

# HEPATITIS B AND C VIRUS INFECTIONS AMONG PREGNANT WOMEN ATTENDING ANTENATAL CLINIC AT MBALE REGIONAL REFERRAL HOSPITAL

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# A RESEARCH REPORT SUBMITTED TO BUSITEMA UNIVERSITY FACULTY OF HEALTH SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELOR OF SCIENCE IN NURSING OF BUSITEMA UNIVERSITY

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#### **ABSTRACT**

**Background:** Hepatitis B and C infections are associated with increased risks of maternal complications that include premature contractions, placenta previa, preterm delivery, placental separation, premature rupture of membranes, low birth weight, gestational diabetes mellitus and congenital anomalies. This study determined the prevalence of Hepatitis B and C Virus infections and associated factors among pregnant women attending Antenatal Clinic at Mbale Regional Referral Hospital.

**Methods**: The study was a hospital-based cross-sectional study that involved the screening of 200 pregnant women for HBV and HCV using ABOTT ARCHITECT i2000 SR for the qualitative detection of HBsAg and Anti-HCV in serum using Chemiluminescent Microparticle Immunoassay (CMIA) technology.

**Results**: Of the 200 pregnant women tested, 2 tested positive for the HBsAg giving a prevalence of 1% and 3 (1.5%) of the pregnant women tested positive for the Anti-HCV.

**Conclusion and Recommendations**: The prevalence of hepatitis B and C virus infections among study participants was low. During antenatal care, routine and mandatory screening of Hepatitis B and C Virus should be done.

# **DECLARATION**

I hereby declare that this research report is my own compilation and has never been submitted to any institution for any award.

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# SUPERVISOR'S APPROVAL

I hereby accept that this research report presented is the original work of the named student who has been under my supervision throughout the study period.

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#### **DEDICATION**

I dedicate this research to my dear parents, Nyandera Teddy and Mungasa Shem for the support and love rendered to me during my study at the university.

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#### LIST OF ABBREVIATIONS

**HBV** - Hepatitis B Virus

**HCV** - Hepatitis C Virus

**ELISA** - Enzyme-Linked Immunosorbent Assay

**CMIA** - Chemiluminescence Microparticle Immunoassay

MTCT - Mother-To-Child Transmission

**HBsAg** - Hepatitis B surface Antigen

**Anti-HCV** - Antibodies against Hepatitis C virus

WHO - World Health Organization

MRRH - Mbale Regional Referral Hospital

**RDT** - Rapid Diagnostic Test

**ANC** - Antenatal care

#### **DEFINITION OF KEY TERMS**

Hepatitis is an inflammatory condition of the liver

**Vertical transmission** is the spread of a pathogen from the mother to the baby during the period immediately before and after birth

**Horizontal transmission** is the spread of an infectious agent from one individual to another usually through contact with bodily fluids or excretions that contain the agent.

Perinatal period is the short period of time immediately before and after birth

**Fulminant hepatitis** is a clinical syndrome of rapid (usually within days or weeks) liver impairment usually caused by hepatitis viruses.

**Hepatocellular carcinoma** is a cancer arising from the liver cells

Antenatal care is the health care that is given to pregnant women throughout pregnancy until childbirth

**Prevalence** is the proportion of individuals in a population who have a particular disease over a specified period.

**Co-infection** is the simultaneous infection of a host by multiple pathogen species