

A FIVE YEAR REVIEW OF THE RATES AND INDICATIONS FOR
CAESAREAN SECTION AT MBALE REGIONAL REFERRAL HOSPITAL: A
CROSS SECTIONAL STUDY

BY

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DECLARATION

I Namugaya Annette Jane Mugabe (BU/GS16/MPH/13) do declare to the best of my knowledge and wisdom that this dissertation is my work. It is being submitted in partial fulfillment for the degree of Master of Public Health. It has never been submitted for any award of a degree in any other university or Institution of higher learning for partial fulfillment of any qualification or publication.

Signed..... Date

DISSERTATION APPROVAL

This dissertation is submitted as a partial fulfillment for the award of the Master Degree in Public Health of Busitema University with our approval as supervisors.

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DEDICATION

It is with genuine gratitude and warm regard that I dedicate this very important academic document to my wonderful daughter Caroline Gift for her love, patience and encouragement. She never left my side and she has been my best cheer leader. At the same time, a special feeling of gratitude to my caring sons Timothy Collins and Emmanuel Charles for they were patient and bore with me the little time I shared with them despite my busy schedule. Their love and effort has accompanied me in the process without hesitating at any moment of seeing my dreams come true which are also their dreams. For I strongly believe that my success is their pride.

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ABSTRACT

Introduction: Globally, there has been an increase in the caesarean section rates. This is a public health concern because of the implications it has on the individual, families and the limited health care resources. Current information on the rates and indications for CS in our setting is not known.

Objective: The main objective of the study was to review files/charts in Mbale Regional Referral Hospital over the study period.

Methods: This was a hospital cross-sectional study, based on a 5 years retrospective chart review. It was conducted in a public hospital setting where 46,575 patient files were included, of these 11,514 were caesarean section deliveries. Trained research assistants extracted data from the patient case files using a structured questionnaire. Descriptive statistics in form of frequency tables, alongside graphs, percentages, means and standard deviation were computed. Data were analyzed using STATA/SE Version 14.2.

Results: The rate of CS during this study was 24.7% (11,514 CS cases out of 46,575 total deliveries). Of these CS deliveries, elective CS deliveries accounted for 372/11,514 (3.2%) while 11,142/11,514 (96.8%) the emergency CS deliveries. Of the 11,514 caesarean section files, 6,466 had complete data and constituted the study sample. The commonest indications for emergency CS were Cephalo pelvic disproportion, macrosomia, and fetal distress, abruptio-placenta, previous scar, and premature rupture of membranes.

Conclusion and Recommendations: Results show a progressively increasing CS rate from 2013 to 2018 and the common indications for CS can be screened for during Antenatal visits. This suggests that various stakeholders may need to; sensitize pregnant mothers to always attend antenatal visits, and health workers to always carefully examine pregnant mothers for such indications during antenatal checkups and advise accordingly, so as to scale down CS rate.

ABBREVIATIONS

AHSPR	Annual Health Sector Performance Report
ANC	Ante Natal Care
CDC	Centers for Disease Control
CI	Confidence Interval
CS	Caesarean Section
DET	Data Extraction Table
EmOC	Emergency Obstetric Care
FSB	Fresh Still Birth
GYN	Gynecology
MAT	Maternity
MMR	Maternal Mortality Ratio
MoH	Ministry of Health
MRRH	Mbale Regional Referral hospital
MSB	Macerated Still Birth
NRH	National Referral Hospital
OBS	Obstetrics
PI	Principal Investigator
PNW	Postnatal Ward
UDHS	Uganda Demographic and Health Survey
UNICEF	United Nations Children's Fund
WHO	World Health Organization

OPERATIONAL DEFINITIONS

Adolescence	Is the transitional phase of growth and development between childhood and adulthood
Adolescent	Is any person between ages 10 and 19 but 15 to 19 years is considered in this study (child bearing age)
Caesarean Section	A surgical incision made in the abdominal wall and the uterus to deliver one or more babies, placenta and membranes
Macrosomia	A baby born weighing more than 4 kilograms
Maternity 1	That ward in MRRH where women with gynecological problems and those who deliver stillbirths are admitted
Multiple pregnancy	Having more than one fetus in the uterus
Obstructed labour	This is failure of the presenting part of the fetus (passenger), to descend through the birth canal (passage), because there is an impossible barrier preventing its descent, despite of the uterus contracting normally (power). Failure to achieve spontaneous delivery.
Postnatal	A period that begins immediately after the birth of the baby and extends up to six weeks (42 days) after birth.
Pre-eclampsia	A condition in pregnancy characterized by hypertension (high blood pressure), proteinuria (protein in the urine) and oedema (swelling of feet, legs and hands).
Prolonged labour	The labour is said to be prolonged when the combined duration of the first and second stage is more than the arbitrary time limit of 18 hours. For twins, it is a labour that lasts for more than 16 hours.

CHAPTER ONE

INTRODUCTION

In this chapter the researcher explains the background to the study, statement of the problem, objectives of the study, significance of the study and the scope of the study in that order.

1.1 Background

The rate at which Caesarean Section (CS) or surgical birth is being carried out in Eastern Uganda is alarming [1]. As a result many women are delivered using this method where the rate at which CS is being performed is higher (20% -28%) [8] than World Health Organization's (WHO) recommended threshold of 10% - 15% [1]. However, there is no justification for the higher caesarean section rates [1] and it is difficult to know an ideal CS rate for a hospital. It is not only Mbale Regional Referral Hospital (Eastern Uganda) that is experiencing a steep increase in CS rates but this is rather a global problem[2]. There is increase in both primary and repeat cesarean section deliveries and little research exists on “Rates and Indications for Caesarean Section” The recent statistics from 150 countries [3] "WHO Statements on Caesarean section Rates" in Brazil indicate that the average global CS rate is 18.6% of all births, meaning that 1 in 5 women around the world give birth by CS which rate is said to have increased by 12.4% (from 6.0% to 27.2%) in developed and developing regions respectively with an average annual rate of increase (AARI) of 4.4%.

At regional level, Latin America and the Caribbean had the largest absolute increases of CSR (19.4%, from 22.8% to 42.2%). However, the 42.9% CSR makes South America a sub region with the highest average CSR in the world, while Africa registered the lowest CS rates in the world with 4.5% increase (from 2.9% to 7.4%) and specifically Western Africa (3%) with the largest rise being noticed in Egypt, Tunisia and Morocco[4]. In East Africa, countries like Tanzania, one of its referral hospital registered a rise in CSR from 29.9 % to 35.5% in the period of 2005 and 2010 [7]. Basing on a study conducted in Uganda, where 13 RRHs in Uganda were surveyed, it was reported that most of them had CSR above the WHO recommendation level with Mbarara RRH taking the lead (37%) followed by Hoima RRH (34%), with the least being Gulu RRH (10%). [8]The CSR where the study was conducted (MRRH) over a period of 5 years

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