Knowledge Attitude and Practices towards use of unprescribed drugs among Adults of a Selected City of Somaliland

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 analyzed 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 significant association between respondent's level of knowledge and practice of unprescribed drug use.* **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*: KAP, 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. 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].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 [4]. 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. The general population can play an important role in reducing the inappropriate and excessive utilization of antibiotic and it is

necessary to understand their antibiotic use knowledge, attitudes, and practices and if any educational needs exist [6].

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 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. This study targeted adults living in Hargeisa city who were available during the study and give consent of participation and the sample size was estimated to be at least 400 individuals. The sampling unit was individual and purposive sampling was used the entire Districts and Villages of Hargeisa city was included and the age of the respondents was also maintained. 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 not available during the study was excluded.

Sample size determination and sampling procedure

Slovene's Formula was used to calculate the sample size

$$n = \frac{N}{1+N(e)^2}$$

Where

N= Population

n= Sample size

e= Marginal error

n=1,000,000/1+1,000,000(0.0025)

=1,000,000/2500

=400

That is why the 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).

A purposive sampling of 400 adult individuals was obtained Data was collected through self administered questionnaire. The questionnaire included the information about the unprescribed drugs usage status (current and non-user), average number of un-prescribed drugs used daily and socio-demographic characters such as age, sex and etc.The researcher was responsible for collecting the completed questionnaires from the respondents. The questionnaire took approximately 15 minutes to be completed. Data was analyzed by using SPSS v.20 and MS Excel. Simple frequencies, means and standard deviations were utilized 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.

Findings

It is found that slightly more than two fifths (40.8%) of the respondents were male followed by around three fifths (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 demonstrates 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.

Slightly more than one fifths (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 shows 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.

The respondents were knowledgeable about the health harms of the unprescribed drug use. 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 shows 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 and15.8% 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.

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.

It is found that there is significant association between knowledge of the health consequences and practices of unprescribed drugs.

Discussion

The study determined that 40.8% of the respondents were male followed by 59.3% females. Near 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. 50.3% were married, followed by 35.5% who were single, 8% who were divorced and 6.3% who were widow/er. This study looked into the prevalence of unprescribed drug usage among adults of Hargeisa city. The overall prevalence of 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. [7]

Approximately half (47%) of the respondents used Anti pain mostly without medical practitioner's prescription. The respondents were knowledgeable about the health harms of the unprescribed drug use similar finding were also stated by other research in Mongolia. [2]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. It is found that there is significant association between knowledge of the health consequences and practices of unprescribed drugs. 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. People prefer to take unprescribed drugs for emergency medical needs like Anti pain for headache, toothache, muscle pain etc. The results suggest formulating policies and strategies for drug distribution and sales.

References

1. US Food and Drug Administration. "Over-the-counter medicines: What's right for you." (2002).
2. Togoobaatar G, Ikeda N, Ali M, Sonomjamts M, Dashdemberel S, Mori R, Shibuya K. Survey of non-prescribed use of antibiotics for children in an urban community in Mongolia. Bulletin of the World Health Organization. 2010 Dec;88(12):930-6.
3. Alhomoud F, Aljamea Z, Almahasnah R, Alkhalifah K, Basalelah L, Alhomoud FK. Self-medication and self-prescription with antibiotics in the Middle East—do they really happen? A systematic review of the prevalence, possible reasons, and outcomes. International Journal of Infectious Diseases. 2017 Apr 1;57:3-12.
4. Holloway K, Van Dijk L. The world medicines situation 2011-rational use of medicines. Geneva: WHO. 2011.
5. Shehadeh M, Suaifan G, Darwish RM, Wazaify M, Zaru L, Alja'fari S. Knowledge, attitudes and behavior regarding antibiotics use and misuse among adults in the community of Jordan. A pilot study. Saudi Pharmaceutical Journal. 2012 Apr 30;20(2):125-33.
6. Napolitano F, Izzo MT, Di Giuseppe G, Angelillo IF. Public knowledge, attitudes, and experience regarding the use of antibiotics in Italy. PloS one. 2013 Dec 23;8(12):e84177.
7. Wu LT, Pilowsky DJ, Patkar AA. Non-prescribed use of pain relievers among adolescents in the United States. Drug and alcohol dependence. 2008 Apr 1;94(1):1-1.
8. Norris P. Interventions to improve antimicrobial use: evidence from ICIUM 2004. School of Pharmacy, University of Otago Dunedin. 2007;75(7):75-.
9. McNulty CA, Boyle P, Nichols T, Clappison DP, Davey P. Antimicrobial drugs in the home, United Kingdom. Emerging infectious diseases. 2006 Oct;12(10):1523.
10. Friedman JF, Lee GM, Kleinman KP, Finkelstein JA. Acute care and antibiotic seeking for upper respiratory tract infections for children in day care: parental knowledge and day care center policies. Archives of pediatrics & adolescent medicine. 2003 Apr 1;157(4):369-74.