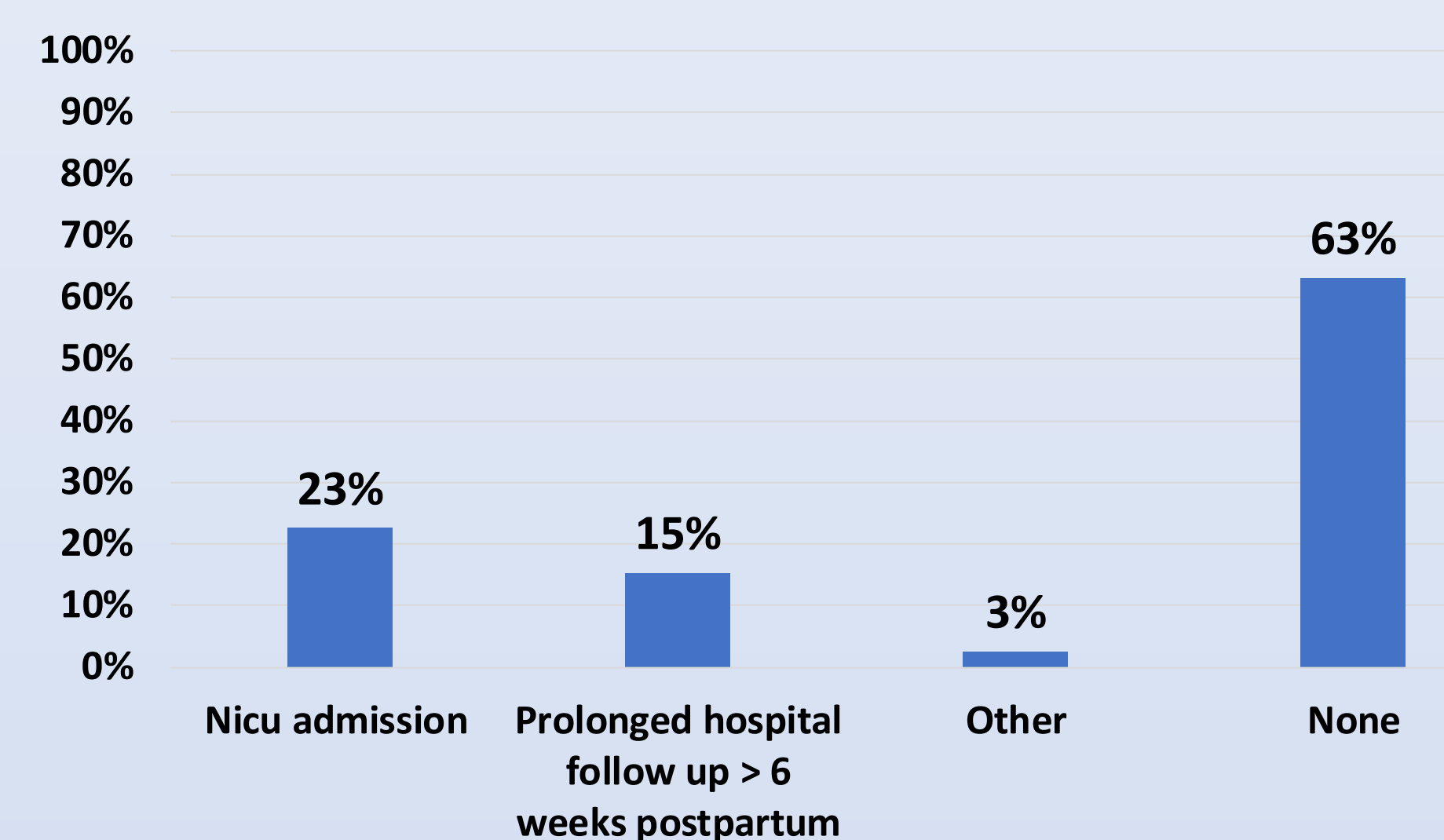
Figure 3 – Maternal birth complications



## Secondary Outcomes

- Number of babies delivered – 309
- Neonatal Death rate – 0.97 %

Figure 4 - Neonatal birth complications



- Average Birth Weight – 2963.7 g

## Discussion

- Delivery by caesarean section was the most common mode of delivery
- Adjusted perinatal mortality rate – 0.1/1000
- Most women achieved their delivery at early term (37 to 38 weeks gestation), regards of mode of delivery and/or parity.
- No current guidelines pertaining to care of women at “very” or “extremely” advanced maternal ages<sup>1</sup>

## Conclusion

- Results show favorable outcomes
- Increase in pregnancy rates in this patient cohort – 7% increase during course of this study
- Expectation is will further increase – given favorable outcomes, advances in and availability of ART.
- Not unreasonable to recommend a planned caesarean birth, given our study identified that less than 1 in 5 women achieved a vaginal birth.
- Our findings may have significant implications in future clinical practices.
- Therefore, early counselling to fully inform women, in addition to modification of guidelines, to account for these age – related risk factors could improve pregnancy outcomes in women of “very” or “extremely” advanced maternal age.

## References:

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