



**UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE**

**A STUDY OF THE SAFETY, EFFECTIVENESS, AND
ACCEPTABILITY OF MISOPROSTOL FOR TREATMENT OF
INCOMPLETE ABORTION AT THE UNIVERSITY TEACHING
HOSPITAL, LUSAKA, ZAMBIA**

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**DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF
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DEDICATION

To my dear wife Judie and our two handsome boys Kaliki and Ng'andwe for their patience whilst I took a lot of time away from home doing this study. Your patience will save women's lives.

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8. All the authors of the referenced Materials for without their work, I would not have had guidance in this study.
9. All other people not mentioned here who might have helped in any way during the development and completion of this study.

STATEMENT

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

SIGNED:
DR STEPHEN MUPETA

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.

SIGNED:
DR STEPHEN MUPETA (INVESTIGATOR)

APPROVED BY:
DR. BELINGTON VWALIKA (SUPERVISOR)

APPROVAL

THE DISSERTATION OF DR. STEPHEN MUPETA IS APPROVED AS FULFILLING PART OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF MEDICINE IN OBSTETRICS AND GYNAECOLOGY BY THE UNIVERSITY OF ZAMBIA.

SIGNATURES:

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LIST OF ABBREVIATIONS

BJOG	British Journey of Obstetrics and Gynecology
BMJ	British Medical Journal
CDC	Center for Disease Control
CSO	Central Statistics Office
D&C	Dilatation and Curettage
MOH	Ministry of Health
MVA	Manual Vacuum Aspiration
PAC	Post Abortion Care
TDRC	Tropical Diseases Research Center
UNICEF	United Nations Children's Fund
USA	United States of America
UTH	University Teaching Hospital
WHO	World Health Organization
ZDHS	Zambia Demographic and Health Survey

ABSTRACT

Incomplete abortion is a major cause of morbidity and mortality among women that experience an abortion. The treatment for incomplete abortion at the University Teaching Hospital (UTH) is currently manual vacuum aspiration (MVA). Misoprostol, a prostaglandin E1 analogue, is a medical alternative to surgical means for treatment of incomplete abortion. This is because of ease of use, less complications, high patient satisfaction and potential use by a wide range of providers in various health care set-ups.

In this study 600µg oral dose of misoprostol was used to evaluate the safety, effectiveness and acceptability of this drug for treatment of incomplete abortion at the University Teaching Hospital in Zambia. An open label, single arm prospective study design was employed to recruit 152 patients presenting at Lusaka's University Teaching Hospital Gynecological gynecology emergency ward for treatment of incomplete abortion with pregnancies in the first trimester between 31st October and 30th November 2009.

Data collected was on the participants' demographics, obstetrics and gynecological history including previous abortions and contraceptive use. Pre and post intervention questionnaires were administered to collect the data.

The primary measure of effectiveness was complete uterine evacuation without recourse to additional surgical intervention at any point for any reason. Other outcome measures included side effects, acceptability and satisfaction.

As the study assessed women's satisfaction with and acceptability of the treatment, each participant was asked to grade their satisfaction with the method on a scale of 4 and to indicate whether she would select the treatment again, and if she would recommend it to a another person.

Vaginal bleeding, Abdominal cramping, incidence of infection were used to measure the safety of the intervention. Abdominal cramps and vaginal bleeding were graded regarding severity whilst infection was based on symptoms and signs that could indicative.

The study showed a success rate of 95.7%, satisfaction and acceptability of about 99%. The study did not record any unexpected side effects and no patient experienced serious adverse events. The mean age of participants was 26.1, most were married (65.8%), majority of them having been only up to secondary school (38.8% senior and 30.3% Junior secondary). Most of the women were in their 2nd to 4th pregnancy (59.9%) with mean gestational age being 9 weeks. Majority reported the abortion to have been spontaneous (86.8%). Fifty percent (50%) of the participants reported having used a form of contractive method before and about 20% of participants reported falling pregnant whilst on a contraceptive method. Forty eight percent (48%) of the participants reported

pregnancies being diagnosed by symptoms alone (no pregnancy test or ultrasound scan done). Almost all the participants in the study were referred from a health center.

The study demonstrated that oral 600µg misoprostol is a safe, effective and acceptable alternative for the treatment of incomplete abortion at the University Teaching Hospital in Lusaka.