

# Determinants of Perinatal Mortality in Gulu Regional Referral Hospital

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## ABSTRACT

**Background:** Perinatal mortality remains a global public health concern with the highest burden in the developing countries. Uganda is among the top 50 countries in the world with highest perinatal death rate estimated at 38 deaths per 1,000 births. In Northern Uganda, the perinatal death stands at 43 deaths per 1,000 births. To improve perinatal survival, there is a need for a better understanding the persisting risk factors for these deaths.

**Study aims:** The study sought thought to identify the determinants of perinatal mortality in Gulu Regional Referral Hospital, Northern Uganda.

**Method:** A hospital-based unmatched case-control study was conducted by reviewing hospital delivery records from January to September 2024, in Gulu Regional Referral Hospital.

**Results:** There were 2,734 deliveries registered at the hospital between January to September 2024. One hundred and fifty-five babies were included in this study, (52 (34%) cases and 103 (66%) controls). The mean age of the mothers was 25 years (Range=15-38). The majority were rural dwellers (82, 52.9%), had formal education (146, 94.2% ), but majority are peasants (102, 65.8%) earning less than Ugx. 100,000 per month. The significant predictors of perinatal mortality were; Prematurity (AOR-10.98, CI: 1.04-11.51, p=0.046), inadequate uptake of IPT-SP (AOR-7.76, CI: 2.97-20.27, p<0.001), history of pregnancy loss (AOR-5.73, CI: 1.77-18.62, p=0.004), and substance abuse/drug abuse (AOR-3.99, CI: 1.36-11.70, p-0.012). Urban residency (AOR=0.38, CI: 0.15-0.95, p-0.038) was found to be protective compared to rural dwelling.

**Conclusion:** Rural residency, prematurity, low uptake of IPT-SP, recurrent pregnancy loss and substance use/drug abuse were the major predictors of perinatal mortality in the study setting. Given these determinants of perinatal mortality, there is need to strengthen the capacity of local health care system to improve the quality and accessibility of basic and comprehensive obstetric care in the region.

**Keywords:** *Determinants, Perinatal, Mortality, Gulu, Regional Referral Hospital*

