

OBJECTIVE

Caesarean delivery at full cervical dilatation can be very challenging and result in significant maternal and perinatal morbidity. Assisted vaginal birth by vacuum and forceps, when performed correctly by appropriately trained personnel, can result in a safe outcome for the woman and baby.

AIM

We have performed a retrospective observational cohort study at Aneurin Bevan University Health Board on operative deliveries in the second stage of labour to determine the outcome.

METHODS

This study analyzed 278 cases of assisted vaginal births: 220 cases (79%) instrumental, 58 cases (21%) cesarean sections. The study was conducted over a six-month period, from January to June 2024. We examined various factors, including parity, mode of delivery, categories of emergencies, significant maternal and neonatal complications, maternal morbidity, and admissions to the Special Care Baby Unit (SCBU).



RESULTS

In 2024 there were 5282 deliveries, 278 deliveries of full dilatation in 6 months. The rate of instrumental delivery for 2024 in our unit was 8.43%. Of 278 cases, 224 (80%) were primi-gravidas, and 54 (20%) were multi-gravidas.

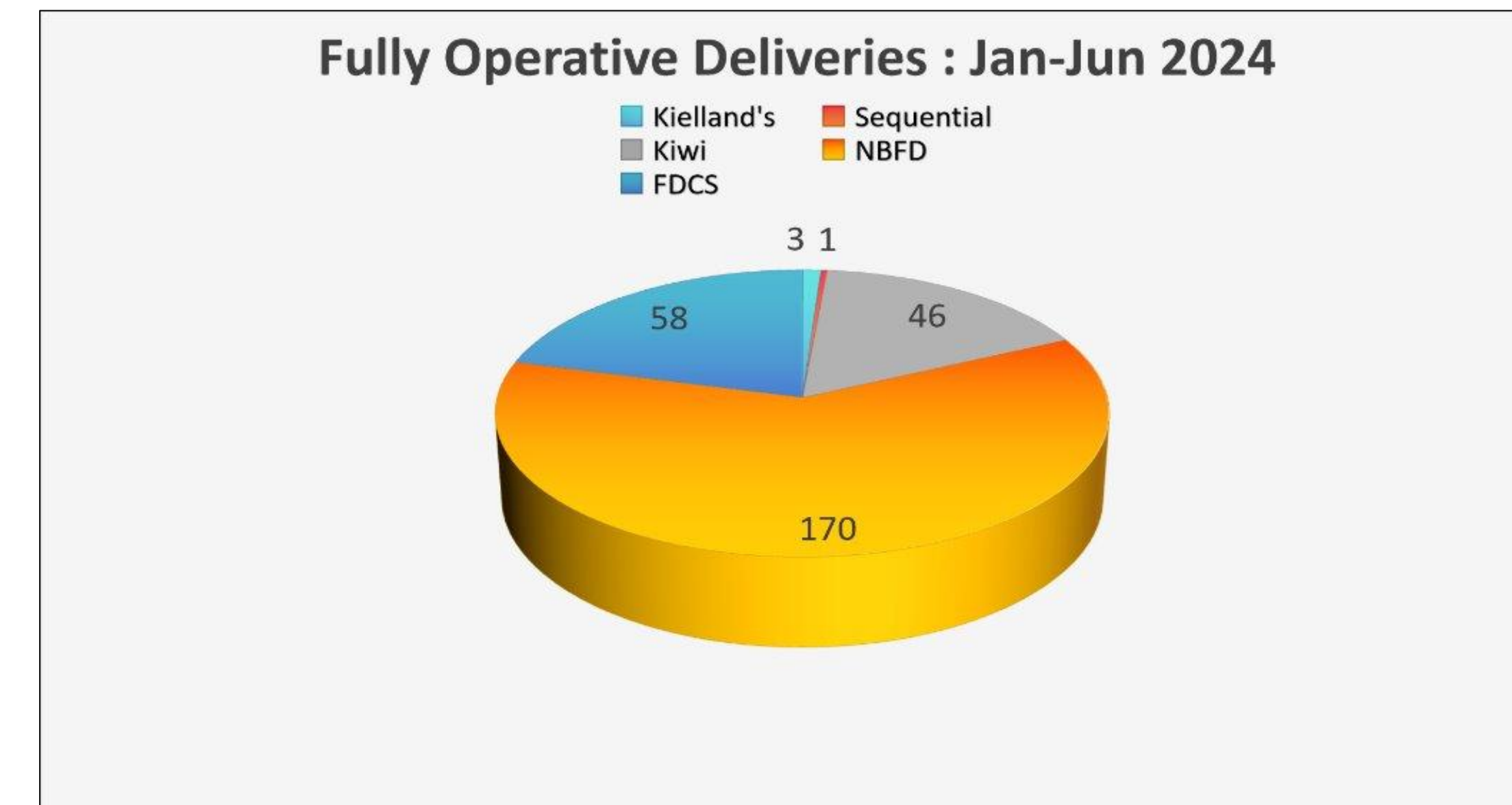


Figure.1 In our study we observed that 79% (220) cases are instrumental deliveries and most of the deliveries (170) were carried out by NBFD. The rate of cesarean section in operative deliveries is 21% (58).

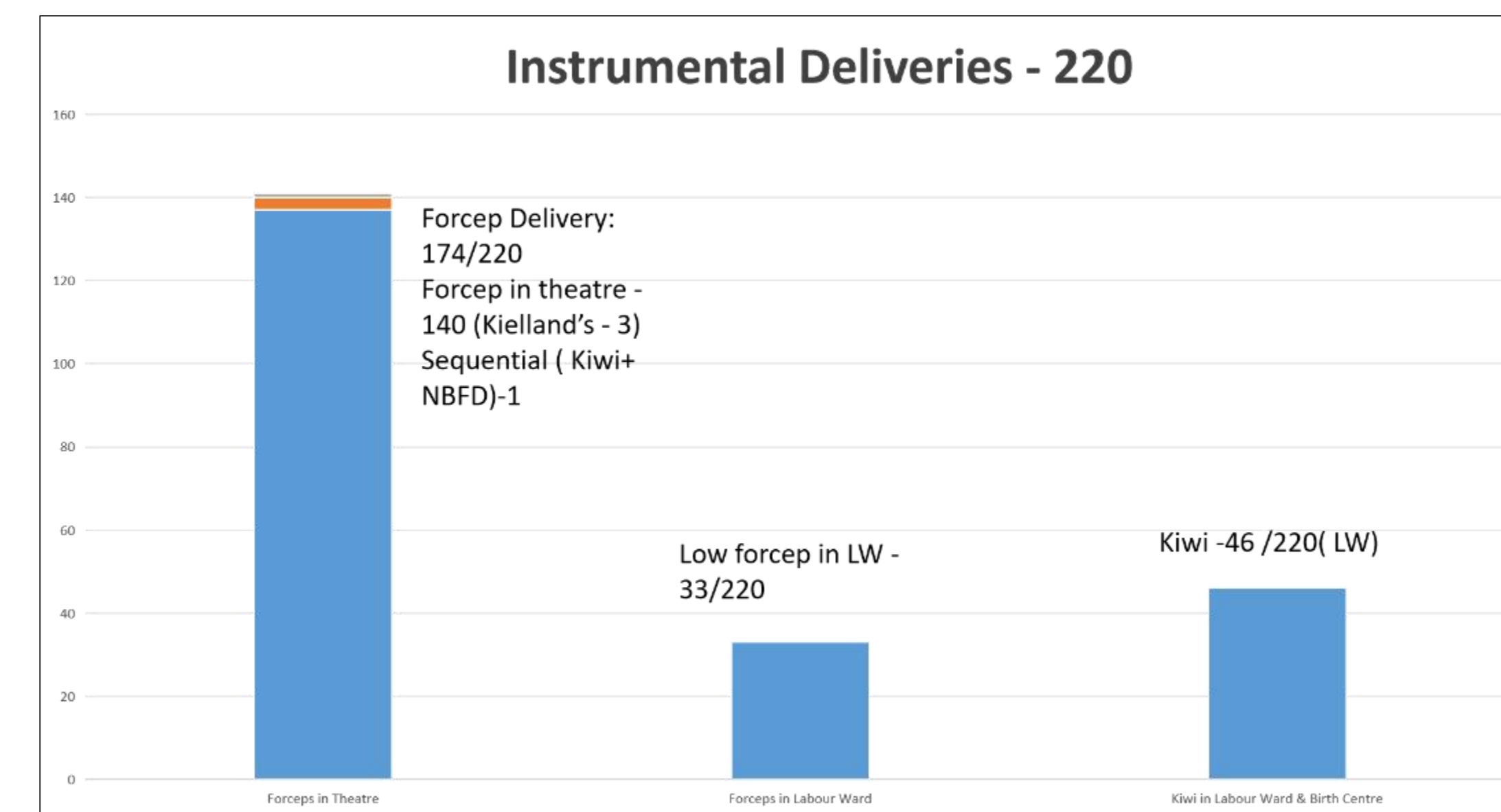


Figure 2. We identified that there were 141 (50%) Forceps deliveries in theatre and 33 (12%) in labour ward delivery rooms (LW). There were 46 (17%) vacuum deliveries in LW.

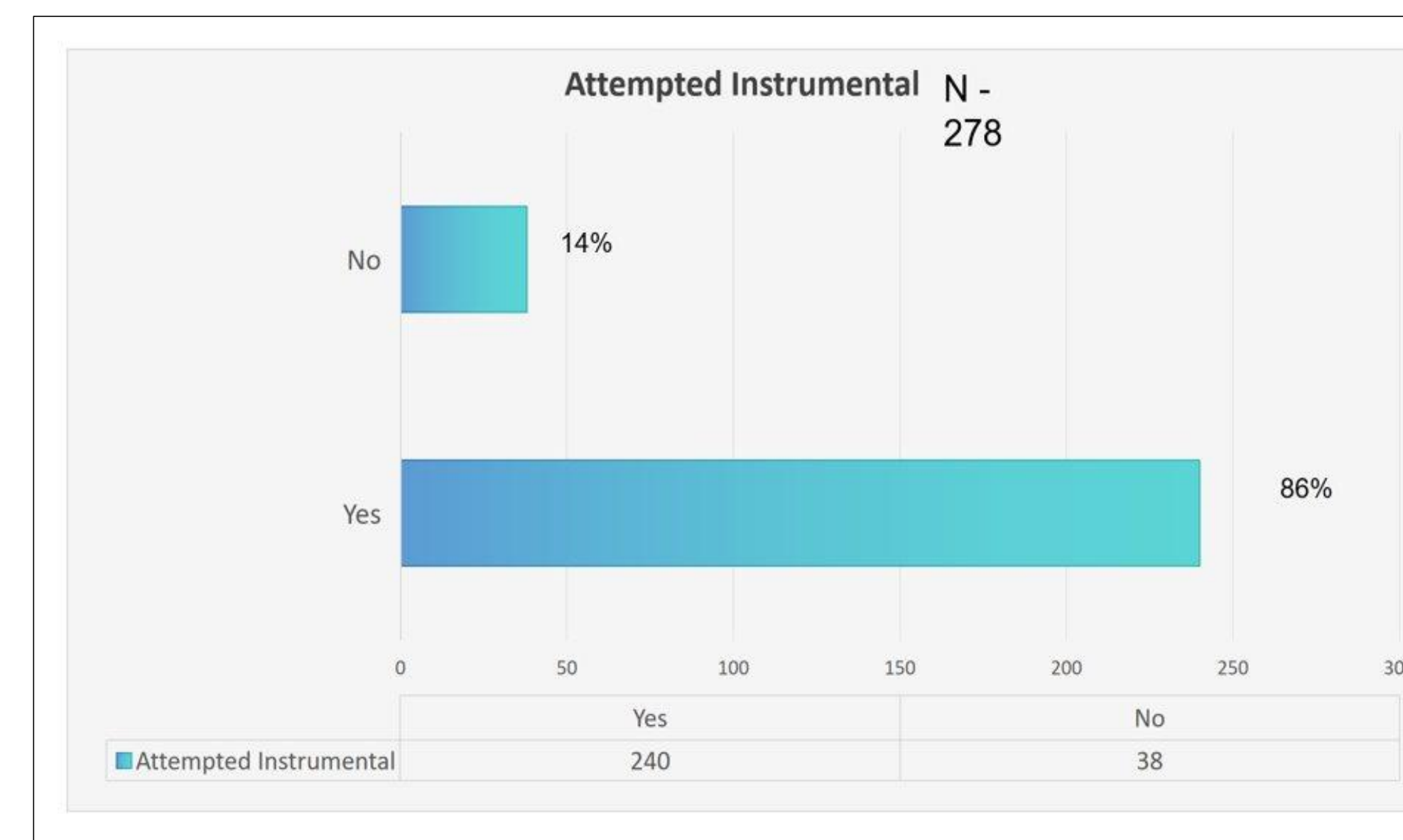


Figure 3. We observed 14% (38) cases, instrumental delivery was not attempted, and the main reason is high presenting part and malrotation.

Most of the assisted vaginal birth were due to failure to progress in 2nd stage (159); other indications include abnormal CTG (87) and bradycardia (12). Indications for cesarean section are failure to progress in 2nd stage (40), CTG concern (15) and attempted instrumental for 21 cases.

CONCLUSIONS

Maternal complications of assisted vaginal birth include PPH (55), Obstetric sphincter injuries (16) and nil complication (149). Fetal complications of forceps and vacuum deliveries were shoulder dystocia (10), SCBU admission (7) (which included 4 preterm births) Cephalo hematoma (1), intraventricular haemorrhage (1).

Maternal complications of cesarean section are PPH (9), Angle extension (8), nil complication (41). 3 babies encountered impacted fetal head, and 7 babies needed resuscitation.

The recommendation of the audit is to have a skilled obstetrician present and ensure the cesarean section is immediately available in case of failure of instrumental delivery.

REFERENCES

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