THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

NEAR MISS MATERNAL MORBIDITY AT THE UNIVERSITY TEACHING HOSPITAL, LUSAKA – A DESCRIPTIVE STUDY

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DISSERTATION SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENT AND FOR THE DEGREE OF MASTER OF
MEDICINE IN OBSTETRICS AND GYNAECOLOGY

2010

DEDICATION

TO ALL THOSE WHO STRIVE TO MAKE INTELLECTUAL PURSUITS

WORTHWHILE.

ACKNOWLEDGEMENTS

STATEMENT

I HEREBY STATE THAT THIS DISSERTATION IS ENTERELY THE RESULT OF MY OWN PERSONAL EFFORT. THE SOURCES TO WHICH I AM INDEBTED TO ARE MENTIONED IN ACKNOWLEDGEMENTS.

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DR CATHERINE MKANDAWIRE SIMBAO

DECLARATION

I HEREBY DECLARE THAT THIS DISSERTATION PRESENTED FOR THE DEGREE OF MASTER OF MEDICINE IN OBSTETRICS AND GYNAECOLOGY HAS NOT BEEN PREVIOUSLY SUBMITTED EITHER WHOLLY OR IN PART FOR ANY OTHER DEGREE AT THIS OR ANY OTHER UNIVERSITY, NOR IS IT BEING CURRENTLY SUBMITTED FOR ANY OTHER DEGREE.

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SIGNATURES

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ABSTRACT

Background

For every maternal death there are many others who suffer serious life-threatening complications of pregnancy, referred to as 'near miss' morbidity. In the past, maternal audit using deaths have traditionally been used to improve maternal health outcomes. Reviews of cases of survivors of life-threatening complications in pregnancy, in addition to maternal death reviews, are becoming an important method of evaluating and improving maternal health outcomes. Although maternal mortality has been studied in Zambia, the extent and types of 'near miss' morbidity are not well described.

Methods

The study was a cross-sectional descriptive study involving case file review of patients admitted as a life–threatening complication in pregnancy or the puerperium and survived to discharge. These patients, termed 'near misses' or severe maternal morbidity were admitted in the Department of Obstetrics and Gynaecology of the University Teaching Hospital, Lusaka over a 3 month period from 1st September to 30th November 2007. Data was collected on patient characteristics, past pregnancy, antenatal care, referral status, type of complication, mode of delivery, timing and availability of care, care provider, mode of delivery, and outcome.

Findings

There were 205 cases defined as 'near-miss' from within 5672 admissions (3.6%) during the study period. The 'near misses' according to clinical type were:

hypertensive disorders of pregnancy (HDP i.e. pre-eclampsia and eclampsia) (n=129, 62.9%), haemorrhage (43, 21.0%), abortions (16, 7.8%) and 'others' (17, 8.3% - including 10 cases of ectopic pregnancy and 2 of severe puerperal sepsis). There were 26 maternal deaths during this time and the case fatality for life-threatening complications was thus 26/(205+26)=11.3%; higher for haemorrhage (17.3%) compared to HDP (4.4%). Just under half were reviewed within 30 minutes and 22.9% required blood transfusion. Overall 41.5% were delivered by caesarean section (compared to the typical caesarean rate of under 20%). The fetal outcome was worse in cases of haemorrhage compared to HDP (32.6% vs. 11.6% deaths).

Interpretation

The study has described, for the first time, the extent and type of 'near miss' cases occurring at UTH, in addition to the timings and availability of care. The occurrence of more cases of 'near miss' morbidity as opposed to cases of maternal mortality offers an opportunity for further audit to improve upon maternity care in a less threatening manner.

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TABLES

ABBREVIATIONS

ARDS   Acute Respiratory Disease Syndrome

ANC   Antenatal Care

APH   Antepartum Haemorrhage

CRHCS   Commonwealth Regional Health Community Secretariat

CSO   Central Statistical Office

DBP   Diastolic Blood Pressure

EmOC   Emergency Obstetric Care

HDP   Hypertensive Disorders of Pregnancy

HDU   High Dependency Unit

ICU   Intensive Care Unit

JRMO   Junior Resident Medical Officer

MOH   Ministry of Health

O_2 Oxygen

PMMN   Prevention of Maternal Mortality Network

PPH   Postpartum Haemorrhage

QA/QC   Quality Assurance/Quality Control

SBP   Systolic Blood Pressure

SD   Standard Deviation

SRMO   Senior Resident Medical Officer

USA   United States of America

TBA   Traditional Birth Attendant

UTH   University Teaching Hospital

WHO   World Health Organisation