

Comparison of OASI rates and risk factors in ventouse assisted and unassisted births

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Introduction

Primiparity is a known risk factor for Obstetric anal sphincter injury (OASI). Particularly higher rates of OASI have been noted in primiparous women in our unit. Our objective was to ascertain the rates of OASI with regards to different modes of vaginal births in St Michael’s hospital. To compare the OASI rates and risk factors in Primigravidae in the two modes of birth groups with the lowest OASI rates to inform areas for consideration to further reduce OASI rates.

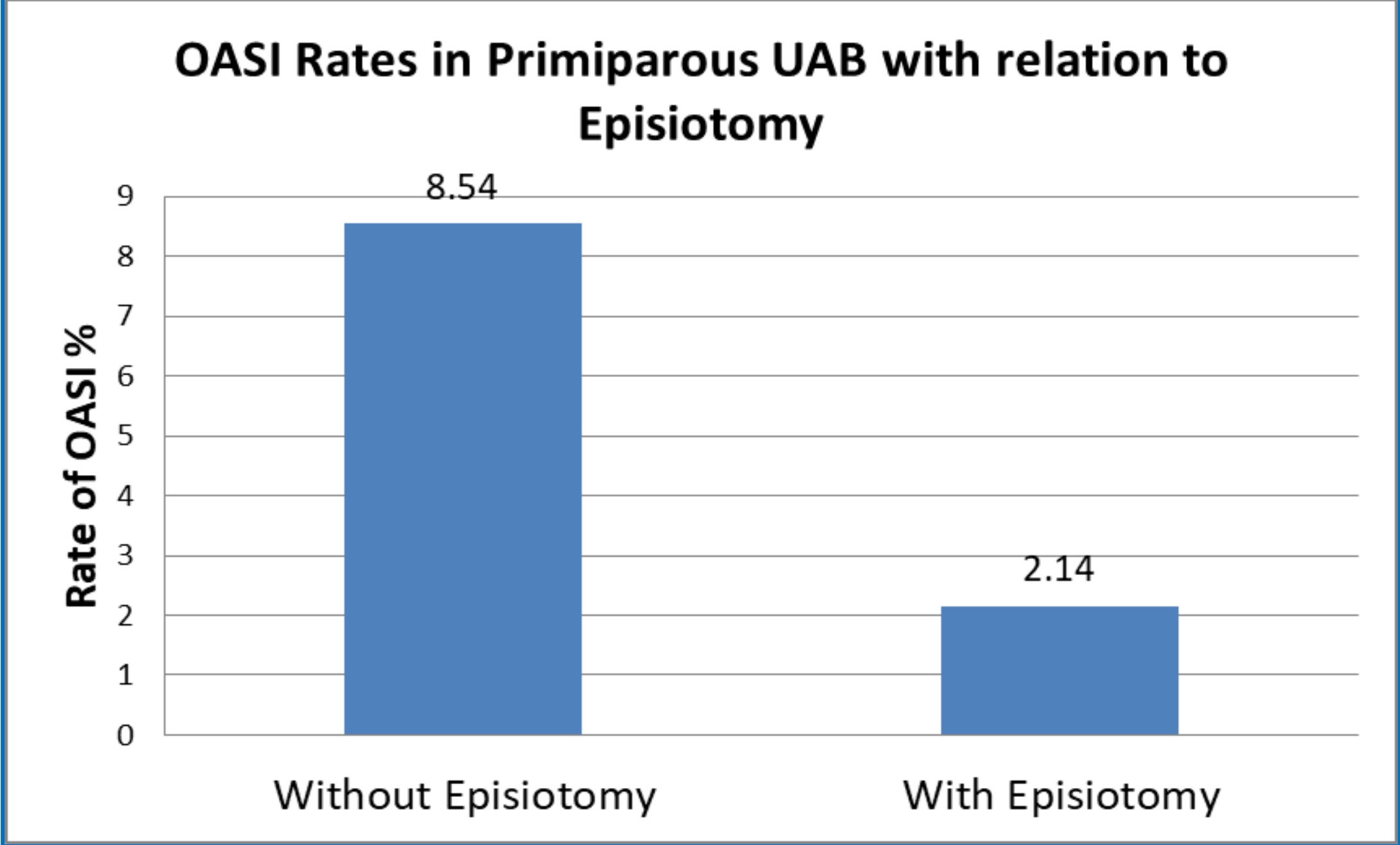
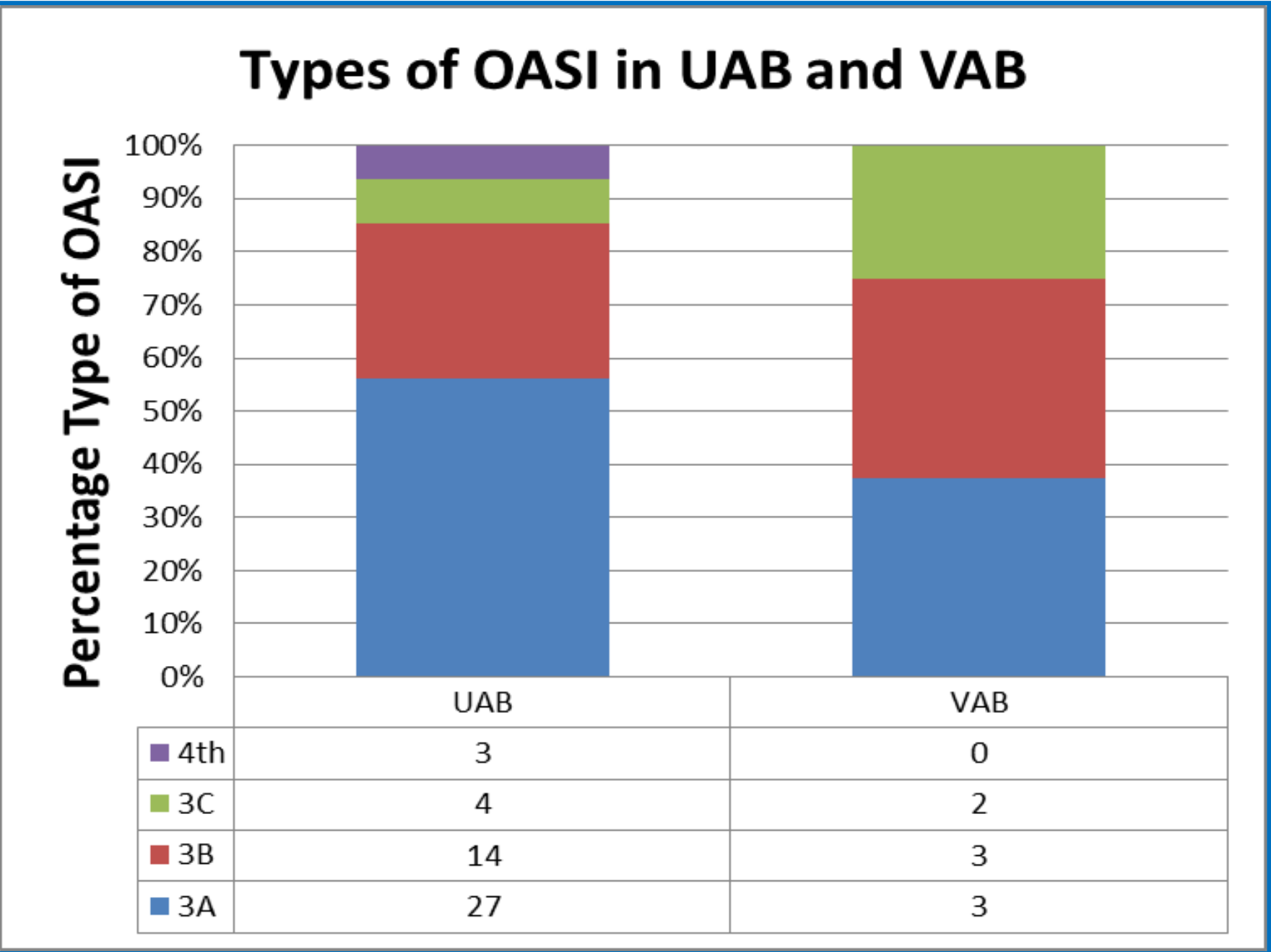
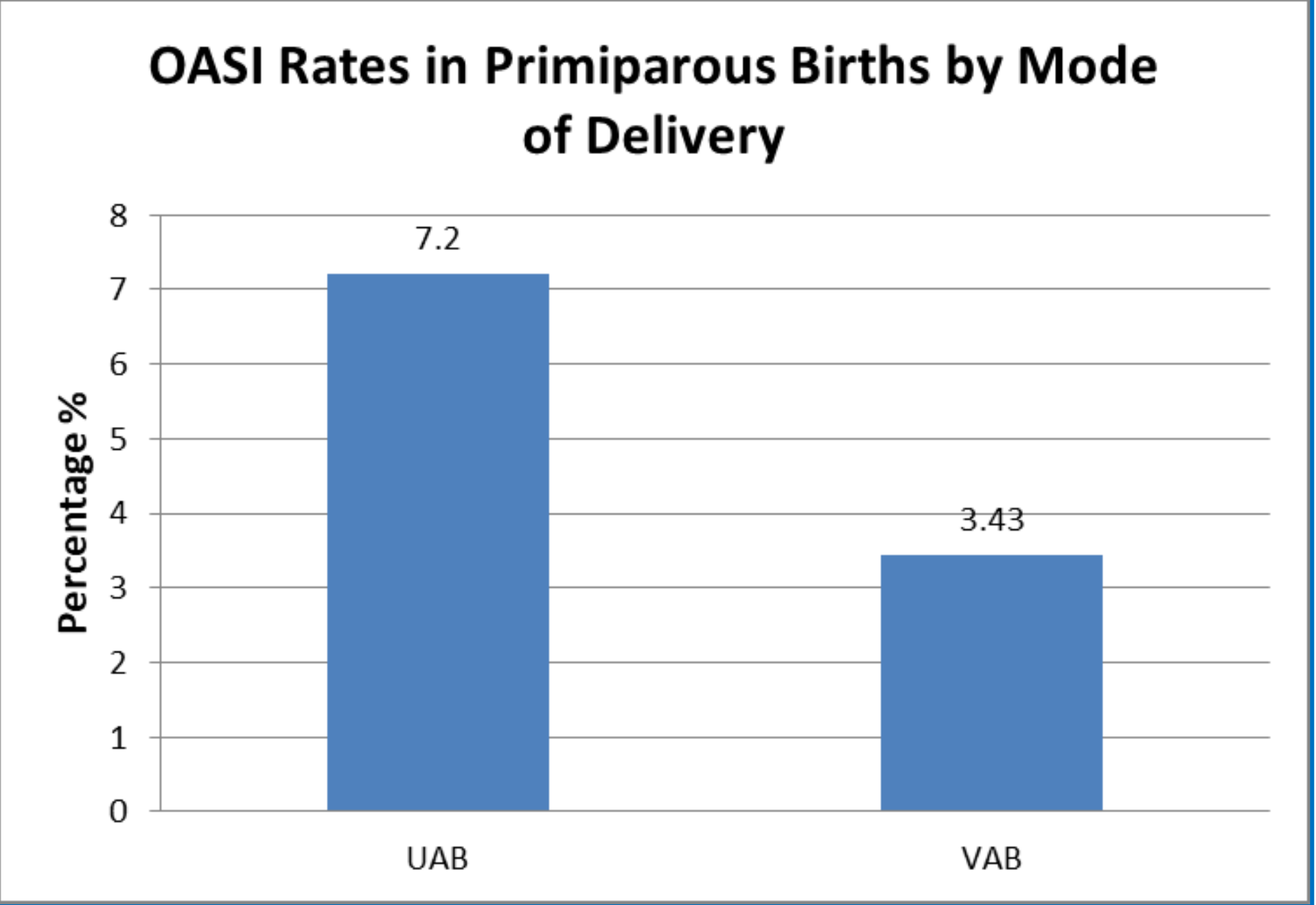
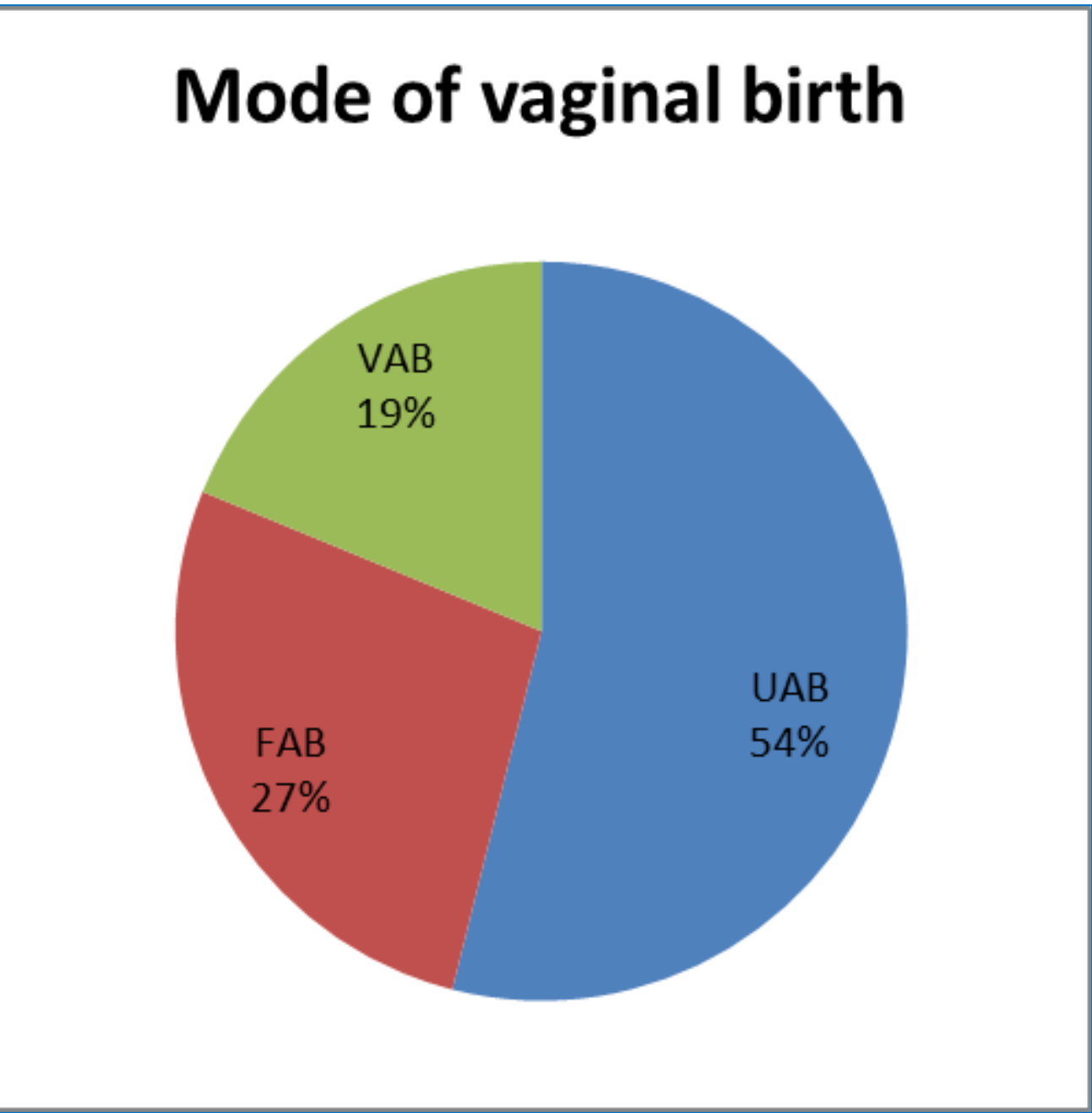
Design and Method

This was a single-centre retrospective analysis. Data was analysed for all vaginal births with regards to OASI rates and risk factors between January to December 2022. Maternity database was used to obtain the data on OASI. Further data was obtained to assess risk factors for OASI sustained in the two groups, including parity, Birthweight (BW), rates of episiotomy and mode of delivery.

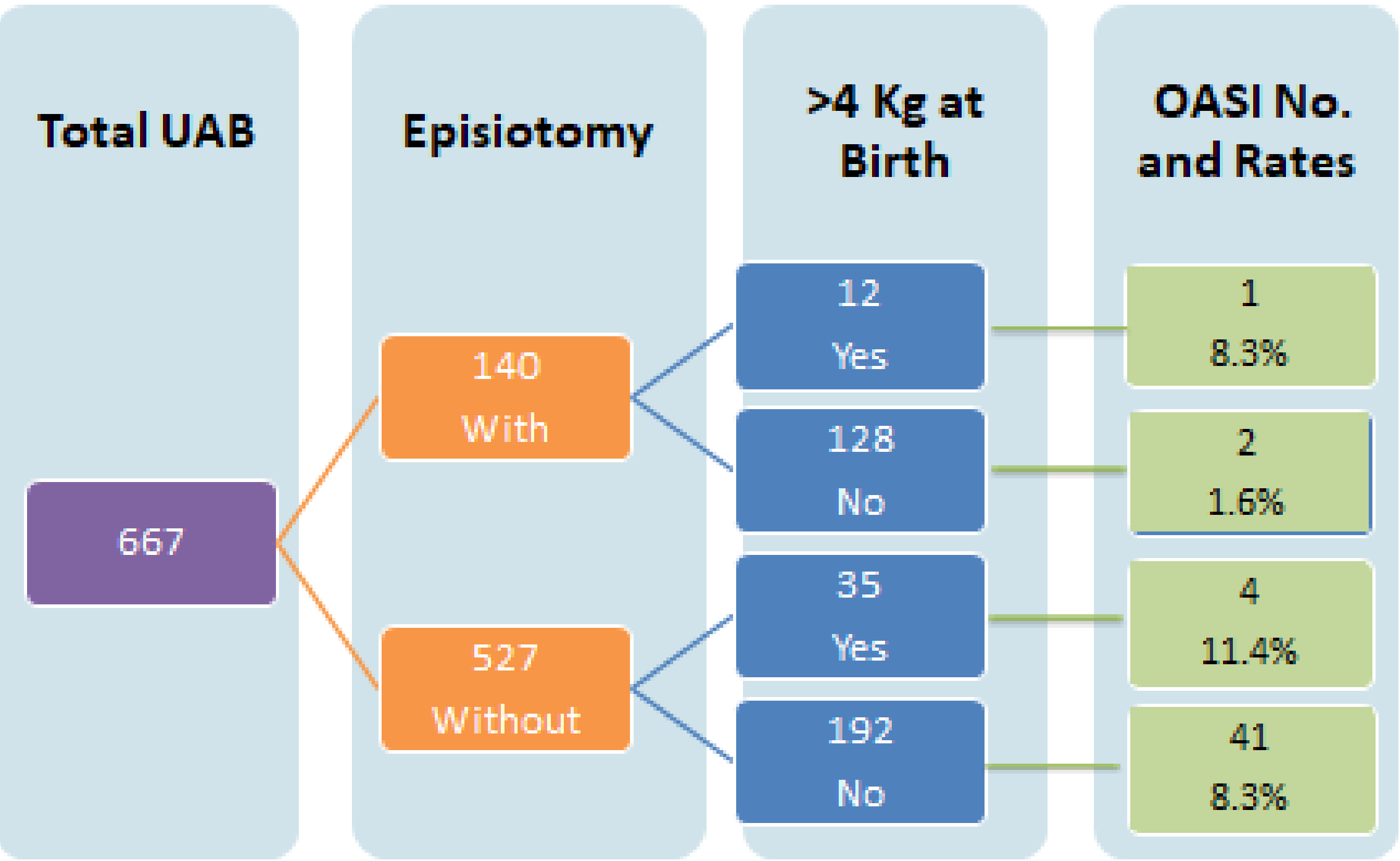
Results

There were a total of 4588 births in the unit, of which 2871 were vaginal (62.57%). 2151 had an unassisted vaginal birth (UAB) of which 667 were primigravida (31%). 300 women had Ventouse assisted birth (VAB) of which 233 (77.7%) were primigravida. 420 women had forceps assisted birth (FAB) of which 337 (80.2%) were primigravida. The overall OASI rates were 3.35%, 3% and 8.57% and in primiparous births were 7.20%, 3.43% and 9.5% for UAB, VAB and FAB respectively.

Comparing risk factors in primigravidae in UAB and VAB groups: 31% (n=667) and 77.7% (n=233) were primigavida in the UAB and VAB groups respectively. 10.3% of all UAB had a birthweight of 4 or more kilograms as compared to 6.3% of VAB. This increased in the women who had sustained OASI to 16.7% and 11.1% in the UAB and VAB groups respectively. 21% of UAB had episiotomy; OASI occurred in 8.5% of the women without episiotomy as compared to 2.1% of those who had episiotomy. 84.6% of VAB had episiotomy; OASI occurred in 5.6% of women without episiotomy as compared to 3.05% with episiotomy. Rates for OASI increased in Primigravidae women without episiotomy to 11.43% if the birthweight was more than 4Kg.



Primiparous OASI Rates in Relation to Episiotomy and Birth Weight



Conclusions

Primary risk factors identified by Stendenfelt etal include primiparity, assisted vaginal birth and birth weight (BW) over 4000g. Furthermore, one of the OASI2 care bundle recommendations is to perform episiotomy when indicated. Of the types of vaginal births, UAB are known to have the lowest OASI rates. However in our cohort UAB rates were higher as compared to VAB irrespective of the risk factors, except in the groups who had episiotomy. This may suggest that there may be a need to lower the threshold of considering use of episiotomy in primigravida having UAB.