



Indications and outcomes of primary cesarean section in nulliparous and multiparous women: a 5-year retrospective cross-sectional study



Moosa Hamdan Al-Harrasi.¹ Mai Abdulla Al-Balushi¹ , Vaidyanathan Gowri²

1. Student, Sultan Qaboos University , Muscat Oman. 2. Associate professor, Obgyn dept, Sultan Qaboos University, Muscat , Oman

AIM AND SPECIFIC OBJECTIVES

The general aim of this study is to evaluate the indications of cesarean section and investigate the common outcomes.

- 1.To compare the indications of nulliparous and multiparous women.
- 2.To investigate the most prevalent outcomes for nulliparous and multiparous women, as well as their newborns.

JUSTIFICATION OF RESEARCH

So far, there needs to be more research on primary cesarean sections among Omani women. As a result, it is anticipated that this study will aid in the identification of the primary indication for primary cesarean section, enhancing the overall healthcare management of these women.

BACKGROUND

- Cesarean section rates have risen worldwide. Cesarean sections are now safer and faster than ever (1) .
- For nulliparous and multiparous women, the most common indicator was a failure to progress (2).
- The most prevalent neonatal outcomes were NICU admission and jaundice (3).

METHODOLOGY

- A retrospective cross-sectional study was conducted at SQUH from January 2017 to December 2021 among 300 Omani nulliparous women and 300 multiparous women.
- Demographic and clinical data were acquired from the TrakCare System and delivery registration books.
- The SPSS program version 25 was used for data analysis to compare the most common indications for cesarean section in nulliparous and multiparous women, as well as the most prevalent outcomes in nulliparous and multiparous mothers and their neonates.

RESULTS

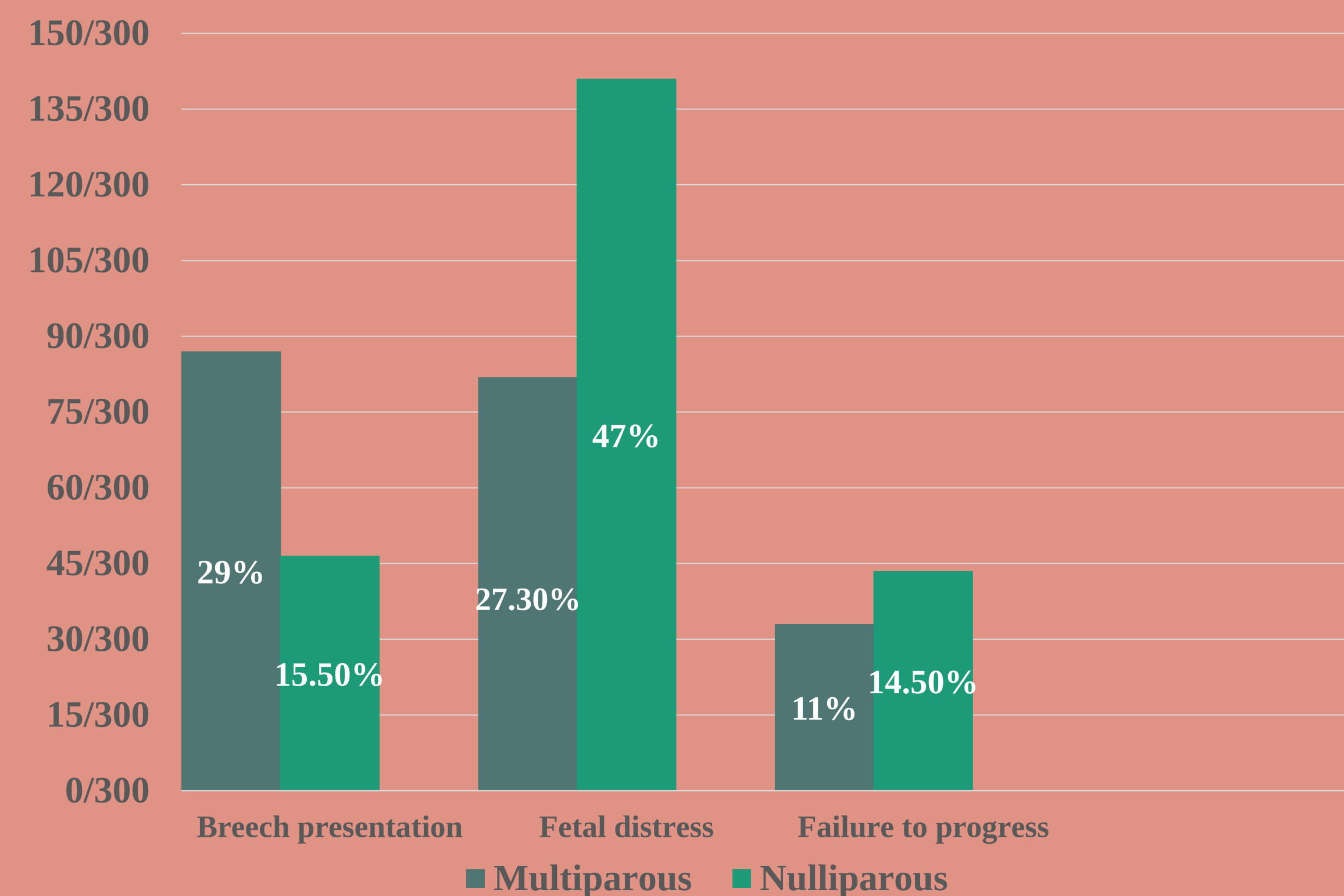


Figure 1: : the indications of primary Cesarean Section among multiparous (n=300) and nulliparous (n=300) women

RESULTS

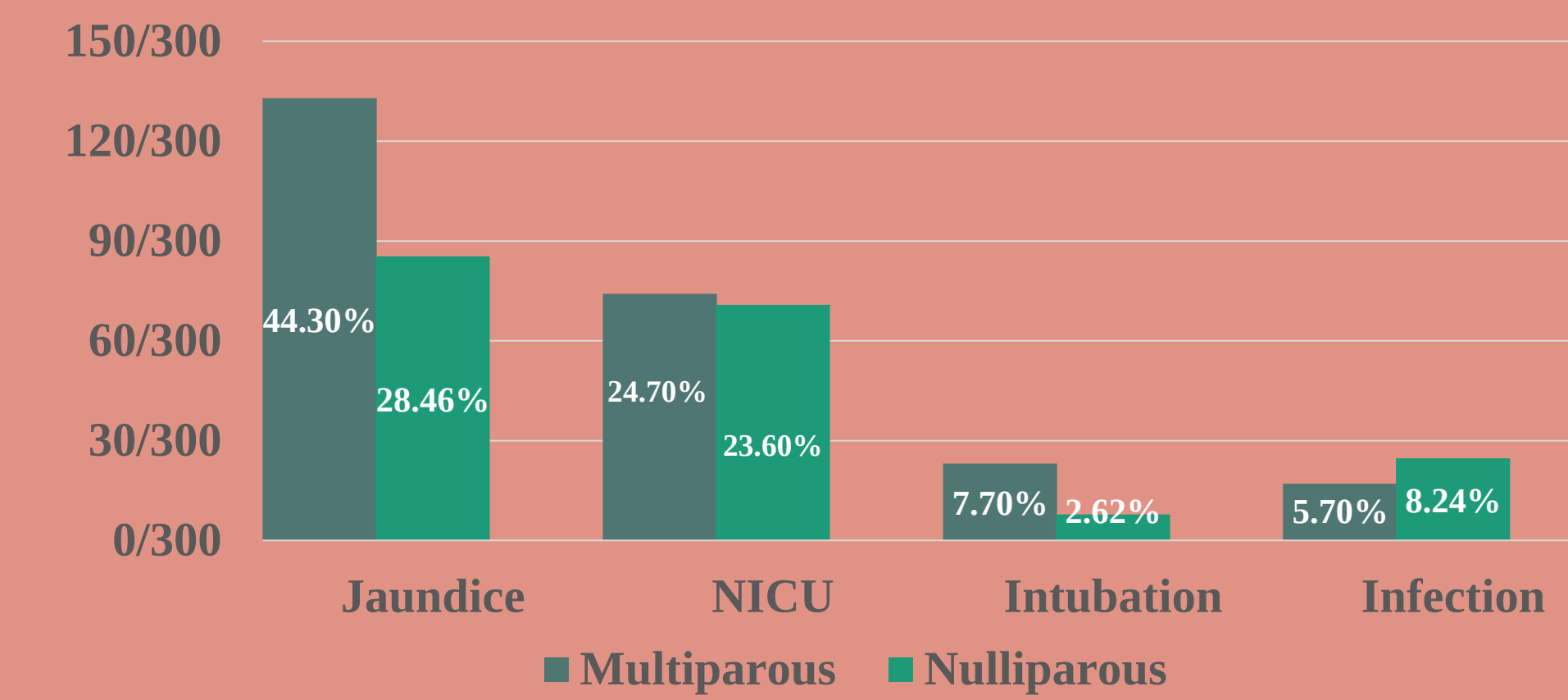


Figure 2: : neonatal outcomes from multiparous (n=300) and nulliparous (n=300) mothers

Among 300 babies delivered by cesarean section from multiparous women, the most common outcomes were jaundice (44.3%), NICU (24.7%), intubation (7.7%), and infection (5.7%). On the other hand, the most common neonatal outcomes in those 300 neonates delivered by cesarean section from nulliparous were jaundice (28.46%), NICU (24.7%), infection (8.24%), and intubation (2.62%). (Figure2)

Table 1: : Maternal outcomes in multiparous (n=300) and nulliparous (n=300) mothers

	Multiparous	Nulliparous
Wound infection	1.7%	2.7%
Thrombo-embolism	0.7%	1.3%

This study showed that the main maternal complications among 300 multiparous women were wound infection (1.7%) and thrombo-embolism (0.7%). In contrast to nulliparous women, the main maternal outcomes were more among nulliparous women, represented by wound infection (2.7%) and thrombo-embolism (1.3%). (Table 1)

SUMMARY

In summary, we found that the most common indication of primary cesarean section in multiparous women is breech presentation compared to fetal distress in nulliparous women. Wound infection and thrombo-embolism were the main maternal outcomes in both groups. The most common neonatal outcome was jaundice among those delivered from multiparous mothers as well as nulliparous mothers.

Main References

1. Kozhimannil KB, Law MR, Virnig BA. Cesarean Delivery Rates Vary Tenfold Among US Hospitals; Reducing Variation May Address Quality And Cost Issues. Health Affairs. 2013 Mar;32(3):527–35.
2. Boyle A, Reddy UM, Landy HJ, Huang CC, Driggers RW, Laughon SK. Primary cesarean delivery in the United States. Obstet Gynecol. 2013 Jul;122(1):33–40.
3. Jain M, Patel A. A cross sectional study of rate, indications and complications of primary caesarean section. Int J Reprod Contracept Obstet Gynecol. 2016;1814–9.