

# Obstetric and Perinatal Outcomes: A Novel Single-Centre Retrospective Analysis in a Rural Hospital of Western Uganda

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## Introduction

This pioneering single centre retrospective study, conducted at Kagando Hospital, represents the first comprehensive assessment of obstetric and perinatal outcomes in this regional Western Ugandan hospital. The value of this investigation lies in its potential to offer insights into pregnancy-related incidences unexplored within the unique context of Kagando Hospital.

## Objectives

This research aims to evaluate a spectrum of data ranging from pregnancy outcomes and mode of deliveries to maternal and perinatal complications.

## Methodology

Retrospective data analysis unfolded by auditing available antenatal and birth records from April 2022 to August 2022. The assembled dataset comprehensively incorporated demographic specifics, obstetric history, modes of delivery, indications for such modes, maternal complications and perinatal outcomes.

410 births were documented within the stipulated study period. It is important to note that there is a large discrepancy with this figure compared to the true number from the birth register, which amounted to approximately 1000 for the same 5-month period.

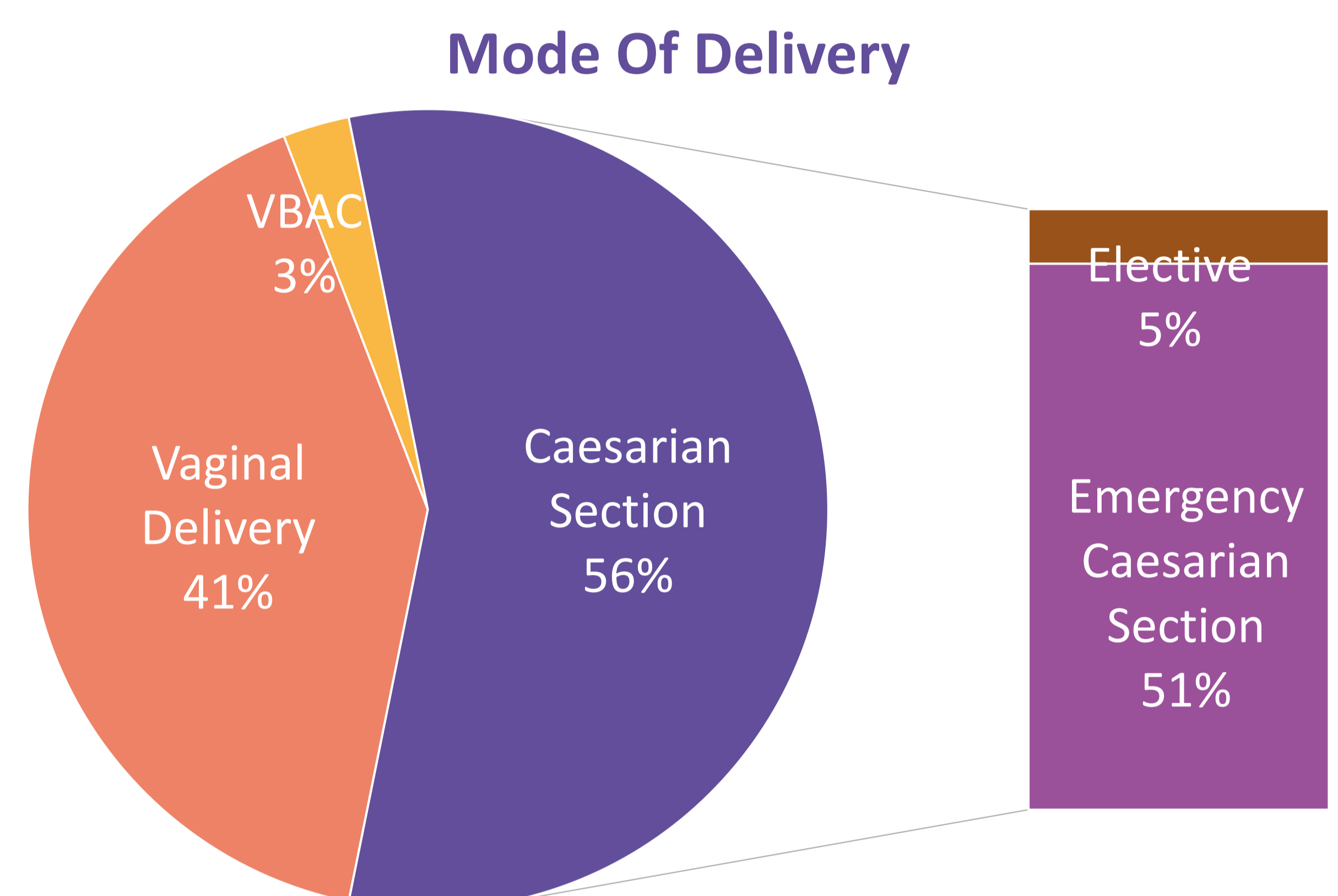
## Conclusion

This comprehensive analysis contributes valuable scientific data to the broader understanding of obstetric and perinatal outcomes in resource-limited rural settings. This audit provides vital information regarding **appropriate resource provision** and **allocation** at Kagando Hospital and areas for improvement in the **education** and **upskilling** of **clinicians**. Ultimately, aiming to **improve patient outcomes** for the maternal population in the local rural community in Uganda.

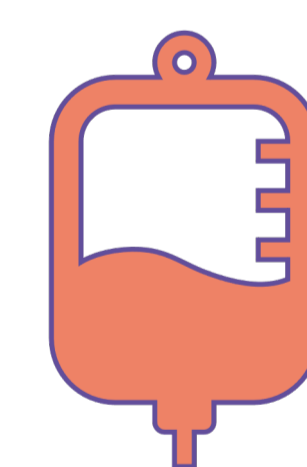
Furthermore, the **discrepancy** in **data collected** from the hospital records versus birth register reveals the need to **improve hospital record documentation** and **collection practices** at Kagando Hospital to allow ongoing access to accurate patient data to inform clinical decisions.

## Results and Discussion

Among the 410 births, 56% were delivered through caesarean section (51% emergency and 5% elective), followed by 44% through vaginal delivery, including 3% vaginal birth after caesarean section. The most common indication for emergency caesarean section was a prior caesarean section in labour, accompanied by foetal distress and failure to progress in labour.



Postpartum haemorrhage (PPH) occurred in 22% of all births, with five cases necessitating hysterectomy for management. A perinatal mortality rate of 6% and six instances of maternal mortality were recorded. The average birth weight stood at 2.65 kg, with 34% of neonates exhibiting low birth weight (<2500g). The mean APGAR scores at 1 minute and 5 minutes were 7.82 and 8.6, respectively.



22% of births were complicated by Post Partum Hemorrhages