SELF-MEDICATION PRACTICES BY CARETAKERS FOR CHILDREN UNDER FIVE YEARS IN TORORO DISTRICT

ALELE PETER MICHEAL (MBChB).

A DISSERTATION SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES IN
PARTIAL FULFILMENTFOR THE AWARD OF THE DEGREE OF MASTER OF
MEDICINE IN PAEDIATRICS AND CHILD HEALTH OF MAKERERE UNIVERSITY

DECLARATION

I Alele Peter Micheal REG No: 2009/HD11/16706U, hereby declare that all the work				
presented in this dissertation is original unless otherwise acknowledged. This work has not been				
presented to any university or higher institute for any academic award or publication				
Signed	Date			
This dissertation has been submitted for	examination with approval of the following supervisors:			
	Date			
DR.NABUKEERA NICOLLET	TE			
MBChB, M. Med (Pead)				
	Date			
PROF.PHILLIPPA MUSOKE				
(MBChB, FAAP, PhD)				

DEDICATION

This work is dedicated to my family for their persistent encouragement and support towards completion of this work. May God bless the works of your hands and keep us together in times to come.

ACKNOWLEDGEMNET

I thank the Belgium embassy for the financial support advanced to me for the purpose of this research, as it would have been impossible to complete the work without it.

I also extend my appreciation towards my supervisors, Dr.Nabukeera Nicolette and Professor Phillipa Musoke for their non-tiring guidance and support throughout the period of research.

I appreciate the work of all paediatricians in the Department of Paediatrics and Child Health Mulago hospital and Makerere University, whose guidance helped a lot in the process of research and final report, write up.

I acknowledge the efforts of Wamalwa Jacqueline and all other research assistants for their tremendous effort in data collection that enabled completion of the process.

I also acknowledge the authorities of Tororo district for the support and guidance during the period of study.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMNET	iv
TABLE OF CONTENTS	V
LIST OF TABLES AND FIGURES	ix
ACRONYMS	x
OPERATIONAL DEFEINITIONS	xi
ABSTRACT	xiii
CHAPTER ONE	1
1.0 INTRODUCTION	1
1.1 BACKGROUND	1
1.2 Literature Review	2
1.2.1 Global Situation	2
1.3 Burden in Africa	4
1.4 Burden of self medication in Uganda	4
1.5 Observed Practices of Self Medication	5
1.5.1 Role of Caretakers	5
1.5.2 Common Symptoms for which Self-medication is practiced	5
1.5.3 Drug use in self medication practice	6
1.5.4 Types of drugs used	6
1.5.5 Sources of medicines for self-medication	8

1.5.6 Source of Information for Drug Choice and Dosage	9
1.5.7 Duration of treatment on self-medication	10
1.6 Reason for self medication	11
1.7 Reported outcome of treatment following self-medication	13
CHAPTER TWO	14
2.0 Problem Statement	14
2.1 Justification	14
2.2 Research questions	15
2.3 Study Objectives	15
2.3.1 General Objective	15
2.3.2 Specific Objectives	15
2.4 Conceptual Frame Work	16
CHAPTER THREE	17
3.0 METHODOLOGY	17
3.1 Study Design	17
3.2 Study Setting	17
3.3 Target Population	17
3.4 Study Unit	17
3.5 Study Population	18
3.6 Selection Criteria	18
3.6.1 Inclusion Criteria	18
3.6.2 Exclusion Criteria.	18

3.7 Sample Size Estimation	18
3.8 Sampling Procedure	19
3.9 Data Collection	20
3.9.1 Study Instruments	21
3.9.2 Quantitative Data	21
3.9.3 Qualitative Data	21
3.10 Study Procedure	21
3.11 Study Variables	23
3.11.1 Independent Variables	23
3.12 Quality Control	24
3.13 Data analysis	24
3.13.1 Quantitative data	24
3.13.2 Qualitative data	26
3.14 Ethical considerations	26
3.15 Dissemination of results	26
CHAPTER FOUR	27
4.0 RESULTS	27
4.1 Description of study population.	27
4.2 Study Profile	27
CHAPTER FIVE	40
5.0 DISCUSSION	40
5.1 Strengths of the study.	48
5.2 Limitations of the study	48

CHAPTER SIX	50
6.0 CONCLUSIONS.	50
6.1 RECOMMENDATIONS	50
REFERENCES	51
APPENDIX A: QUESTIONNAIRE	56
APPENDIX B: FGD GUIDE	62
APPENDIX C: INTERVIEW GUIDE	63
APPENDIX D: CONSENT FORM	64
APPENDIX E:CONSENT FORM (ATESO):	70
APPENDIX F: MAP OF TORORO	73

LIST OF TABLES AND FIGURES

Table 1: Description of household characteristics	
Table 2: Socio-Demographic information of caretakers of the children	29
Table 3:Bivariate analysis of factors associated with self-medication.	31
Table 4:Multivariable analysis of factors associated with self-medication	32
Table 5: Distribution of drugs caretakers used for self medication.	33
Table 6: Drugs used for common symptoms byself-medication	34
Table 7: Sources of drug and information for self-medication	35
Table 8: Reasons for practice of self-medication	36
Table 9: Outcome of treatment following self-medication of children	37

ACRONYMS

ARI Acute Respiratory Infections

HBM Home Based Management

IPA International Pharmaceutical Association

MOH Ministry Of Health

MDG Millennium Developmental Goals

NSAIDS Non-steroidal Anti-inflammatory Drugs

NDA National Drug Authority

OTC Over-The-Counter

ORS Oral Rehydration Solution

RBM Roll Back Malaria

UDHS Uganda Demographic Health Survey

UBOS Uganda Bureau of Statistics

UNICEF: United Nations International Children's Emergency Fund

VHT Village Health Teams

WHO World Health Organization

OPERATIONAL DEFEINITIONS

Caretaker: A person related to the child legally or by blood and is responsible for the physical and emotional support to the child.

Drug/medicine: This refers to any substance(s) that is biologically and/or physiologically active used in the prevention, diagnosis, treatment, or cure of a disease.

Formal health care: Healthcare provided by health workers with professional health training working in institutions recognized by the ministry of health

Health worker: A qualified medical worker to include nurse, mid-wife, dispenser, clinician, medical doctor, or auxiliary medical assistants like nursing assistants or VHT personnel legally recognized within Uganda to provide medical services.

High education status: Attainment of formal education with at least primary school certificate or above:

Low education status: Illiterate persons or lack of any formal school education attainment.

High socioeconomic status: Possession of any two of the following; cemented house, monthly salary or being a civil servant.

Low socioeconomic status: Possession of any two of the following; lack of an income source, unemployment, semi-permanent or mud and wattle house..

Illiterate person: A person who did not attend any formal education.

Literate person: A person who attended formal school with at least primary school education.

Over-the-counter or non-prescription drugs: These are drugs that can be legally purchased from a drug retail outlet without having a prescription from a licensed health care provider.

Self-care: Any action that an individual takes for themselves or their dependents to establish and maintain health, prevent and deal with illnesses.

Self-medication: The actions a caretaker of a child under five years of age takes when a child is ill to include, obtaining and administering one or more prescription or non-prescription/Over-The Counter (OTC) drugs to a child without the aid of a health worker in diagnosis, prescription or surveillance of treatment for a given ailment.

ABSTRACT

BACKGROUND

Majority of caretakers in Uganda prefer to initiate treatment for children with common childhood illness at home. Inappropriate and unregulated use of medicinal agents by self-medication has been widely attributed to detrimental outcomes like inappropriate treatment, adverse drug events and antimicrobial resistance. Self-medication practices in children underfive has not been well studied in Uganda despite widespread reports of irrational drug use in most communities in developing countries.

Objectives: To determine the prevalence of self-medication, establish common self-medication practices undertaken by caretakers for children less than five years and to determine the reported treatment outcomes of self-medication for children less than five years of age in Tororo district Uganda.

Methods: This was a cross sectional study involving caretakers of children under five in Tororo district of Uganda. From each of the four counties in Tororo district, multistage cluster sampling was used to select four villages. Through consecutive recruitment, a caretaker- child pair was purposively chosen from a selected household meeting the criteria. The demographic data and drug use information by caretakers for the selected child was recorded on a structured questionnaire following an interview. A total of 456 caretakers were enrolled, two participants were excluded from the study. Two focus group discussions and eight key informant interviews were conducted for qualitative data. Quantitative data was obtained by a structured tool and analysed by SPSS 12.0 software. Qualitative data was analysed manually with data grouped into themes.

RESULTS

Prevalence of self-medication in children under five years was 30.1%. Self-medication significantly increased among children aged three to five years (OR 1.66, 0.57-1.99, p-value 0.02) and a high socioeconomic status of caretakers was significantly associated with selfmedication use (OR 1.71, 0.37-1.97, p-value 0.01). Self-medication was practiced commonly for symptoms of cough 60%, fever 51.6%, vomiting 19% and diarrhoea 10%. Some caretakers self medicated children for severe symptoms of wheezing 3.6% and convulsions 1.5%. Analgesics/antipyretics 73%, antibiotics 48% and antimalarials 43% were the main classes of drugs used for self-medication. Cough was the symptom for which most drugs including antibiotics 56.4% and antimalarials 44% were used. More than half of caretakers 54% acquired drugs from local drug shops. Leftover drugs from previous treatment served a source of medicines for 17.5% of the children. Dosage estimation by caretakers was mainly by reference to old prescription notes 52%. The main reasons for self-medication of children by caretakers was to initiate early treatment in their children 20%. A poor treatment outcome following selfmedication was reported by caretakers in 57 % of children. Among these, 24% had no change in symptoms, 16.8% of the children were hospitalized, and 8% of caretakers reported new symptoms occurred following self-medication of their children.

Conclusion: Despite low prevalence of self-medication, those caretakers who practiced self-medication exhibited inappropriate and irrational drug use patterns with more than half reporting poor treatment outcomes in their children.

Recommendations: In view of above findings, advocacy for health education of communities on symptom recognition and appropriate early management in children should be strengthened.