SELF-MEDICATION AMONG PATIENTS ATTENDING KAMPALA INTERNATIONAL UNIVERSITY TEACHING HOSPITAL OUT PATIENT DEPARTMENT ISHAKA-BUSHENYI DISTRICT, WESTERN UGANDA.

BY

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DCM/0002/143/DU

A RESEARCH SUBMITTED TO THE SCHOOL OF ALLIED HEALTH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DIPLOMA IN CLINICAL MEDICINE AND COMMMUNITY HEALTH OF KAMPALA INTERNATIONALUNIVERSITY WESTERN CAMPUS.

JULY, 2017.

DECLARATION

I declare that factors associated with self-medication among patients attending Kampala International university teaching hospital, this proposal is my original work and has never been submitted to this university or any other institution of higher learning for any academic award. I hereby submit it in partial fulfillment for the award of a Diploma of Clinical Medicine and community Health of Kampala international university Western campus.

SIGNATURE:..... DATE:14-AUG-2017.

BIRUNGI SOLOMON

DCM/0002/143/DU

APPROVAL

I have supervised LUWATE CLEMENT in the process of developing research proposal and dissertation entitled "self-medication practices among the people of Oli Division, Arua municipality in Arua district and hereby approve this work to be forwarded for consideration.

SUPERVISOR

(MR TUTAMWEBA THOMAS)

Signature.....

Date.....24/7/17.....

ACKNOWLEDGEMENT

I thank the Almighty GOD for his mercy and ask for His guidance through the programme till its completion. Special thanks to my family, Grandma Pam, Kendra, Night Christine, Grandpa Neil, friends and Mr. TUTAMWEBWA TOM, my supervisor for all their efforts and support during the compilation of this work.

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LIST OF ABBRIVIATIONS

ACT	Artermether based Combination Therapy
AQ	Amodiaquine
CQ	Chloroquine
MDRSA	Multi-Drug Resistant Staphylococcus Aerus.
OTC	Over the Counter
POM	Prescription Only medicines
RDT	Rapid Diagnostic Test
SP	Sulphadoxine-Pyrimethamine
WHO	World Health Organization
WSMI	World Self-Medication Industry.

OPERATIONAL DEFINITIONS

An antibiotic- was defined as 'a medicine or substance that fights infections caused by bacteria and other microorganisms. It kills or inhibits the growth of bacteria and other microorganisms' (Oxford concise colour medical dictionary, 2004, emedicinehealth, 2010, MedicineNet.com, 2010).

Self-medication- is defined as ''the use of drugs to treat self-diagnosed disorders or symptoms without prescription, or the intermittent or continued use of a prescribed drug for chronic or recurrent disease or symptoms or sharing medicines with relatives or members of one's social circle or using leftover medicines stored at home'' (Abasaeed et al., 2009, WHO, 2000, Awad et al., 2005). Self-medication has also been defined as ''obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment'' (Montastruc et al., 1997, Zafar et al., 2008

Abstract:

Self-medication use has led society to antibiotic resistance—a serious health problem worldwide. **AIM:** This study aimed to assess prevalence, factors, common drugs used to treat the common symptoms and sources of the drugs used in self-medication by patients attending Kampala International University Teaching Hospital in Ishaka, Bushenyi district in Western Uganda. **STUDY DESIGN**: The cross-sectional descriptive study method was processed using questionnaires in different out-patient clinics at KIUTH. In total, 118 patients completed the questionnaire and were included in the study.**RESULTS;** More than half of the respondents 98/118 (83.3%) had used drugs (Over the Counter drugs) to treat self-diagnosed illnesses. Almost half of therespondents used antibiotics and analgesics either against viral (commonly cold)or mixed (bacterial and viral) infections. The respondents with lower educational qualifications (29.7%) and those from rural areas (32%) were significantly less involved in the self-medication practice.however respondents with high education (70.3%) and those from urban areas (58%) as around Ishaka town were more involved with the use "Over the Counter drugs". There was significant difference between genders, different age groups, or different parenthood status as shown in Table 1.Preferred drugs were Paracetamol (37%), followed by Amoxicillin (36%) in penicillin class, used to treat respiratory and abdominal symptoms. Respondents carried out self-medication because they considered their symptoms minor in (39%) as (17%)wanted to reduce costs required to seek treatment in a hospital setting, and sources of drugs were majorly pharmacies in (31.6%) of the respondents.**CONCLUSION:** Rate of self-medication incidence among the patients in Ishaka, has been shown to be high and is a major public health problem as it is associated increased emergency antimicrobial resistance and adverse side effects. RECOMMENDATION: Increase PUBLIC awareness about the dangers of self-medication through community out-reaches by concern organizations as Uganda national drug authority.

CHAPTER ONE

1.0 Introduction

Self-medication has been defined as obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription, or surveillance of treatment. (Zafar et al., 2008) t is estimated that more than 50% of antibiotics worldwide are purchased privately without a prescription note from immense OTC drug outlets, pharmacies, and from street venders in the informal sector. (L. Garofalo et al., 2015)

1.1 Background

In the past, responsible self-medication has developed particularly in developed economies as US, UK, Spain, India, Pakistan, Nigeria, and other developed nations. However, today all countries rich and poor, developed and developing are coming to appreciate the contribution to individual and public health that self-care and self-medication can make.(WSMI,2009)

According to the WSMI, self-medication is the treatment of common health problems with medicines especially designed and labelled for use without medical supervision and approved as safe and effective for such use. These medicines are often known as "Over The Counter" and are available for use without the doctor's prescription, through pharmacies, drug shops, and also from street venders. Those that require prescription are called prescription products.

All parts of the world encounter the same common health problems in roughly the frequency and t doesn't seem to depend on where or how they live. Thus conditions that prompt these patients o engage in the vice of self-medication don't vary much, these include: common cold, pain, ligestive problems, fever, rash, eye infections, and other may be psychiatric problems.

Self-medication practice has been reported to be alarmingly prevalent among the younger generations at an alarming rate, especially the college going students. Previous studies reported he extent of self-medication to be 98% in Palestine, 94% in Hong Kong, 88% in Croatia, 76% in Pakistan 75.4% in Nigeria and 45% in Turkey (Sharma et al., 2012)

n majority of developing countries, Uganda inclusive, 80% of health related problems are reated through self-medication as lower cost alternative for hospital setting intervention (Abay t al,. 2010, Awad et al., 2007). The percentages are also high in the United States and South

Africa while in developing countries many patients consider self-medication with "over the counter" medicines as a cost and time saving alternative to doctor's visits for common ailments.

In Italy,69.2% parents stated that they usedan oral medication without prescription of a physician at least once in their lives and 71.8% reported to use oral medication in last 12 months. (Luca Garofalo et al., 2015). Most non-prescription medicines commonly used are; the nonsteroidal anti-inflammatory drugs (83.5%), antibiotics (26.7%) which less frequently used, antacids (4.2%) and corticosteroids (3.4%) are also used (Luca Garofalo et al., 2015), antihistamines and analgesics. In Africa, especially in the sub-tropic and sub-Saharan Africa, where malaria is endemic, anti-malarial medicines are also frequently used.

The World Self-Medication Industry further divides self-medication into: responsible self-medication and irresponsible self-medication. Responsible self-medication is self-prescription with only OTC medicines which is distinguished from Irresponsible self-medication, a practice of purchasing and using prescription medicines without a doctor's prescription. This irresponsible is potentially dangerous self-prescription and has no place in self-care or (responsible) self-medication. Due to self-medication being on the rise, in developing countries people(patients) are not only using non-prescription drugs but also prescription medicines without supervision.(Bushra Ali Sherazi et al.,2012).

Self-medication has provided great satisfaction globally to the patients who used it in the proper manner, in every nation in which the question is posed people are overwhelmingly satisfied with the non-prescription medicines they use, from as high as 94% in Mexico, to a low of 75% in Australia, 90% of the Japanese population,76% of Colombians and 60% of Canadians find OTC medicines just as effective for some problems as prescription medicines, while nearly a half of 1.5 billion Chinese believe that OTC medicines are safer than prescription medicines when used as directed.(WSMI,2017), increased access to non-prescription medicines may encourage patients to believe that there is a drug treatment for every ailment, irrational use of the OTC drugs, issuing incorrect doses which has led emergence of human pathogen drug resistance and other negative effects, that arise as result of misdiagnosis, lack of appropriate knowledge about their side effects and interactionscould have serious insinuation, especially in special population groups like children ,elderly, pregnant and lactating mothers.

1.2 Problem statement

Self-medication is an important public health problem throughout the world since it is a fairly common practice. Self-medication, has resulted in wastage of health care resources, increased pathogen resistance and may precipitate the emergency of multiple resistant organisms (MDRS) that would be difficult and costly to treat especially in immuno-compromised patients and this has caused increased morbidity, drug-drug interactions, and adverse drug reactions, fatal side effects leading to hospital admissions, (L. Garofalo et al., 2015, Osemene & Lamikanra, 2012). Self-medication in many developing countries where drug are not well regulated. Hence there is easier access to prescription medicines or over the counter medicines without prescription.Change in perception of illness and incessant advertising among other factors have increased the prevalence of self-medication which accounts for about 2.9-3.9% causes of death. (Erhun WO, Erhun MO., 2002, Laurice LB, 2001)

In study carried out in Northern Uganda post-conflict region, found that 75.7% respondents performed antimicrobial self-medication for fever, headache, lack of appetite and body weakness and antimicrobials commonly used were coartem, 27.3%, amoxillin 21.7%, metronidazole 12.3%, and cotrimoxazole 11.6%, (Ocan M et al., 2014). Drug sources are pharmacies, drug shops, private clinics, ordinary shops, government health centers, and VHTs where the source of drugs acts as source of knowledge about the drug, (Oluwele A. Babatunde, et al 2016). To our knowledge,there little data or no data at all available about factors associated with self-medication among patients attending KIUTH outpatient department, in Ishaka municipality Bushenyi district in Western Uganda.

1.3 Justification

Self-medication is practiced around the world although there has been restriction and effective control in some developed countries. The study on self-medication in Rural Africa revealed that 99.4% relied on self-medication while 0.6% only consulted physicians. (G.Arikpo et al., 2009).

Another study showed that drug use by self-medication by 46.5% and drug shop attendants 57.5% in northern Uganda. (Ocan M, et al., 2014).Findings from this study, among patients attending KIUTH outpatient department in Ishaka municipality Bushenyi district, is important to understand the impact of self-medication and how best to control it effectively in the region and in the end which will lower the escalating rates of the practice in Uganda.

1.4 Objectives

1.4.1 Broad objective

To establish the burden of self-medication among patients attending KIUTH outpatient department in Ishaka municipality Bushenyi district.

1.4.2 Specific objectives

To find out the prevalence of self-medication among the patients attending KIUTH outpatient department in Ishaka Bushenyi district.

To determine the factors of the practice of self-medication among the patients attending KIUTH outpatient department in Ishaka Bushenyi district.

To establish the drugs, and sources of drugs involved in the vice of self-medication among patientsattending KIUTH outpatient department in Ishaka Bushenyi district.

1.5 Research questions

i. What is the prevalence of self-medication among the patientsattending KIUTH outpatient department in Ishaka Bushenyi district?

ii. What are the factors predisposing patientsattending KIUTH outpatient department in Ishaka Bushenyi district, to self-medication?

iii. What are the common drugs, and sources of the drugs involved in self-medication

.6. Scope of the Study

.6.1 Time Scope

The study shall be conducted between the months of April 2017 and July 2017.

.6.2 Content Scope

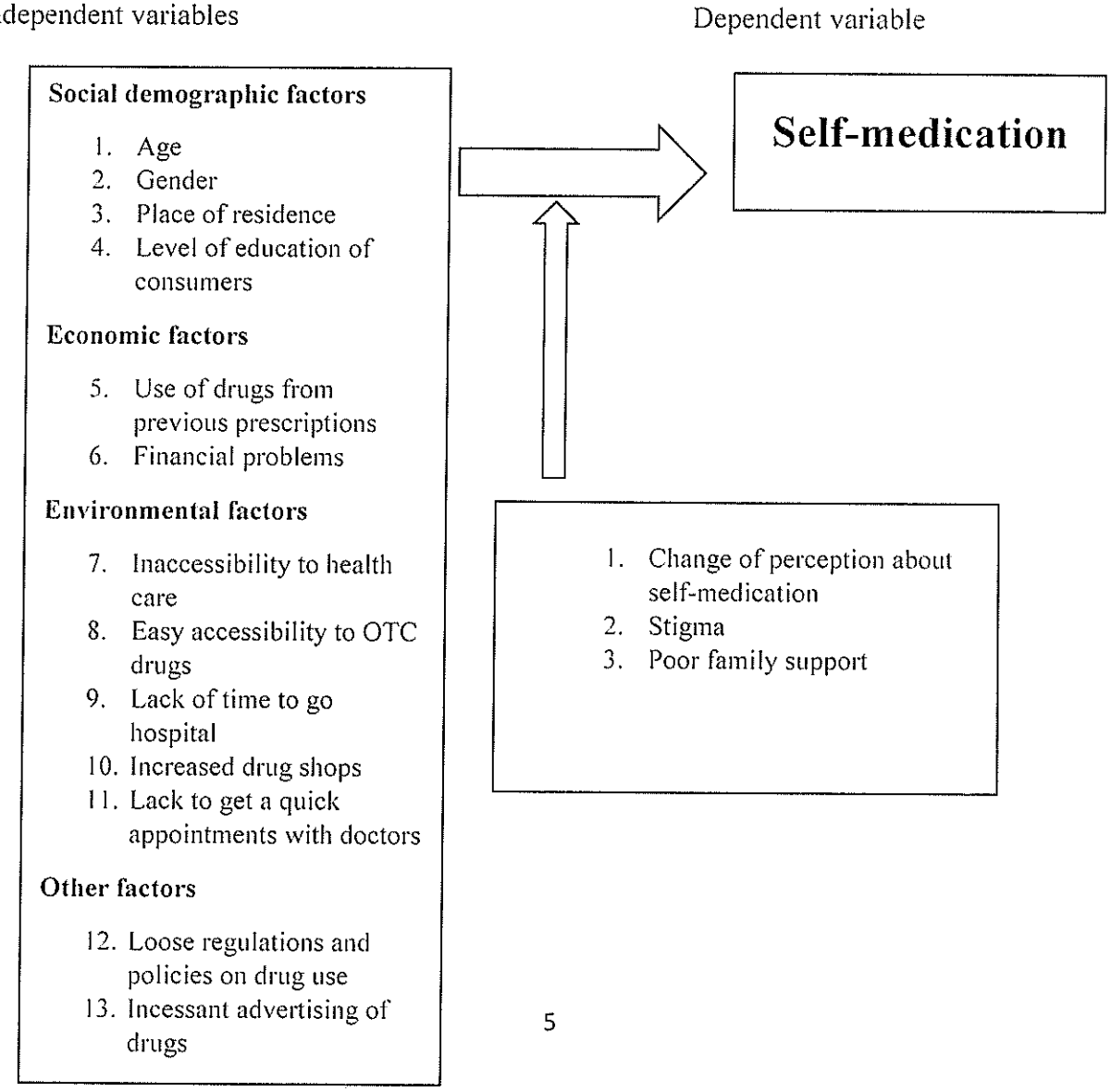
The study will concentrate on self-medication, factors causing the increasing rates of the practice among the patients attending KIUTH outpatient department, common symptoms and drugs used.

identifying how to reduce the practice among the patients and minimize the detrimental effects of the practice.

1.6.3 Geographical Scope

The study shall be conducted in Kampala International University, Western Uganda; the study will include all patients diagnosed and those who have been managed at KIU-TH, outpatient department, with the period of April to July 2017 and volunteers around the hospital after being briefed about purpose of the study.

1.7.0 Conceptual framework of factors associated with self-medication among patients attending KIUTH outpatient department.



CHAPTER TWO: LITERATURE REVIEW

2.1 Definition

Self-medication is the treatment of common health problems with medicines especially designed and labelled for use without medical supervision and approved as safe and effective for such use. (WSMI,2017). Alternatively self-medication is defined as the selection and use of medicines by individuals to treat self-recognized or self-diagnosed conditions or symptoms. (Ruiz ME. Curr saf, 2010)

2.2 Prevalence of self-medication

Self-medication practice has been reported to be alarmingly prevalent among the younger generations at an alarming rate, especially the college going students. Previous studies reported the extent of self-medication to be 98% in Palestine, 88% in Croatia, 76% in Pakistan 75% and 45% in Turkey (Sharma et al., 2012).

Self-medication is major global problem with increasing rates all around the world, the recent study from Sri Lanka, reported prevalence of self-medication to be 79%, and studies from neighboring countries such as in India and Nepal also indicated high rates of 85% and 65% respectively. (Osemene & Lamikanra, 2012)

Studies in Europe show prevalence to be 68%, prevalence in some countries like Spain and Denmark is 11% and 3% respectively. In America, the rate of prevalence of self-medication is 17%, in Asia (Oluwele A. Babatunde, et al 2016), studies showed 78% of Chinese in Hong Kong self-medicated with antibiotics. In Africa the prevalence of self-medication is highest, with South Africa having a prevalence rate of 98%, followed by Nigeria 67.7% of the mothers treated their infants without a doctor's consultation.(Ocan M et al., 2014), in sub Saharan African countries, Sudan, Cameroon, the prevalence is found to be very high as 73.8% and 55.7% respectively. (Oluwele A. Babatunde, et al 2016).In Kenya, study of Luo children in Western Kenya, found that 19% reported engaging in self-medication with herbal or pharmaceutical medicine. Potential earning is the cause and boys werelikely to self-medicate using conventional medicine than herbal medicine as compare with girls. (Geissier et al., 2000). In a study carried out in post-conflict Northern Uganda, found that 75.7% of respondents perform antimicrobials

self-medication for fever, headache, lack of appetite and body weakness disease.(Ocan M et al., 2014).

2.3Common drugs reported.

Medications categories mostly used in self-medication:Some examples of irresponsible self-medication: Cough syrups 90% among students are used as sleep aid, Skin bleaching steroids 73.5% in women to lighten their skin, Sildenafil citrate 90% in men above 40 yearto increase the period of erection. Antibiotic and anti-malarial 73% in Khartoum state to treat malaria. Anti-histamines, Analgesics, Weight gain and weight reducing agents, Multivitamins, are also among the most commonly used drug classes.(WHO, 2014).

For children with cough, treatment was mainly by use of analgesic/antipyretic (paracetamol) followed by antibiotic co-trimoxazole. There was also a relatively high use of the antimalarial, co-artemether for cough in children. Twenty one per cent (21 %) of respondents indicated use of ORS for diarrhea.Caretakers reporting vomiting in their children mainly used paracetamol (76.9%), co-trimoxazole (50%), and co-artemether (30.8%) to treat their children. (Alele et al., 2015).

Malaria affects 154-289 millionpeople who are diagnosed using RDT and kills 610000-971000 annually, with majority of clinical cases and deaths occurring in the Sub Saharan Africa (WHO, 2012). Antimalarial drugs commonly usedinclude chloroquine (CQ) used by 67% of febrile episodes in Rural Kenya, Amoiaquine (AQ) (5%),and Artemether-Lumefantrine. Artemisinin combined therapy (ACT) antimalarial drugs were the most commonly used drug for self-medication (70.3%), majority of the participants mentioned private pharmacy, followed by retails shop.Other reported sources included left over drugs from previous treatment, neighbors, friends and relatives (Sammy Kimoloi et al., 2013)

n Uganda, there is the highest incidence of malaria in the world, with the rate of 478 cases per .000 population per year. About 100000 people mainly children and women die of malaria every ear.(The Independent, 2015).

Although a high proportion of childhood and adult fevers are caused by malaria, patients may only buy antipyretic analgesic drugs. (Anthony Battersby et al 2003).The practice is a worldwide problem, not only in the developing countries (Sudan (Awad et al., 2007), Trinidad and Tobago

(Parimi N et al., 2004),Pakistan and Brazil (Sturm AW et al., 1997) but also in the developed countries (Spain, Greece, Russia, USA, Israel, and Malta). (Sayer I.Al-Azzam et al., 2007).Furthermore, some European countries, namely Romania and Lithuania, were found to have high rates of self-medication (Grigoryan L et al., 2007).

It's estimated 50% of the antibiotics are privately purchased without prescription from pharmacies and street vendors in the informal sectors. (WHO 2016). Self-medication with antibiotics may lead to a wrong choice of antibiotics. This is partially due to the fact that patient knowledge of appropriate treatments for infections may be inconsistent with available evidence of effective treatment. (NambatyaJacqueline et al., 2011).Penicillins were ranked highest (70.7%), and in this group, amoxicillin was most frequently misused (53.56%) among all the antibiotics.

World Health Organization (WHO) and other drug regulatory bodies have inculcated larger number of commonly used safe prescription-only medications under the OTC category. This step s aimed to assuage the socio-economic burden, and to deal with shortage of medical professionals,in addition, patient empowerment policies are believed to develop sense of esponsibility towards self-health management. But existing advertising and push-counter distribution strategies suppress the real purpose. Instead of alleviating the healthcare burden, many problems associated with irrational self-medications have emerged. (WHO, 2016).

Rampant irrational use of drugs without medical guidance may result in greater risk of nappropriate, incorrect and undue treatment, misdiagnosis, delays in appropriate treatment, pathogen resistance and increased morbidity (Matuz et al., 2007). However, bad as it is, self-nedication has substantial benefits that can't go unnoticed, as patients taking an active role in the nanagement of their own health care, convenience, cheaper economically since medical consultations will reduced and avoided. At community level, saves scarce medical resources rom being wasted on minor illnesses, lower the cost of community funded health care programs, educes pressure on the medical personnel who are insufficient, increases the availability of ealth care in remote areas in Bushenyi district.

.4 Common sources of drugs

. Pharmacies, 2. Drug stores, 3. Medicines stored at home, 4. Friends and relatives, 5. Street endors.

2.5Factors associated with self-medication

Most parents reported the main reason for self-medication of their children was to initiate early treatment, while others considered the symptoms to be minor. In contrast to Ethiopia, a study, self-medication given by majority of caretakers were, many considered child's symptoms to be minor 36%, prior experience with similar symptoms 18.2% and to save health costs 12.6% (Tadege, 2010).The disparity in reasons for practicing self-medication with the Ethiopian study may be a result of the higher age groups including adults and the relatively higher socio-economic status and education level in their population. This pattern however shows a universal desire by all caretakers to make an early life saving intervention in their children's illnesses with a timely and affordable approach. In the Sub-Saharan Africa, where factors such as inadequate health care, poverty, illiteracyare ever present, besides bizarre official policies on self-medication, this good intention needs to be guided by appropriate knowledge to provide the intended benefit.

In self-medication profile of Sub Saharan African countries, fewer trained physicians thus only very few people have access to doctors and resort to self-medication, the cost of conventional drugs is very high for the low income group, traditional herbal medicines whose dosages are not known constitute almost 50% of the drugs used for treatment and very often users of traditional medicines have no names for most ailments. For instance typhoid and malaria can be called "fever". (G.Arikpo et al., 2009). Other factors include lack of time to see the doctor, incessant advertising, mild sickness, knowledge of diagnosis, convenience, increased availability of OTC drugs and Prescription Only drugs.

CHAPTER THREE

3.0 Introduction

This chapter describes the methodological procedures that will be used in conducting the study and basically involves the following; study area, study population, the concepts of study design, sample size, sample population, sampling technique, and inclusion and exclusion criteria are discussed and elucidated comprehensively. The chapter will also deal with issues of data collection method, data analysis, data presentation, data quality control and research ethics.

3.1 Study design

The study will be across sectional study design and will enable the researcher to study well the patients attending KIUTH Outpatient department with the help of questionnaire.

3.2 Study area

The study will be conducted from KIU-TH Outpatient Department, which consists of Pediatric Outpatient wing, Dental clinic, Medical outpatient clinic, Ophthalmology clinic, ANC, ENT which are all specialized clinics located in Bushenyi-Ishaka municipality, Ishaka town in Bushenyi district. Bushenyi District is located in the south western part of the Western Region of Uganda. It has 1 county with 9 sub-counties, 1 municipality and 3 divisions. Bushenyi-Ishaka municipal is the largest town in Bushenyi district and it is located 75km by road, northwest of Mbarara, the largest town in the sub region. Bushenyi district which is located in south western Uganda and it is approximately 350 kilometers (200 miles), by road using the Mbarara-Kasese highway from Kampala, the capital city of Uganda.

3.3 Study population

The study population is adults over 18 years living in Bushenyi district which has a population of 260,000 people, without disabilities that would impend or hinder comprehension of the questionnaire in use. The dominant tribe being Banyankole and others like Bakonjo, Batooro and Bakiga. They are averagely educated, a few are university graduates and some are tertiary graduates. Their social economic status; they are generally poor people spending less than 1US dollar per day. The major economic activity is subsistence farming particularly matooke, coffee, tea, bananas, millet, maize and they also carry out livestock farming and sell meat, milk and milk products and others do commercial trade.

3.4Sample size determination

The sample size will be determined by fisher's formula (1962)

$$n = \frac{z2pq}{d2}$$

When n = designed sample size.

z= Standard deviation at the desired degree of accuracy which is 95% z= 1.96.

p=proportion of target population estimated to have similar characteristic .50 %(constant) or 0.5 is to be used therefore p=0.5 because of unknown incidence of which is being measured.

q=Standard 1.0 –p =0.5.

d=Degree of accuracy. 8.0 % will be used.

On substituting the above formula,

1.962 x 0.5 x 0.5

0.082

Hence, n = 150

3.5 Sample population

The primary sample participants will comprise both adult women and men (above 18 years) who are attending Kampala international university teaching hospital, Bushenyi district, western Uganda.

3.6 Sampling method

Purposive sampling method will be used where by all patients attending outpatient department at the time of study, and consented to the study will be interviewed.

3.7 Inclusion criteria

All patients aged 18 years and above, who will be, attending outpatient clinics and university students who have the insurance card, under KIUTH insurance scheme, seeking outpatient health care servicesand consent to take part in the study.

3.8 Exclusion criteria

The very sick patients and patients on wards.

3.9 Data collection method

3.9.1 Data collection instrument

The data for the study will be collected using a structured interview questionnaires which consists of 2 parts, Part A, and Part B, conducted among all patients attending Kampala international university teaching hospital, Outpatient Department in Bushenyi district, western Uganda during the period of the study and questionnaires will be fill by people I will train as am next to them because cases of language barrier and illiteracy are eminent.

3.9.2Data quality control

To ensure quality control, I will conduct a one day training for the two research assistants who there-after I will send for field testing of the study tools. A total of four questionnaires will be distributed for the pre-test with my close supervision. This will determine the extent to which the questions in the questionnaire address the variables of interest.

3.9.3 Data collection procedure

Data will be collected from the respondents by use of self-administered questionnaires and interview schedule. I considered the method to be most appropriate for data collection as per the study design.

Three research assistants will be trained to help in data collection process especially in those patients who cannot understand English, the language used by the researcher.

3.10 Data analysis

The analysis will be performed using the Statistical Package for Social Sciences (SPSS).

3.11 Data presentation method

Data will be presented in form of tables, graphs and charts which will represent the statistical data collected from the respondents.

3.12 Limitations of the study

The study is limited to self-medication with the antibiotics and antimalarial drugs only other forms of self-medication and drug abuse are not included.

Financial constraints- The research will be confined within Kampala international university teaching hospital due to financial implications.

Time frame- The study will be done in a relatively shorter period by involving more research assistants to facilitate quick data collection.

Language barrier- research assistant will be those who understand the native language to facilitate good communication.

3.13 Ethical consideration

The study will be conducted upon ethical approval from Kampala International University-Western campus. An introductory letter will be obtained from the administrator of school of Allied Health sciences in which copy of it will presented to the ED KIU-TH, then another one to the in- charge of medical wards KIU-TH T to get permission for collecting the information. The purposes and objectives of the study clearly explained, privacy and confidentiality during and after the study will be maintained. Codes use instead of patient names to foster confidentiality.

CHAPTER FOUR

4.0 RESULTS

This chapter presents the results, analysis and interpretations of findings of the study according to the specific study objectives. Findings and results are presented in form of bar graphs, pie charts, tables and figures

4.1 Social demographic characteristics of study populations

Results as obtained from patients attending KIUTH medical care in themonth period of data collection, with sample of 150 patients who were attending outpatient department in the month of May, 2017.

Less than half of the respondents (41.2%) were men and 58.8% were females. Most respondents were from urban places of residence (62%) and had university or a secondary education (70.3%). Study population demographic characteristics of general Bushenyi population are detailed in Table 1.

Nearly all the respondents (83.3%) claimed that they had self-medicated with drugs at some point in their life. 31 of the total respondents (20%) indicated that they had used drugs on their own at least once in the last 2 months, and one-quarter (24.9%) at least once a year. The main sources of drugs were, pharmacies (64.5%), family members or friends (41.8%), and the drug shops (40.5%) (Study participants could choose more than one possible source of information).

*Table 1**Demographic characteristics of the patients attending KIUTH medical care services.***

VARIABLE	FREQUENCY	PERCENTAGE (%)
1. Age		
18-29	49	41.6
30-39	32	27.6
40-49	28	24

>50	8	6.8
2. Gender		
Male	49	41.2
Female	69	58.8
3. Level of Education		
Secondary level	35	30
University level	48	40.3
Primary level	24	20.6
None	11	9.1
4. Place of Residence		
Urban	73	62
Rural	45	38
5. Socioeconomic status		
Upper	6	5.2
Middle upper	34	29.1
Middle lower	48	40.3
Lower	30	25.4
6. Parenthood		
Yes	73	61.6
No	45	38.4

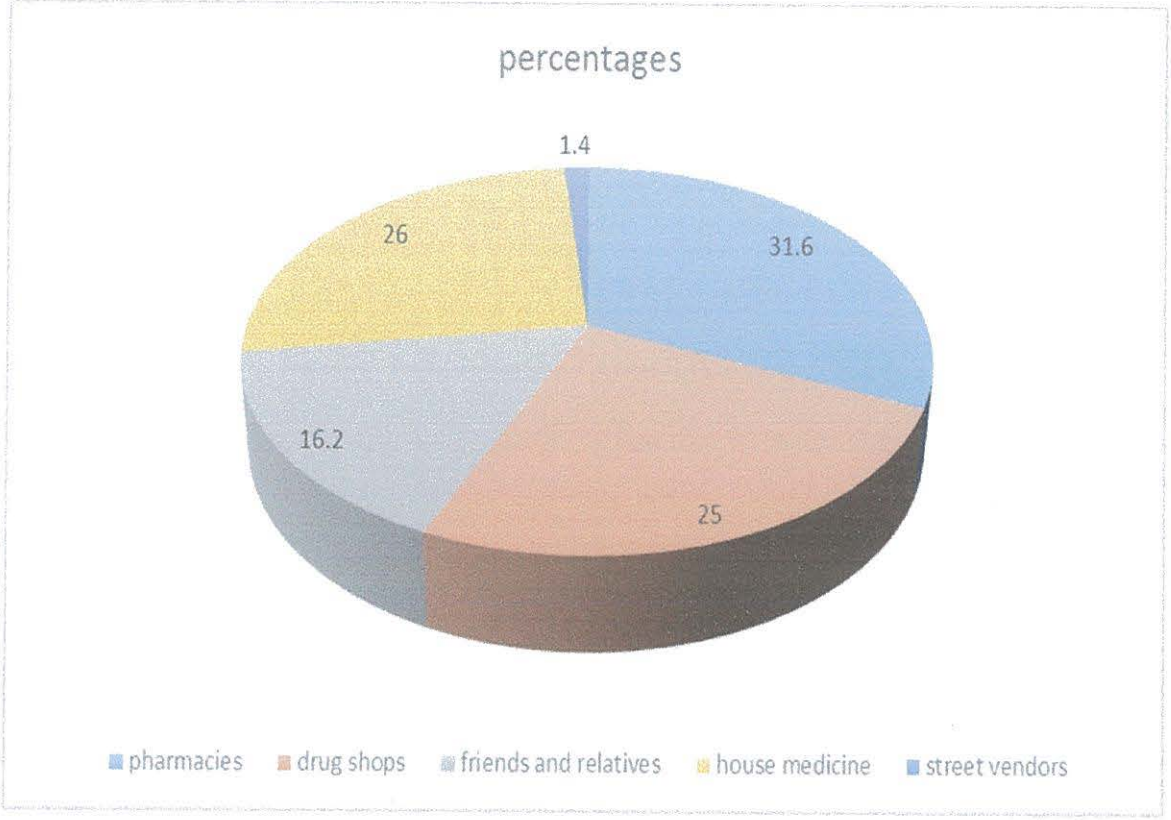
4.2 Prevalence of the self-medication practice among the patients.

Most of the respondent 98 (83.3%) were involved in self-medication practice. In the study, self-medication was high among patients between 18 and 29 years of age 41.6%, females were more involved the males with 58.8% (69) and 70.3 have an education at least secondary.

4.2 Common sources of drugs used in the study.

The most common source of the drugs in the was pharmacies around the study area with 31.6%, followed by friends and relatives with 26%, drug shops 25%, drugs kept in the household 16.2% with the least is vendors 1.4%.

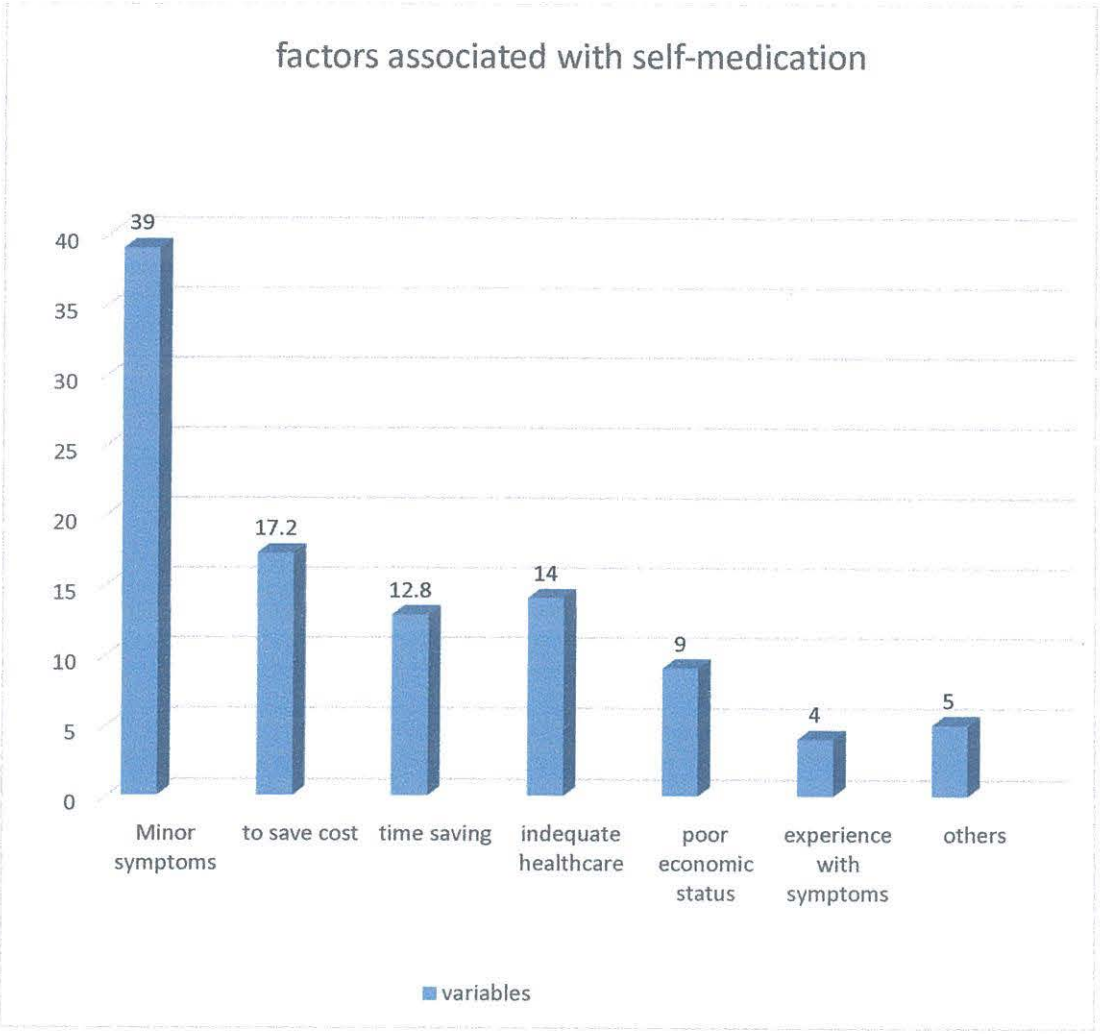
Figure 1: common sources of drugs used by the patients in the study by percentages.



4.3 Factors associated with increased rate among the patients in the study.

In the study majority of the respondents reported self-medicating due to symptoms being mild in 39%,while 17.2% were influenced by the high cost of medical care, and inadequate health care made 14%, 12.8% of the respondents found self-medication time saving due to long queue in public settings, and poor economic status contributed to 9%,and 4% claimed to have knowledge about recognizing symptoms previously treated with the drugs they used while other factors contributed 5%.

Figure 2; Factors influencing self-medication among respondent patients at KIUTH.



4.4Common drugs reported.

For children with cough, treatment was mainly by use of analgesic/antipyretic (paracetamol) 21% followed by antibiotic amoxicilin,(13%). There was also a relatively high use of the antimalarial, co-artemether in 28(11%). Fig; 4 shows most common drugs reported in most of therespondents.

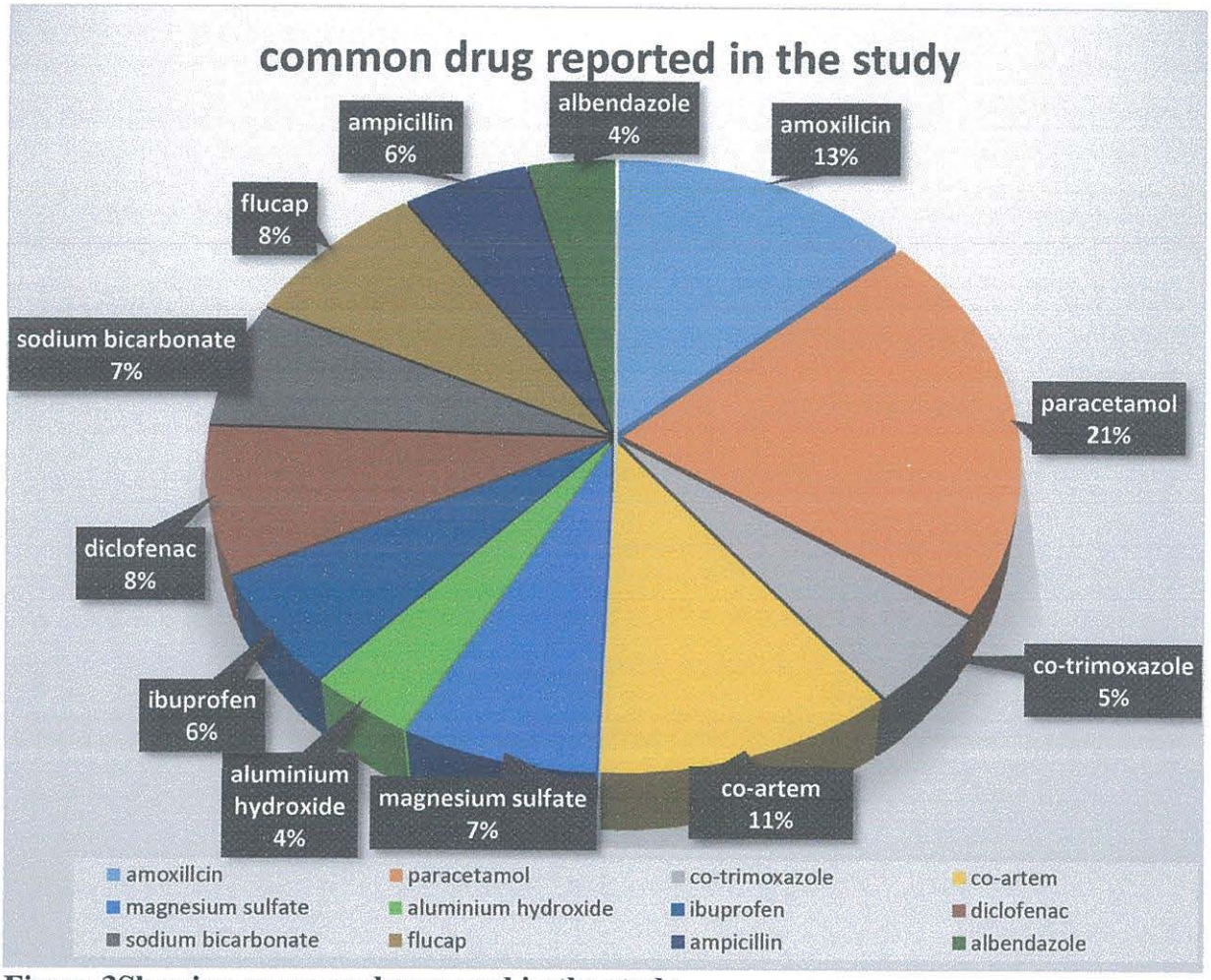


Figure 3Showing common drugs used in the study

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS.

Study was conducted to determine the self-medication practices undertaken by patients attending Kampala International University Teaching Hospital. The main aims were, to determine the prevalence, establish the common factors associated with self-medication practice, common drugs used, symptoms treated with self-medication, sources of the drugs used.

5.1Prevalence of self-medication among the patients.

We found the prevalence of self-medication was 83.3% accounted for by 98 who participated in the study, this is very higher comparedto a study carried out in Northern Uganda post-conflict region, where 75.7% respondents performed antimicrobial self-medication (Ocan M et al., 2014). This variation in the prevalence could have arisen from the difference in the study populations and the socio-economic and cultural attributes between the communities. With this rate at which the practice is being carried out many patient lives are being exposed to immense danger due to unknown drug reactions in different patients with some drugs and resistance emergency is an issue of great concern.

5.2 Factors associated with self-medication among the patients

The increase in was due to a number of factors like socioeconomic factors, ready access to drugs, the increased potential to manage certain illnesses through self- care, and greater availability of medicinal products, cost of the drugs, educational level, age and gender are the other important factors influencing self-medication. One of the most common reasons for indulging in self-medication includes high cost of private doctor's consultations in 17% (20/118) of patients. In accordance with result in the study prior familiarity and the non-seriousness minority) of the illness were the top two reported factors for self-medication, (Bushra Ali Sherazi et al., 2012), the patient's assessment of his ailment has being minor was also identified as one of the major factors for self –medication accounting for 39% of the respondent patients in a study conducted.

5.3Drugs commonly used and their sources

Most drugs used were analgesics e.g. Paracetamol accounting for 21% of the drugs reported. followed penicillins e.g. amoxicillin with 13% and antimalarials, coartem had 11%, their usage

depended on their easy accessibility from numerous unregulated drug shops. medicines from previous prescriptions in the house, pharmacies and from friends and family members. Other drugs reported include antacids i.e. magnesium sulfate and aluminium hydroxide. sodium bicarbonate, diclofenac, flucap as shown in figure 4. Most patient respondents reported to procure their drugs from pharmacies accounting for 31.6% of all drug sources.

CONCLUSION

Prevalence was higher among the patients seeking medical care at KIUTH as 83.3%, the most common cause being patients viewing their illnesses as minor (39%) and sources of the drugs are pharmacies in 31.6% of the respondents. Majority of the patient respondents interviewed reported that severity of the illnesses is a great factor, for a decision to be made whether to seek medical care or buy drugs. Paracetamol 21% and amoxicillin 13% the most used drugs in the study. which were used to treat the most common symptom which was generalized body ache/pain.

RECOMMENDATION

Health education campaigns, strict legislations on dispensing drugs from private pharmacies and increasing the quality of and access to health care are among the important interventions that might be needed in order to change the people's health seeking behavior and protect them from the potential risks of self-medications

Through creation of awareness among the patients about the dangers of self-medication will help them practice responsible self-medication as emphased by WHO as strategy of making health care available to economically poor countries.

More studies need to be carried out to assess different factors and issues concerning self-medication among the patients.

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APPENDICES

APPENDIX I:

CONSENT FORM

Introduction

I am ..... a student of Kampala International University pursuing a Diploma in Clinical Medicine and Community Health. I am carrying out a study to assess factors and effects associated with self-medication antibiotics and antimalarial drugs among patients attending Kampala international university teaching hospital, Out Patient Department, Bushenyi district, western Uganda. I am inviting you to take part in this study but before we discuss more about the study, I ask you to reflect on whether you want to participate or not. In case you do not understand, some words, I will explain them to you, and feel free to ask me or my research assistant questions as we go along.

Confidentiality

With this study, something out of ordinary is being done in this community. It is possible that if others in the community are aware that you are participating, they may ask you questions. We will not be sharing the identity of those participating in the study.

I have read the foregoing information. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

Name of participant.....

Signature/Thumbprint of the participant.....

Date..... (Day/Month/Year)

Name of researcher.....

Signature.....

Date.....

APPENDIX II:

QUESTIONNAIRE

To assess the factors and effects associated with self-medication with antibiotics and antimalarial among patients attending Kampala international university teaching hospital. Bushenyi district, western Uganda.

Instructions

Please answer the following questions whose answers are required solely for research purposes. Please tick the appropriate box or fill the spaces provided for each question below. There are no restrictions whatsoever about specific answers to be given. Enrolment criteria:

Oral consent from participants.

Some questions have MORE THAN one answer.

Part A

Demographic DATA

1. Age: .....

2. Educational level:

1. None ◯ 2. Primary education ◯ 3. Secondary education ◯

4. University ◯

3. Gender:

1. Male ◯ 2. Female ◯

4. Monthly income [Ugandan shillings/month]:

1. < 100,000 ◯ 2. 100,000–250,000 ◯

3. 250,000–500,000 ◯ 4. > 500,000 ◯

5. Residence

Town/Urban ◯ 2. Village/Rural ◯

7. Are you a parent with the child?

Yes ◯

No ◯

Part B

1. Have you ever treated yourself drugs?

A. Yes ◯ B. No ◯

If NO, please go to Part B Question 1

i. **What drug did you ever treated yourself (self-medicate) with?**

_____

2. What drug are you currently using in your self-treatment?

_____

ii. What was your illness or sickness for self-medication with the drugs? (Check more than one if applicable)

A. fever B. diarrhea

C. cough D. generalized body pain/ache

E. Other specify

_____

4.What was (were) your reason(s) of self-medication with the drugs? (Check more than one if applicable)

A. Cost saving ◯ B. minor illness C. time saving ◯

D. I have experienced the illness before ◯

D. Others (specify)_____

6. How did you choose Your of drugs ... (Checkmore than one if applicable)

A. Recommendation by community pharmacis ◯ B. Opinion of family members ◯

C. Opinion of friends ◯ D. My own experience ◯

F. Previous doctor's prescription ◯

G. The advertisement ◯

7. Where did you usually obtain drugs from for self-medication? (Check more than one if applicable)

A. Community pharmacies ⬭ B. drug shop operators ⬭

C. Leftover from previous prescripti⬭ D. street vendors ⬭

E. Others (specify)

8. How did you know the drugs? (Check more than one if applicable)

A. By checking the package insert ⬭ B. By consulting a doctor ⬭

C. By consulting family members/friends ⬭

E. From the newspapers, magazines, books, or TV programs ⬭

F. From the Internet ⬭ G. From my previous experience ⬭

H. By guessing by myself ⬭

9. Please write down the names of drugs you have ever taken for SELF-MEDICATION:

A.

B.

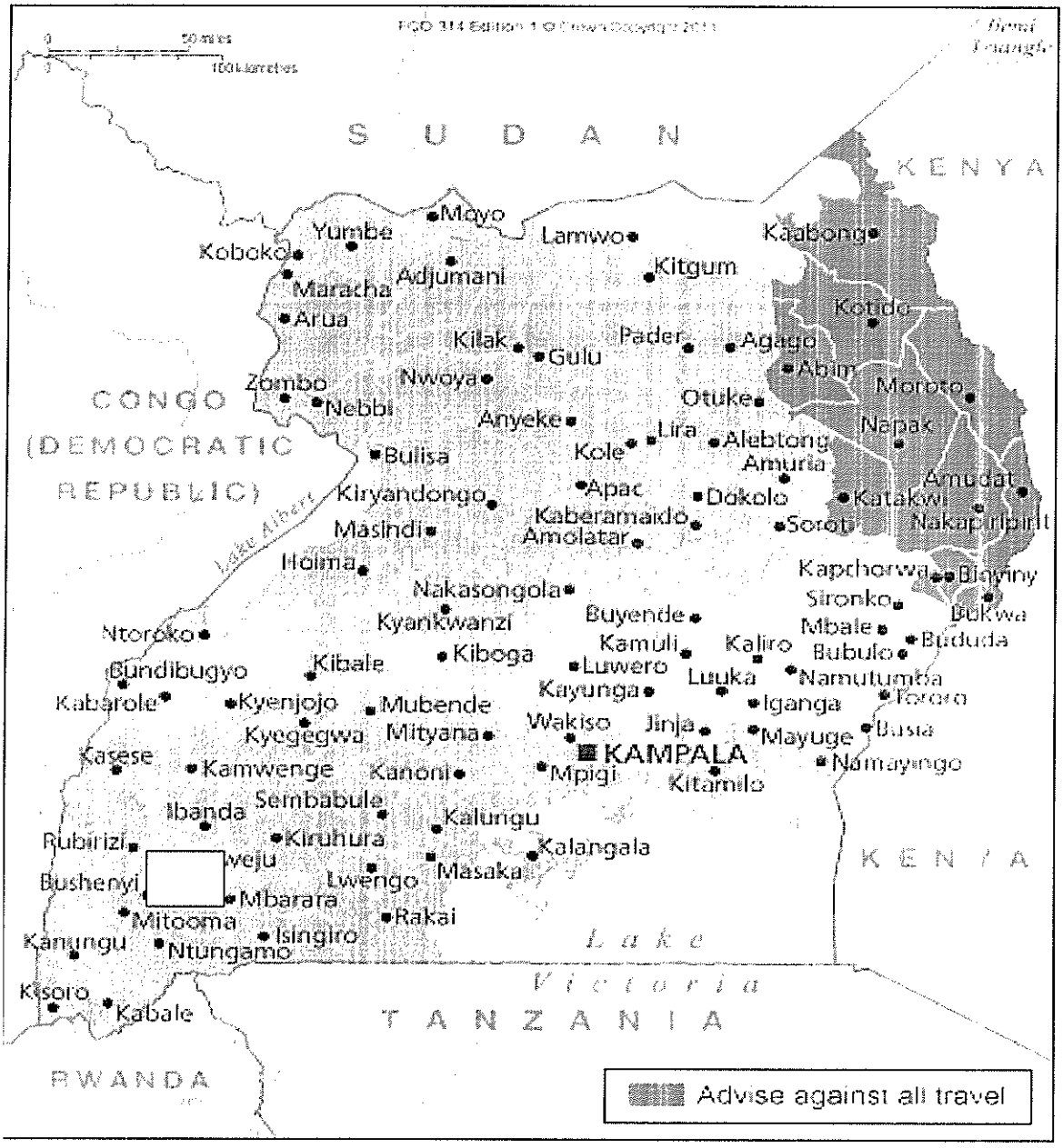
C.

D.

E.

APPENDDIX III: MAP OF UGANDA

MAP OF UGANDA SHOWING BUSHENYI DISTRICT AND NEIGHBOURING DISTRICTS.



KEY **BUSHENYI DISTRICT**

KAMPALA INTERNATIONAL UNIVERSITY
TEACHING HOSPITAL

School of Allied Health Sciences (SAHS) Ishaka,
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OFFICE OF THE ADMINISTRATOR –SAHS

Date: 5/05/2017

To: EXECUTIVE DIRECTOR KIUTH

Dear Sir/ Madam/Professor,

SUBJECT: DATA COLLECTION

Academic research project is an Academic requirement of every student pursuing a 3 year Diplo in Clinical Medicine & Community Health (DCM) of Kampala International University- West Campus (KIU-WC). DCM program is housed in the School of Allied Health Sciences (SAHS).

The students have so far obtained skills in Proposal writing especially chapter one, Three & Questionnaire design. The student's topic has been approved by SAHS Research Unit and is therefore permitted to go for data collection alongside full proposal & dissertation writing. As you may discover the student is in the process of full proposal development. However, the student MU: present to you his/her questionnaire and his/her research specific objectives that he/she wishes to address. We as academic staff of Allied Health Sciences are extremely grateful for your support in training the young generation of Health Professionals. I therefore humbly request you to receive and allow the student BIRUNGI SOLOMON Reg. No. DCM/0002/1431/04 in your area/hospital to carry out his research. His/her topic is hereby attached. Again we are very grateful for your matchless support and cooperation.

Topic: Factors associated with self-medication among patients attending Kampala International University.

Sincerely yours,

Christine Kyobuhaire, Administrator- SAHS

CC: Dean SAHs
CC: Associate Dean SAHs
CC: Coordinator, Research Unit- SAHS
CC: H.O.D Dept. Public Health
CC: H.O.D Laboratory Sciences
CC: Coordinators; TLC & DEC