

**FACTORS ASSOCIATED WITH PRETERM BIRTHS AMONG
POSTNATAL MOTHERS AT SOROTI REGIONAL REFERRAL
HOSPITAL, EASTERN UGANDA.**

By

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DECLARATION.

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APPROVAL

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LIST OF ABBREVIATIONS

AOR	Adjusted Odds Ratio
ANC	Antenatal Clinic
APH	Antepartum Hemorrhage
BMI	Body Mass Index
BUFHS	Busitema University Faculty of Health Sciences
C/S	Caesarean Section
DRH	Division of Reproductive Health
DOMC	Division of Malaria Control
GA	Gestational Age
HDC	Higher Degrees Committee
HIV	Human Immunodeficiency Virus
IUGR	Intrauterine Growth Restriction
LBW	Low Birth Weight
LNMP	Last Normal Monthly Period
MOH	Ministry of Health
MUAC	Mid upper arm circumference
NU	Neonatal Unit
PIH	Pregnancy Induced Hypertension
PLBW	Preterm Low Birth Weight
PMTCT	Prevention of Mother to Child Transmission of HIV
PPROM	Preterm Premature Rupture of Membranes
REC	Research and Ethics Committee
SDG	Sustainable Development Goal
SGA	Small for Gestational Age
SRRH	Soroti Regional Referral Hospital
SVD	Spontaneous Vertex Delivery
UDHS	Uganda Demographic Health Survey
UTIs	Urinary Tract Infections
WHO	World Health Organization

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ABSTRACT

BACKGROUND: Globally, prematurity is the leading cause of death in neonates and a contributor to the under 5-year mortality. In Uganda, there is limited data outside of the capital city Kampala appraising occurrence and factors responsible for prematurity. We studied the prevalence and risk factors associated with preterm birth in Eastern Uganda.

METHOD: This was a descriptive cross-sectional study conducted at a regional referral hospital in Eastern Uganda. We used questionnaire through which we captured data on maternal socio-demographic features, and obstetrical causes. In addition, we employed chart review for corresponding medical records on maternal gestation age, date of birth, and birth weight of the baby. In total, 350 mothers – baby pairs were studied. Ethical approval was obtained from the Mbale Regional Referral Hospital Research and Ethics Committee (MRRH-REC).

RESULTS: Prevalence of preterm birth at Soroti Regional Referral Hospital was 24.6% (86/350). Factors associated with preterm birth included fewer than 3 antenatal attendances (aOR=3.115, 95% CI [1.659-5.849], $P=0.038$), twin gestation (aOR=6.973, 95% CI [1.128-43.097], $P=0.016$), antepartum hemorrhage (aOR=4.743, 95% CI[806-12.458], $P<0.001$) and PPRM (aOR=18.902, 95% CI[7.267-49.167], $P<0.001$). Maternal Mid Upper Arm Circumference (MUAC) measurement 24cm and above, was a protective factor against preterm birth (aOR=0.155, 95% CI[0.0686-0.352], $P<0.001$).

CONCLUSION: Preterm births in Eastern Uganda were commonly associated with poor maternal nutritional status and obstetric factors.

Key words

Preterm, gestational age, risk factors, pregnancy, and Prevalence

DEFINITION OF TERMS

Preterm birth	All births before 37 completed weeks of gestation or fewer than 259 days since the first day of a woman's last menstrual period.
Post-natal Period	As per this study, it is the period between 24 hours to 5 days after delivery.
Gestational age	The post-conceptual age of the baby based on menstrual dates, abdominal ultra-scan or by clinical assessment using the modified Ballard score
Modified Ballard score:	A tool used to determine gestational age by giving scores for 6 physical and 6 nerve and muscle development (neuromuscular) signs of maturity, which may range from 1 to 5. The scores are added together to determine the baby's gestational age, and the total score may range from -10 to 50. Premature preterm babies have the low scores, while babies born late have high score.
Low Birth Weight:	Birth weight less than 2500 grams
Inter-pregnancy interval:	The duration between one pregnancy and the next. This is calculated to the nearest month as the period between the date of the previous delivery and the date of the last menstrual period (LMP) for the current pregnancy
Parity	The total number of pregnancies reaching viable gestational age (including live birth and stillbirth).
Spontaneous preterm birth	Commencement of labor with prelabour rupture of membrane (PROM) and birth occurring before 37 completed weeks of gestation
Induced preterm birth	Induction of labor or elective Caesarian section before 37 completed weeks of gestation
Obstetric wheel	A standard tool used to simplify calculation of gestation based on the LMP
Anemia in Pregnancy	This is a hemoglobin level <11g/dl as measured antenatally
Low Mid Upper Arm Circumference (MUAC):	A MUAC <24cm