



Exploring the Knowledge, Attitude and Practices towards Use of Unprescribed Drugs among Adults of a Selected City of Somaliland

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Authors' contributions

This work was carried out in collaboration between all authors. Author SMF designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors ABMAC and KH managed the analyses of the study. Authors MM and RK managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Background: The emergence and spread of resistance related to the irrational use of antibiotics is a major global public health problem. The aim of this study was to assess Knowledge, Attitude and Practices towards use of unprescribed drugs among adults in a selected city of Somaliland.

Methods: This study used cross-sectional survey and data was collected through semi-structured questionnaire. A purposive sampling of 400 individuals was obtained; Slovene's Formula was used to calculate the sample size & Data was analysed by using SSPS v.20 and Ms Excel.

Results: It is found that 64.3% of the respondents used any form of medicine without a medical practitioner's prescription. It is found that there is a significant association between respondent's level of knowledge and practice of unprescribed drug use.

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Conclusion: The conclusion is that it is important to formulate policies and strategies for drug distribution and sales aimed for controlling the public use of unprescribed drugs.

Keywords: Knowledge; attitude and practice; antibiotics; unprescribed drugs; adults; Somaliland.

1. INTRODUCTION

An unprescribed drug also called over the counter (OTC) refers to drugs that can be obtained without a medical prescription or drugs that are safe and effective for use by the general public without seeking treatment by a health professional [1]. The emergence and spread of resistance related to the irrational use of antibiotics is a major global public health problem. Studies from American, Asian and European countries indicate that between 22% and 70% of parents have misconceptions about the appropriate applications and efficacy of antibiotics and often use them without a prescription. A study found that other determinants of self-medication with antibiotics in low-income countries include over-the-counter sales of antibiotics, the high cost of medical consultations and dissatisfaction with medical practitioners [2].

It has been estimated that more than 50% of antibiotics are purchased without a prescription and used over-the-counter in most parts of the world [3] and like antibiotics, anti ulcerants are overprescribed drugs worldwide both at primary and secondary care [4]. The World Health Organization estimates that more than half of all medicines are inappropriately prescribed, dispensed or sold. In addition, half of all patients fail to take them correctly [5]. The situation in developing countries is of particular concern because the use of antibiotics without medical guidance is largely influenced by the use of the private healthcare system. A disadvantage of this system is that the availability of drugs without prescription becomes ordinary with inadequate regulation of the distribution and sale of drugs [6]. The general population can play an important role in reducing the inappropriate and excessive utilisation of antibiotic and it is necessary to understand their antibiotic use knowledge, attitudes, and practices and if any educational needs exist [7].

In Somaliland which is now recovered from the destructions and started the way to development and social service improvement there is scarcity of information in this regard. The pharmaceutical sector of Somaliland is least invested, and the

pharmacist should distinguish between prescribed and non-prescribed drugs also the wholesalers have no permit selling drugs on retail [8]. the government of Somaliland have been starting to rebuild health care facilities and hospitals, which made progress for the protection of people's health, including mother and child health, but still public health issues and drug regulation is under progress. Recently, self-medication practices spread and became more of a phenomenon in the community of Somaliland, due to lack of public health laws in the country [9].

The research findings will help policy makers to develop proper strategies to understand as well as to improve the factors which are associated with the increasing use of unprescribed drugs. The aim of this study was to assess level of Knowledge, Attitude and Practices towards use of Unprescribed drugs among adults (15 years or older) in a selected City of Somaliland.

2. MATERIALS AND METHODS

This study was cross sectional study conducted at Hargeisa city from May to September 2014. Hargeisa is the capital city of the Republic of Somaliland it is composed of five major districts and hosts around 1, 000,000 people. The sampling unit was individual and purposive sampling was used to select the participants. Every person who was aged 15 years or older which resides in Hargeisa city and available at the time of study was included in this study, while every person who was sick and or who refused to participate during the study was excluded.

In this research, sample size was 400 individuals who were selected purposively from different districts of Hargeisa city. The research instrument was a self-administered semi-structured questionnaire. The first part of the tool was demographic data including: age, sex, marital status, educational level, occupation. The second part of the tool included the knowledge related questions (knowledge of using prescribed drugs, knowledge of the health consequences unprescribed drugs has, knowledge of the types of health consequences).

The third part of the tool included Attitude related questions (Somaliland's regulation against drug distribution and sales, best prevention measures of the consequences that unprescribed drugs usage has). The fourth part of the tool included practices related questions (used any drugs without a medical practitioner's prescription, types of unprescribed drugs you mostly use).

The researcher was responsible for collecting the completed questionnaires from the respondents. The questionnaire took approximately 15 minutes to be completed. Data was analysed by using SPSS v.20 and MS Excel. Simple frequencies, means and standard deviations were utilised for continuous variables. Bivariate analyses like chi-square were done as appropriate. All participants in this study signed a written consent form. The ethical approval was obtained from the Daffodil International University Research Ethics Committee and Ethics Committee of Hargeisa city, Somali Land prior to the start of data collection.

3. RESULTS

It is found that about 40.8% of the respondents were male followed by 59.3% females. Additionally, this table shows that almost near to half of the respondents (48.3%) were older than 30 years of age, followed by 28% of the respondents who were aged 21-30 years of age and 23.5% who were 15-20 years old. Added to this, the results demonstrate that slightly more than half of the respondents (50.3%) were married, followed by 35.5% who were single, 8% who were divorced and 6.3% who were widow/er as shown in Table 1.

Approximately 21.8% of the respondents were illiterate followed by 23% who have educational level of Up to grade school, 23% who have educational level of Up to secondary school, 16.3% who have educational level of Up to college degree, 16% who have educational level of Up to graduate degree. Additionally, the findings show that more than half of the respondents (53.6%) were unemployed, followed by 24.3% who were self-employed, 20.5% who were employee and 1.5% who belong to other kinds of occupation as presented in Table 2.

The respondents were knowledgeable about the health harms of the unprescribed drug use is shown in Table 3. Added to this, it displays that almost 39.8% of the respondents stated that use of unprescribed drugs are important followed by

19.8% who said it is not important and 40.3% who said it is risky. The results also show 19.3% of the respondents agreed that use of unprescribed drugs improves health, followed by 65.8% who disagreed that use unprescribed drugs improves health and 14.8% were uncertain about this regard. Additionally, the possibility of unprescribed drug use by the respondents if it had not had any impact and the result was that 35.8% prefer to take, followed by 48.3% who disagreed to take and 15.8% who were uncertain about this regard.

Almost 35.1% of the respondents stated that the Republic of Somaliland has a reliable regulation against drug sales and distribution, followed by 28% who said the regulation is unreliable and 36.8% said the regulation against drug sales and distribution is poor. Added to this, more than half of the respondents (56.8%) suggested that health education is the best way to prevent use of unprescribed drugs, followed by 37% suggested that rule and regulation is the best way to prevent use of unprescribed drugs and 6% of them suggested combining both rule/regulation and health education is the best way to prevent use of unprescribed drugs. Additionally, more than seven tenths of the respondents think that it is important to stop and prevent use of unprescribed drugs, followed by 23.1% which think that use of unprescribed drugs is risky, 2% think it is normal, and 3.5% think that government must control as shown in Table 4.

Almost 64.3% of the respondents used a medicine without a medical practitioner's prescription followed by 35.5% who did not use. The finding also shows 61.3% of the respondents were used unprescribed drugs more than one time, followed by 38.5% who did not use unprescribed drugs more than one time. This study also find out the types of OTC used by the respondents which are 19.6% of the respondents used Antibiotics, followed by 47% who used Anti pain, 5% who used Sedatives and 28.3% who used other medications as shown in Table 5.

Table 6 shows that there is significant association between knowledge of the health consequences and practices of unprescribed drugs.

4. DISCUSSION

This study looked into the prevalence of unprescribed drug usage among adults of Hargeisa city. The respondents were

knowledgeable about the health harms of the unprescribed drug use similar finding were also stated by other research in Mongolia [2]. People prefer to take unprescribed drugs for emergency medical needs like Anti pain for headache, toothache, muscle pain etc. The results indicate that unprescribed drug users among the respondents in our study was 64.3%. This prevalence is remarkably higher than the reports from study conducted in USA where prevalence of non-prescribed use of pain relievers in their lifetime was approximately one in 10 adolescents aged 12–17 years [10].

Approximately half of the respondents used anti pain medications mostly without medical practitioner's prescription. The study revealed that nearly two-fifths (39.8%) of the respondents stated that use of unprescribed drugs are important. Near to one-fifth (19.3%) of the

respondents agreed that use of unprescribed drugs improves health and 35.8% of the respondents prefer to use unprescribed drugs if it had not had any impact. The bivariate analysis found that there is significant association between knowledge of the health consequences and practices of unprescribed drugs, this is similar to a study conducted in China demonstrated that low level of knowledge associated with antibiotic use [11].

The prevalence of unprescribed drug usage among adults of Hargeisa city was (64.3%) this is remarkably higher than the findings of another study conducted in Mongolia [2]. And it is associated with availability, cost effectiveness and lack of proper regulation of drug distribution and sales. The results suggest formulating policies and strategies for drug distribution and sales.

Table 1. Distributions of the respondents by sex, age and marital status

Variable	Frequency (n=400)	Percentage (%)
Sex		
Male	163	40.8
Female	237	59.3
Age (years)		
15-20	94	23.5
21-30	112	28
>30	193	48.3
Marital status		
Single	142	35.5
Married	201	50.3
Divorced	32	8
Widow/er	25	6.3

Table 2. Distributions of the respondents by level of knowledge and occupation

Variable	Frequency (n= 400)	Percentage (%)
Level of education		
Illiterate	87	21.8
Up to grade school	92	23
Up to secondary school	92	23
Up to college degree	65	16.3
Graduate degree	64	16
Occupation		
Unemployed	214	53.6
Self employed	97	24.3
Employee	82	20.5
Others	6	1.5

Table 3. Respondent's Knowledge of unprescribed drugs

Variable	Frequency (n=400)	Percentage (%)
Respondent's knowledge of prescribed drug use		
Excellent	148	37
Good	152	38.1
poor	99	24.8
Knowledge of side effects of unprescribed drugs use		
Good	304	76
Poor	95	23.8
Knowledge of consequences that unprescribed drugs can cause		
Toxicity	59	14.8
Decreases immunity	55	13.8
Abortion in pregnant women	37	9.3
All	248	62
Use of unprescribed drugs are		
Important	159	39.8
Not important	79	19.8
Risky	161	40.3
Use of unprescribed drugs improves health		
Agree	77	19.3
Disagree	263	65.8
Uncertain	59	14.8
I like use of unprescribed drugs		
Yes	110	27.5
No	289	72.3
Prefer to take unprescribed drugs If there is no consequences		
Agree	143	35.8
Disagree	193	48.3
Uncertain	63	15.8

Table 4. Respondent's Attitude towards consequences of unprescribed drugs and its regulation

Variable	Frequency (n=400)	Percentage (%)
Somaliland's regulation against drug distribution and sales		
Reliable	140	35.1
Unreliable	112	28
Poor	147	36.8
Unprescribed drugs use can be prevented through		
Rule and regulation	148	37
Health education	227	56.8
Both	24	6
Opinion about use of unprescribed drugs in Hargeisa City		
Stop and prevent using	284	71.1
It is risky	92	23.1
It is normal	8	2
Government must control	14	3.5

Table 5. Respondent's practices of unprescribed drugs

Variable	Frequency (n=400)	Percentage (%)
Used any drugs without medical practitioner's prescription		
Yes	257	64.3
No	142	35.5
Used unprescribed drugs more than one time		
Yes	245	61.3
No	154	38.5
Types of unprescribed drugs used mostly		
Antibiotics	78	19.6
Anti pain	188	47
Sedatives	20	5
Others	113	28.3

Table 6. Association of Respondent's use of unprescribed drugs and knowledge of its consequences

Variable	Unprescribed drug use status		Chi-square
	Yes	No	
Use of unprescribed drugs have side effects to the health			
Yes	204	100	4.043** with df1
No	53	42	

***, ** and * indicate significance level at 1%, 5% and 10% respectively

5. CONCLUSION

The study concluded that there is a high rate of non-prescribed medication use among the Somali Land populations. Easy availability of non-prescribed medication poses major health complications so further research is needed to explore the multiple factors influencing people the use of non-prescribed medication in Somali Land. Furthermore, the law makers should bring up some strict legislations in practice which will prevent the sale of medication over the counter without prescription and there should be proper monitoring and evaluation of the pharmacy services would help to identify the challenges.

CONSENT

All participants in this study signed a written consent form.

ETHICAL APPROVAL

The ethical approval was obtained from the Daffodil International University Research Ethics Committee and Ethics Committee of Hargeisa city, Somali Land prior to the start of data collection.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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