

# **Self-Medication Practices among Clients of Shanan-Gibe Hospital, Jimma, Ethiopia**

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# **Self-Medication Practice among Clients of Shana Gibe Hospital, Jimma, Ethiopia**

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## **Abstract**

**Back-ground:**Self-medication makes consumers more health conscious, reduces treatment burden on healthcare facilities and curtails the cost and time of obtaining access to treatment. However, it increases risks such as drug resistance, adverse drug reactions, incorrect diagnosis, drug interactions and poly-pharmacy. No data is available on the current status of self-medication practices among Shanangibe hospital which the current study is aimed.

**Objective:** The purpose of this study is to assess the practices and factors associated with self-medication in Shanan Gibe hospital, Jimma, Ethiopia.

**Methods:**A cross-sectional study was undertaken in Shanan Gibe hospital from June 11 to 16, 2015. According to the data from the hospital, which clients used SM before one month, the number of patients served at adult OPD in March, was 450,112 patients who are expected to come into one week period were taken consecutively for the study. A pre-tested structured questionnaire was used for data collection to assess self-medication practices. The data were collected by threefourth year three health officer students. The validity and reliability of the data collection format was (pre-tested) before the actual study period. Data was analyzed using statistical package for social sciences (SPSS) version 20.0. An official letter was taken from Jimma university community Based Education office to Shanangibe hospital administrative office.

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## **Abbreviation**

IPF = International Pharmaceutical Federation

OPD=Out Patient Department

SGH= Shanan-Gibe hospital

SPSS= Statistical Package for Social Sciences

SM= Self-Medication

WHO=World Health Organization

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# **Chapter One**

## **Introduction**

### **1.1. Background**

Self-care is what people do for their own selves to establish and maintain health, prevent and deal with illness (WHO, 1998). It is a broad concept encompassing hygiene, nutrition, lifestyle, environmental factors, socioeconomic factors and self-medication (Al Khaja et al., 2006, Alano et al., 2009). Self-medication, as one element of self-care, is the selection and use of medicines by individuals to treat self recognized illnesses or symptoms (WHO, 1998). It is use of nonprescription medicines by people on the basis of their own initiatives. Husain A and Khanum A, (2008) also defined self-medication as obtaining and consuming medication without professional supervision regarding indication, dosage, and duration of treatment. However, self medication is not necessarily means the consumption of modern medicines but also of herbs.

The International Pharmaceutical Federation defines self-medication as the use of non-prescription medicines by people on their own initiative. Self-care, including self-medication, has been a feature of healthcare for many years and people have always been keen to accept more personal responsibility for their health status( IPF,2013).

Self-medication is a fairly widespread practice in the world, particularly in economically deprived communities. When practiced correctly, self-medication has a positive impact on individual and healthcare system. It allows patients to take responsibility and build confidence to manage their own health, thereby, promoting self-empowerment. Furthermore, it can save the time spent in waiting for a doctor, and even save life in acute condition and may contribute to decrease healthcare cost( Almasdy D.,Sherif 2011)

The World Health Organization has also pointed out that responsible self-medication can help to prevent and treat ailments that do not require medical consultation and provides a cheaper alternative for treating common illnesses. Nevertheless, the individual bears primary responsibility for the use of self-medication products. All parties involved in self-medication should be aware of the benefits and risks of any self-medication product. Self-medication

may be associated with certain risks such as drug resistance, drug interactions, adverse drug reactions, increased poly-pharmacy, incorrect diagnosis and drug dependence\_(Hughes CM,2001; Sapkota AR,2010). The study will thus conduct to evaluate the practices of self-medication and to identify factors associated with it in Shanangibe hospital,Jimma , Ethiopia

## **1.2.Statement of the problem**

Medicines for self-medication are often called ‘non- prescription’ or ‘over the counter’ (OTC) and are available without a doctor’s prescription through pharmacies. In some countries OTC products are also available in supermarkets and other outlets. Medicines that require a doctor’s prescription are called prescription products (Rx products).

Self-medication with OTC medicines is sometimes referred to as ‘responsible’ self-medication to distinguish it from the practice of purchasing and using a prescription medicine without a doctors’ prescription. Self- medication is widely practiced in both developed and developing countries. As a result medications may be approved as being safe for self-medication by the national drug regulatory authority. Such medicines are normally used for the prevention or treatment of minor ailments or symptoms, which do not justify medical consultation. In some chronic or recurring illnesses, after initial diagnosis and prescription, self-medication is possible with the doctor retaining an advisory role (Partha et al., 2002). Studies revealed that there is an increase in trends of self- medications particularly among the youth. This can be attributed to socio-economic factors, life style, ready access to drugs, the increased potential to manage certain illnesses through self-care, and greater availability of medicinal products, socio-demographic, epidemiological, availability of healthcare and health professional, law, society and exposure to advertisement; high level of education and professional status (Alano et al., 2009).

Moreover, knowledge of drugs and their use are the main causes of self-medication especially among pharmacists and physicians (Al Khaja et al, 2006). In most illness episodes, self-medication is the first option which makes it a common practice worldwide. In the treatment of minor illness, when problems are self-limited, self-care can be used. The criteria for considering health problems as a minor illness include having limited duration and being perceived as non- threatening to the patients. For government institutions, this can reduce costs while allowing health professionals to focus on more serious health problems (Alano et al., 2009). In economically deprived countries most episodes of illness are treated by self-medication (G/Mariam and Worku, 2003). In a number of developing countries

including Ethiopia, many drugs are dispensed over the counter without medical supervision. In this case, self-medication provides a lower cost-alternative for people who cannot afford the cost of clinical services. The common episodes for which most people go for self-medication include, but not limited to colds and flu, heart burn, infrequent and difficulty of passing stool, minor skin problems, insect bites and many others (G/Mariam A and Worku S, 2003). Though the practice of self-medication is as old as mankind itself, little has been exploited. If used appropriately, self-medication could lighten the demand on doctors and make people more health conscious. However, if abused, it could delay accurate diagnosis and appropriate treatment, and could cause toxicity, side-effects, drug interaction and unnecessary expenditure (Arzi A et al., 2010). The use of drugs from informal sectors such as open markets and village kiosks encourage the practice of self-medication (Baruzaig A a Bashrahil K, 2008).

In order to handle unnecessary health risk and bacterial resistance due to improperly obtained drugs, it is important to consider the manners of drug availability to consumers. Unlike in the developed countries, illegal purveyors of drugs are common in developing countries along with some practitioners. There is much anecdotal evidence of self-medication with such drugs and inappropriate purchasing of medicines for a particular condition though few studies have quantified their extent (G/Mariam and Worku, 2003). No data is available on the current status of self-medication practices among Shanangibe hospital. [wW](#)hich the current study was aimed.

### **1.3. Significance of the Study**

Due to lack of proper health education to the population, the practice of self-medication is becoming one of the public health problems.

The rising level of resistance of infectious disease to the drug effect can be related to self-medication as one main factor. The aim of this study is to assess self-medication practice in Shanan Gibe hospital. The result will help in recognizing possible intervention measure and provide the base line information to plan health education activities on self-medication practice. Finally based on the study finding feasible recommendation and conclusion was forwarded.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

Unlike the developed countries, illegal providers of drugs are common in developing countries, which is a further source of irrational and potentially dangerous drug use (<http://www.ncbi.nlm.nih.gov>) Improvements in people's general knowledge, level of education and socio-economic status in many countries form a reasonable basis for successful self-medication (WHO,200).

A cross-sectional observational study done in 155 community pharmacies with 800 participants in Amman, Jordan, reported that self-medication is a common practice among Jordanians (42.5%). The variable that was associated with extent of self-medication was respondents' age, where patients younger than 16 years and those older than 60 years were less likely to self-treat. The most common reasons for self-medication in the study were that the ailments were too minor to see a doctor (46.4%), the long waiting time to be seen by doctors (37.7%) and avoiding the cost of doctor's visits (31.4%) (<http://www.nlm.nih.gov>). A survey done in Jordanian population on a sample of 1943 households (9281 persons) showed that 842(39.5%) of 2133 antibiotic users identified via the survey had used antibiotics without a prescription with in a one month study period ((<http://www.nlm.nih.gov>)). Another study conducted in Khartoum state, Sudan, on self-medication showed that from 1,200 individuals included in the study 81.8% of respondents used medicines including herbs without a medical consultation with in two months prior to the study period.

Proprietary medicines alone were used by 28.3%, herbs alone by 20.7%, while 32.8% had used both.

In the study self-medication with proprietary medicines was least common with the middle aged, the elderly and low level of education. It was most associated with low and middle income, but no gender difference was found. Self-medication behavior with herbs was most associated with middle-age, female gender and lowest income earners (Badeg W.& Tsigi.G,2002). A preliminary assessment conducted in Addis Ababa showed that almost all (99.5%) respondents have used herbal remedies for self-care. 20% of the respondents preferred traditional medicine (TM); while 75% preferred both TM and modern medicine (MM) for selfcare (Mecganaw F.& Getu D. 2003).

In another study conducted in Amhara region of Ethiopia on 17,780 people, from people claimed they were sick 995(5.6%) the most important reasons for not visiting health institutions were they believed that the disease did not need treatment in health institutions (31.9%), bought drugs from drug vendors (27.2%) and visited traditional healers (20.2%) (WHO,2004). A study in southern Ethiopia showed that 15% of the persons with perceived illnesses performed self-medication. In another study conducted in Addis Ababa and central Ethiopia the magnitude of self-care was as high as 50% (Tefera A.& Alemayhu W.2003).

A community based cross-sectional survey in north west Ethiopia conducted on 1880 households with 1070 individuals reveal that self-mediation (by the patient themselves or care takers) was employed in 324(27.2%) cases, where as in 332(27.9%) cases no action was taken. 164(13.8%) of self-medicated persons used modern drugs obtained from pharmacy or drug shop. Among the reasons for self-medication in the study include unaffordability (in financial terms) of the modern health services (37.4%), low severity of the symptoms (29.9%) and remoteness of modern health care (4.3%) (Tefera A.& Alemayhu W.2003).

A cross-sectional study conducted in Jimma zone, on 198 households reported that from 93 responds whose family member was ill in the previous month, 8.6% took drugs by themselves without prescription. About 68% of the 93 respondents were cured: of whom 74.6% got treatment in the health institutions while 14.3% use traditional medicines (Solomon W.& Abebe G.2003).

A similar study conducted in Jimma town showed that the prevalence of self-medication in the town is 27.6% which is almost similar with the studies done in Mexico (30%), India (34.5%) and china (32.5%) (9). Another study conducted on 630 households in Butajira, southern Ethiopia, it was reported that 294(46.7%) of respondents had visited health institutions after taking anti malarial drugs at home and 112 (17.8%) had self-medicated at home with antimalarial drugs (Tsegaye G.1998).

According to the 1982-83 rural health survey, more than half of health service seekers relied on traditional healers, lay treatment or self-care. The use of traditional medicine among the urban population is also very high. For instance, in Addis Ababa, where modern health service is relatively better, a significant percentage of the population has been shown to have used traditional medicine (Mecganaw F.& Getu D. 2003).

Reasons for self-diagnosis and self-medication in participants of a prospective study conducted in Addis Ababa, reported that 36.6% replied they believed the disease is not serious, 19.8% the illness emergency care, 18.2% prior experience to the illness and/or drugs and 12.6% less expensiveness were mentioned (Tenaw A and Tsige G.2004).



## **Chapter Three**

### **Objectives**

#### **3.1 General objectives**

To assess self-medication practices among clients of Shannan gibe hospital.

#### **3.2 Specific Objectives**

- To determine the prevalence of self-medication. .
- To identify reasons for self-medication.
- To identify source of information for self-medication.
- To identify commonly treated ailments by self-medication.
- To determine factors associated with self-medication

## **Chapter Four:**

### **Method ~~a~~ And Materials**

#### **4.1 Study Area and Period**

Shanan Gibe hospital started giving service to the community in 2011 by oromia health office. It has 60 beds and OPD which has the capacity of giving service to 450 people. Generally in the hospital there are 74 medical staffs, 9 doctors, 6 Laboratory technician, 39 Nurse, 8 midwife, 4 anesthesia with one environmentalist and 7 pharmacists. It also have its own pharmacy, the activities done in the hospital are minor surgery, family planning and antenatal care, emergency OPD for rural areas.

#### **4.2 Study Design**

A community based cross-sectional study design was employed.

#### **4.3 Populations**

##### **4.3.1 Source of population**

All patients who visit the hospital.

##### **4.3.2 Study population**

Systematically selected patients. (~~all 3<sup>rd</sup> patients~~)

##### **4.3.3. Exclusion criteria**

The following was preclude because we aimed to describe self-medication behavior: (i) patients unable to participate because of cognitive impairment, neuropsychiatric disorders,

language barriers or having presented with an unstable medical illness in the absence of a near relative who could answer for them: (ii) declining study participate

#### 4.4 Sample size and Sampling procedure

According to the information from the Jimma zone shanan gibe hospital, the maximum population that came to the hospital at the end of May was 450. .By using systematic random sampling technique the minimum sample size was determined from the total OPD patient of the SGH by the following formula:-

$$n = \frac{NZ^2pq}{d^2(N-1) + Z^2pq}$$

Where

N=Total population

n = minimum sample size

p= estimate of the prevalent of self medication, since from previous research

p=27.6% is used. (8)

$Z_{\alpha/2}$  = The standard normal variable at  $(1 - \alpha) \%$

confidence level and  $\alpha$  is mostly 5% (i.e. with 95%

confidence level)

d= tolerated error 0.05(5%)

$$n = \frac{450(1.96)^2 \cdot 0.276(1-0.276)}{(0.05)^2(449) + (1.96^2)(0.276)}$$

$$(0.05)^2(449) + (1.96^2)(0.276)$$

n = 158

## **4.5 Study variables**

### **4.5.1 Dependent variables**

- Self-medication practice

### **4.5.2 Independent variables**

- Age
- Sex
- Marital status
- Religion
- Ethnicity
- Educational status
- occupation
- Income
- Peer pressure
- Past experience

## 4.6 data collection procedure

### 4.6.1 data collection instrument

Using semi-structured questionnaire, consisting of the general socio-demographic, socio-economic, perceived illnesses and actions taken to overcome the illness, among patients with one months of illness prior to the interview the data will collect. The questioner was answered by face to face interview and the data was analyzed by using tally sheet. .

#### **4.6.2 Personnel**

Four data collectors will be recruited among third year health officer students. One supervisor will be recruited from graduating class Health Officer Student. One day training will be given to both data collectors and supervisors. Close supervision will be done both by the supervisor and principal investigator.

#### **4.6.3 Data collection technique**

Before data collection, training was given for data collectors to enable them to have common understanding on the objectives of the study the data collection methods and each of the questions in the .

#### **4.8 Data analysis**

The collect data was checked for completeness of information and consistency. The data was entered, and analyzed using SPSS version 20. And results were presented using tables and figures. Chi-square test was used to determine association between dependent and independent variables

#### **4.9 Data quality management**

Before data collection, training was given for data collectors to enable them to have common understanding on the objectives of the study, the data collection methods and each of the questions in the questionnaire. Therefore, the personal variations on interpretation of the questions was minimize. The data collection was supervised by the principal investigator.

#### **4.10 Ethical considerations**

An official letter were taken from Jimma university community based education office to administration of hospital then verbal consent will obtain from the hospital administrator.

The study subjects was clearly be informed about the purpose of the study before administering the questions.

#### 4.11 Dissemination of the findings

The study finding will be submitted to college of Health Sciences,department of health officer.

### Chapter Five

#### RESULT

The questioners were completed for 158peoples who visitedsthe shanan gibe hospital . oOut of that the respondents 75(60.23%)were in the age of 35 and above 93(58.8%)and 65(41.2%) were female and male respectively.mMajority of the respondents 101(63.93%) were literate while 57(36.07%) illiterate. Christian represented 65(41.12%) and muslims 93(58.86%). the majority 73(46.20%) earns monthly income of 301-600 birr and 46(25.31%) earns monthly income of 150-300. The common illnesses for which the subjects took action where headache /fever 58(23.87%), abdominal problem /GI 57(23.46%), cough 53(21.81%),eye infection 7(2.88%) sore throat 10(4.11%), skin disease 20(8.23%) and others 38(15.64%). who had reported headache /fever and cough respectively, were self medicated.

**Table1.** Types of illness reported and action taken in Shanangibe hospital, May 2015 .

Illness/symptom	Action taken			
	MM	TM	N/F	Total
Headache/ fever	48	10	0	58
GI/abdominal problem	40	12	5	57
Cough	32	14	7	53

Eye infection /inflammation	2	5	0	7
Sore throat	2	8	0	10
Skin disease	4	11	5	20
Others	18	13	7	38
Total	146	73	24	243

**Reason of self medication**

85(53.79%), 67(42.40%) and 58(36.7%) reported that they used self medication because its' previous experience for similar illness, illness was minor to see health care provider and low coast alternative respectively,

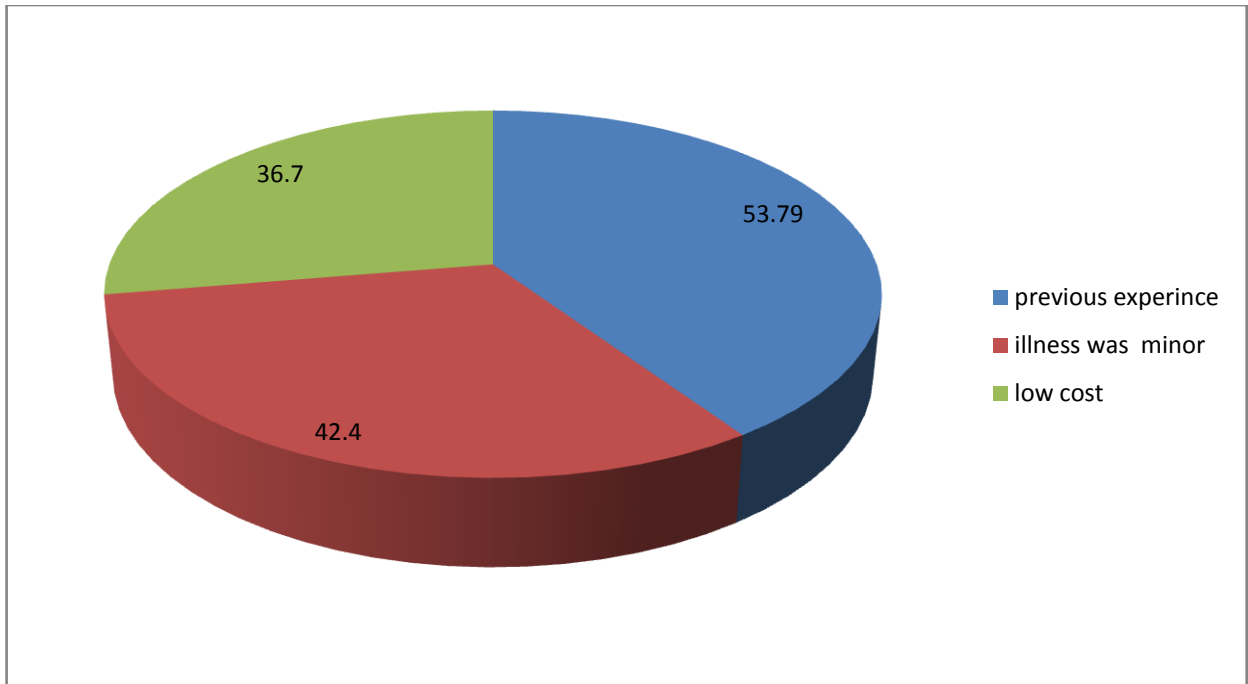


Fig 1. Reason for self- medication in Shanangibe hospital, May 2015.

**Source of modern medication**

56(35.44%), 14(8.86%), 7(4.43%)and 3(1%) said they obtained the drugs from DRO ,left over from privies use , neighbor / relative and kiosk

**Table 2.** sources of modern medicine in Shanangibe hospital,May 2015.

Sources of modern drugs	Frequency	%
DRO	56	35.44
Left over from previous use	14	8.86
Neighbor/relative	7	4.43
Kiosk	3	1

**Source of information for SM**



24(15.18%),18(11.39),71(44.93), 45(28.48); there source of information was personal of drug outlet other health professional, previous experience and neighbor/relative

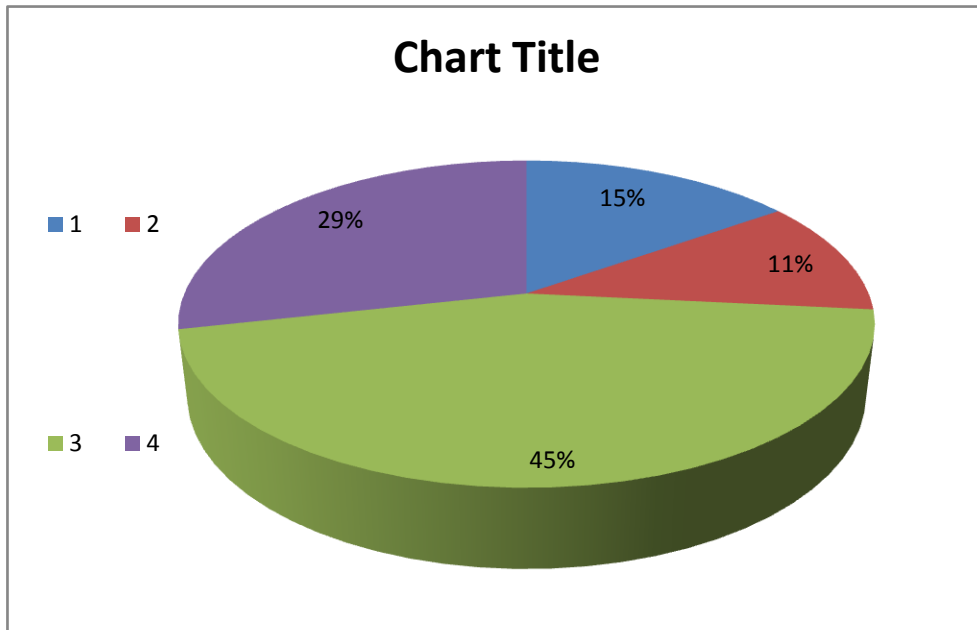


Fig.2 Source of information for SM in Shanangibe hospital,May 2015.

#### Factors associated with self medication

85(53.79),67(42.40),32(20.25), 8(5.06),58(36.70);there reason for self medication previous experience for similar illness,illness was minor to see health care provider,long waiting time ,un satisfaction by the service of H/F and low cost alternative.

Table 3. Factors associated with self medication in shanangibe hospitals, May 2015.

Reason for self medication	Frequency	%
Previous experience for similar illness	85	53.79
Illness was minor to see health care provider	67	42.40
Long waiting time	32	20.25
Un satisfaction by the service of H/F	8	5.06
Low cost alternative	58	36.70

## **Discussion**

Female practiced more SM (58.8%) than males (41.13%) and this findings is in agreement with the study done in Mexico that identified women as the fundamental element in the consumption of drugs and employment of SM (Angeles 1992).The commonest illnesses that led to SM in this study (headache/fever, cough, GI) where also reported similarly.

Unlike the study done in China where people used SM mainly because they felt that they know what to do, in this study one of the commonest reason for practice of SM was previous experience for similar illness 85(53.79%) and its relative less cost 58 (36.7%). As who noted, SM provides a cheap alterative to people who cannot afford to pay medical practitioners. Thus, SM is often the first response to illness among people with low income (Lam CL,1994).

8.86% said they obtained the drugs from over from previous use, 4.43% from neighbor/relative, 1% from kiosk. Where majority of 35.44% are obtained the drugs from DRO while in the studies done in Jimma (Ethiopia) about one third and in France about three over from previous use and from DROs(Tejedor.N,1995).

## **CHAPTER Seven**

## **Conclusion**

A significant number of people use self medication among shenen gibe clients of Jimma town. the self medication behavior of the shenen gibe clients varies significantly with a number of socio-demographic characteristics and its more prevalent among females middle age and lowest income earning individuals. there is also between the types of illness/symptoms, educational level marital status occupation and monthly income or the population. but no association is found between the action taken for illness/symptoms and religion of the population.

the major reason for self medication is reported to be previous experience for the illness/symptoms and majors taken. DRO are cited to be the major source of drugs that used for self medication. the similar illness/symptoms and drugs left over from previous use contribute to the increases in the self medication practices .

## **RECOMMENDATION**

Much has to be done in educating the public including the health care providers on the type of illnesses that can be self-diagnosed and self-treated, the type of drugs to be used for S/M, the proper use of antihelmintics and the dangers of sharing and using left over drugs.

Drug Administration and Control Authority (DACA) needs to effectively implement laws on drug handling and dispensing so as to take necessary measures on illegal providers of drugs.

The Federal Ministry of Health (MOH) and the regional health bureau may need to facilitate ways so as to increase health service delivery institutions and quality of service delivered as well, so that more people can have access for utilizing health facilities. Finally, further study needs to be done in the study area to understand especially self-treatment practice of malaria in the study area.

Annex I

## **Work Plan and Budget**

work plan

Table 1

No.	Activities	Months			
		March	April	May	June
<b>1</b>	Proposal development	<b>X</b>	<b>X</b>		
<b>2</b>	Recruitment of data collectors			<b>X</b>	
<b>3</b>	Training of data collectors			<b>X</b>	
<b>4</b>	Pre-testing the tools			<b>X</b>	
<b>5</b>	Main Data collection			<b>X</b>	
<b>6</b>	Data Entry & analysis				<b>X</b>
<b>7</b>	Report writing				<b>X</b>
<b>8</b>	Submission of the thesis				<b>X</b>

Table 2

## 5.2 Budget breakdown

		Unit	Quantity	Unit price		Total Price	
				Birr	Cents	Birr	Cents
Personal	Principal investigator	Per Day	1 for 3 day	50		150	
	Advisor	Per day	1 for 3 day	100		300	
	Data Collector	Per day	1 for 3 day	50		150	
	Secretary	Per day	1	150		150	
Stationary	Pans	Each	5			10	
	Pensile	Each	1		50		50
	Eraser	Each	1	1		1	
	Paper	Ream	1	70		70	
	Diskettes	Each	1	20		20	
	Binder	Each	1	25		15	
	Transportation	Per trip	3	10		30	
	Duplication	Per page	3	15		45	
	Binding the report	Each	3	6		18	
	Ground Total		24		50	959	50

Annexes

Annex I

Questioner

Part I

Socio-demographic information

1. Address: Kebele \_\_\_\_\_ House Number \_\_\_\_\_
2. Respondent's Age \_\_\_\_\_ Sex \_\_\_\_\_
- Head of household's
3. Marital status \_\_\_\_\_
4. Religion \_\_\_\_\_
5. Educational status \_\_\_\_\_
6. Ethnicity \_\_\_\_\_
7. Occupational status \_\_\_\_\_
8. Income per month (in Birr or in kind) \_\_\_\_\_

**PART – II**

**HEALTH RELATED information**

1. Was there any health problem in your house in the last two year?

Yes  No

2. If yes, for above

S.N	Age	Sex	Educational status	Marital status	Religion	Disease/symptom	Action taken

3. From these actions which one did you take?
- Bought medicine our selves without the health worker prescription.
  - Use holly water.
  - Prayed for the patient.
  - Took medicine given from the health worker.



e. Use valuable traditional medicine.

4. If answered self-medication for above, reasons for preferring it?

- a. Low cost alternative
- b. The illness was minor
- c. Emergency
- d. In accessibility of health care providers
- e. No satisfaction from health care providers
- f. Health facilities are over burdened
- g. Previous experience with similar ailments
- h. Others (specify) \_\_\_\_\_

5. Source of information for choosing self-medication?

- a. Personnel of drug retail outlet
- b. Other health professionals
- c. Previous experience
- d. Neighbor/relative
- e. Other (specify) \_\_\_\_\_

6. What was the category of the medicinal agent used?

(Could you show if there is any leftover)

- a. Analgesic /antipyretic
- b. Antimicrobial
- c. Traditional medicine
- d. Antimalarial
- e. Antihelminthics
- f. Other (specify) \_\_\_\_\_

7. If modern medicine for above, what was the source?

- a. Drug retail outlets(DROs)
- b. Neighbors/Relative
- c. Leftover from previous use
- d. Kiosk
- e. Other (specify) \_\_\_\_\_

8. Outcome of the self-medication?

- a. Improved the health condition
- b. Worsen health condition
- c. No change
- d. Other (specify) \_\_\_\_\_

9. Your plan for future about the same perceived illness /symptom?

- a. Continue self-medication
- b. Look for modern health care
- c. Other (specify) \_\_\_\_\_

10. Do you hoard modern drugs

- a. Yes
- b. No

11. If yes, why?

- a. Leftover
- b. To treat similar ailment
- c. For emergency use
- d. Other (specify) \_\_\_\_\_

12. To what category do they belong, could you show sample of the drugs?

- a. Analgesic /antipyretic
- b. Antimicrobial
- c. Antimalarial
- d. Anthelminthics
- e. other(specify)\_\_\_\_

## ANNEX II

### DUMMY TABLE

Table 3

Socio-demographic characteristics of sample patients, Shanangibe hospital

May,2015

Socio-demographic characteristics		Frequency	Percentage
Sex*	Male	65	
	Female	93	
	Total	158	
Age*	18-24	20	
	25-34	43	
	35-44	25	
	45-54	15	
	55-64	32	
	≥65	23	
	Total	158	
Marital status	Un married	29	
	Married	97	

	Widow	14	
	Divorce	18	
	Total	158	
Religion	Orthodox	43	
	Muslim	93	
	Protestant	20	
	Catholic	2	
	Total	158	
Educational status	Illiterate	57	
	Informal	9	
	Elementary (1-4)	16	
	Junior (5-8)	34	
	Secondary (9-12)	15	
	10+/12+	27	
	Total	158	
Occupation	Business man	8	
	Daily laborer	23	
	Private employee	36	

	Government employee	34	
	Farmer	47	
	Retire	10	
	Other	0	
	Total	158	
Income	< 150	32	
	150-300	40	
	301-600	73	
	>600	13	
	Total	158	

Illness/symptom	Frequency	%
Headache/fever	53	
GI/Abdominal	46	
cough	37	
Eye infection	6	
Sore throat	8	
Skin disease	9	
Other	24	

TABLE:4: frequency of illness/symptom in Shanangibe hospital, May 2015

Table 5, Action taken by individuals with the socio-demographic characteristics of the individuals.  
Shanangibe hospital, May 2015

Socio-demographic characteristics		Statistical test			
		Self-medication			
		MM	TM	N/F	Total
Sex	Male	34	28	13	75
	Female	42	52	18	108
	Total	76	80	31	183
	18-24	11	16	4	31
	25-34	36	25	14	75
	35-44	20	17	7	44
	45-54	8	15	11	34
	55-64	18	27	21	66
	≥ 65	13	17	9	39
	Total	106	117	66	289
Marital status	Unmarried	18	22	5	45
	Married	57	35	19	111
	Widow	10	13	4	27
	Divorce	15	17	2	34
	Total	100	87	30	217
Religion	Orthodox	32	16	7	55
	Muslim	27	45	16	88
	Protestant	16	11	0	27
	Others	2	2	0	2



	Total	77	74	23	172	
Educational status	Pre school					
	Illiterate	15	46	17		
	Informal	3	7	2		
	Kindergarten					
	Elementary (grade 1-4)	12	8	5		
	Junior (grade 5-8)	24	27	6		
	Secondary (grade 9-12)	13	9	3		
	Above grade 10 and 12*	22	11	1		
	Total	89	108	34		

\* Individuals who had completed grade 10/12, and attended higher education

**Keys**

mm-Modern medicine square

H/F – Health facility

C/S – Chi-

TM – Traditional medicine Degree of freedom

T/H – Traditional healer

D/F –

N/F – Non-pharmacological Probability

N/A –No action taken

P –

Table 6 : reported symptom/illness and action taken in Shanagibe hospital, May2015

ACTION TAKEN									
		MM	TM	N/F	TOTAL				
Illness/symptom	Headache/fever	48	10	0	58				
	GI/abdominal problem	40	12	5	57				
	Cough	32	14	7	53				
	Eye infection/inflammation	2	5	0	7				
	Sore throat	2	8	0	10				
	Skin disease	4	11	5	20				
	Others	18	13	7	38				
	Total	146	73	24	243				

TABLE 7: reason for conducting self medication in Shanagibe hospital, May 2015

Reason for self medication	Frequency	%
Previous experience for similar illness	85	

Illness was minor to see health care provider	67	
Long waiting time	32	
Un satisfaction by the service of H/F	8	
Low cost alternative	58	

**TABLE 8**source of information for self medication in Shanagibe hospital, May 2015

Source of information	Frequency	%
Personnel of drug retail out let	19	12.02
Other health professional	15	9.49
Previous experience	58	36.70
Neighbor/ relative	42	26.58
Other	0	-

TABLE 9: distribution of category of medication in Shanagibe hospital, May 2015.

Category of medication	Frequency	%
Anti malarial	37	
Analgesic/antipyretic	48	
Traditional	80	
Antimicrobial	8	
Antihelmentic	2	
Other	4	
N/F	31	

TABLE 10: sources of modern medicine in Shanangibe hospital, May 2015.

Sources of modern drugs	Frequency	%
DRO	56	35.44

Left over from previous use	14	8.86
Neighbor/relative	7	4.43
Kiosk	3	1.89

TABLE 11: outcome of self medication in Shanagibe hospital, May 2015.

Outcome of self medication	Frequency	%
Improved	46	29.11
Worsen	28	17.72
No change	70	44.30
Other	0	-

TABLE 12: distribution of future plan for the same illness in shanangibe hospital, May 2015.

Future plan	Frequency	%
Continue S/M	56	35.44
Visit H/F	44	27.84
Visit higher H/F	12	7.59
Other	23	14.55

TABLE 13: reason for hoard medication in shanagibe hospital, May 2015.

Hoard medicine	Frequency	%
Left over	39	24.68
To treat similar ailments	32	20.25
For emergency	58	36.70
Other	29	18.35

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