

Prevalance of self – medication (self – Drug use) in Hadhramout Governorate

Dr. Ahmed Ali Bahaj,

Dept. of Medicine, College of Medicine, Hadhramout University for Science and
Technology, Yemen.

Received 18 / 12 /2005: Accepted 23 /4/2006

Abstract:

Self-medication is worldwide method of prevention and treatment of many health problems and self –use of drugs is commonly practiced. To evaluate the prevalence of this problem in our community in Hadhramout this study was conducted. Data were collected from randomly selected dispensaries and drug stores in the four largest cities in Hadhramout, Mukalla ,Al-shiher ,Al-ghail & Sayoon during the period October – December 1999 .1100 out of 4040 (27%) were self-drug users .(39%) were 21-30years age ,(22%) over 40 years and (14%) bellow 10years.(67%) of self- drug user were of primary school level of education and bellow, (17%) of secondary school and (16%) of university level. The most common methods of drug requisition were to describe the complaints to the dispenser (35.8%), (21.4%) showed sample of drug or empty container and some brought an old prescription (11.5%). some other methods of requisition were also seen. Analgesics-antipyretics were the most drugs requested (35.7%), antibiotics (25.9%), drugs for respiratory system (10.4%), ant parasitic (5.2%) and antacids (5%). Tonics and drugs for DM, HTN were also requested by this methods. The most common cause of self- medication were previous experience (48.3%), advises from relatives and friends (10.3%) and thinking of simplicity of the diseases that no need to consult a doctor (10.3%). (60%) of the patients know some adverse reaction of the drugs, (25%) knew and (15%) didn't know about .Of all the patients (42.8%) practicing self-medication occasionally, (31%) very rarely and (26.2%) most for the times. It is concluded that self-drug use is commonly practiced in our community as affordable and easy way of treatment by different age groups and at all levels of education. There is misuse and irrational over use of not only the OTC drugs but almost every type of drugs. Suitable health education programs, Proper regulations and close observation is recommended.

Introduction:

Self medication is broad term .It does not mean medication by using drugs only, but all other means of treatment including herbal, cultural and spiritual treatment. In recent years appeared in the medical literature new trends in medicine named *Alternative medicine*(which suggest replacement of the standard medicine) and *complementary medicine*(which suggest retention of stadard therapies as central and *primary*). In both advanced and advancing countries there is increasing in the size and diversity over the last few years of these types of medicine(1,2). Many types of herbal drugs are available in the market and the number of people using herbal medicine to treat or prevent wide array of health problems has been increased because they feel it is more natural and dealing with their mind/body interactionsand and spirtualentities.(3,4).

In Yemen, like in other countries because of economic crisis and increasing expense of conventional medicine and its dependency on technology which is inherently costly , there are practitioners of various types of traditional medicine using herbal and other medicinal plants. Recently the are increasing number of treating patient by holy Quran. Others using spirtual medicine and even ther

are shamans and astrlogist but its prevalence in our country is not known(5,6). In astudy from Yemen, it was found that 50% of the studied group preferred herbal medicine (56%in urban and 42.2% in rural area)(7). On the other hand there are many people who use pharmacological drugs, but without medical advise(8). The problems relating to medicine misuse is widely spread in developing countries and Yemen is not an exceptional. In Yemen the quality of health services and health care is far from being achieved and health care infrastructure are less than adequate. Although Yemen was among the first countries in the region who adopted the Concept of Essential Drugs (EDC) (9,10,11). The first National Essential Drug List (NEDL) and the National Standard Treatment Guidelines (NSTG) were issued since 1996,(12,13),but the implementation of it is still far from the minimum because of the absence of proper supervision and follow up(14). Also programs for health education regarding illness, health and dealing with drugs and awareness about its adverse reaction is very low and limited. All these factors lead to widespread prevalence of drug- misuse.

To gather information about the problem of self-drug use in Hadhramout as step in study self-medication, this study was conducted.

AIMS & OBJECTIVES:

General Objective:

To evaluate the prevalence of self-medication (self-drug use) in the community of Hadhramout governorate-Yemen.

Specific Objective

1-To describe the prevalence of self drug use in relation to the Level of education and age groups.

2- To compare the current situation in the four metropolitan cities in Hadhramout.

3-To identify the type and common drugs used.

4-To define the causes for self drug use.

5- To asses the method of drug requiring and source of knowledge and advises.

Material&methods:

A group of female, second year medical students from the four metropolitan cities of Hadramout: Al-MUKALLA, AL-SHEHER, AL-GHAIL & SAYOON were distributed among randomly selected dispensaries and drug stores in their places for several days during the period from October to December 1999. Observation for all customers were done and those asking for drug without recent medical prescription were interviewed according to a questionnaire prepared for this purpose . Including age, sex, level of education, types

of drug ordered, the adviser, knowledge about drug action and its side effects. The habit of self-medication, if it is always, occasionally or sometimes was also evaluated.

Results:

(A): Prevalence of self-drug use & its relation to age group & level of education:

The prevalence of self drug use in all the studied group was 27% of the participants (1100 out of 4040). In Sayoon it was(61%) ,while it was (29%) in Mukalla, (26%) in Alghail &(20%) in Ashiher,(table -1).

Table -1.Prevalence self-drug users according to areas:

Areas	Total	Cases with prescription	%	Cases without prescription	%
Al-Mukalla	1309	929	72 %	380	29%
Al-shiher	1535	1225	80 %	310	20%
Al-ghail	1001	711	74 %	290	26%
Sayoon	195	75	39 %	120	61%
Total	4040	2940	63 %	1100	27%

(Table 2) shows that among the age groups there was some differences in self drug use in different place .In Mukalla & Ashiher it was more common in adult age (21-30 years) while it was more in children & old age in Sayoon & Alghail respectively,

Table (2): Self drug users according to age:

Areas	0-10 Years	11-20 Years	21-30 years	31-40 Years	More than 40 years
Mukalla	0	70	221	34	55
Al-shiher	62	57	88	37	66
Al-ghail	23	24	61	81	101
Sayoon	65	9	10	8	28

Table (3) showing taht (66.2 %) of self drug use were those holding primary school level of education and bellow , while it was in 18.1 % & 15.7 % in secondary &university levels.(table 3).

Table (3) :Prevalence of drug user according to level of education:

Area	University	Secondary school	Primary school	Bellow Primary school
Mukalla	94	53	148	85
Al-shiher	46	71	171	22
Al-ghail	33	53	91	113
Sayoon	-	22	59	39
Total	173	199	469	259
%	15.7 %	18.1 %	42.6 %	23.6 %

(B): Methods of drug requisition & causes :

Table (4) shows that (35.8%) of the attendants asked for drug by describing the complaints of the patients to the dispenser of the drugs and about 10 % presented the patient to the drug store, while (21.4%) showed a sample of drug or an empty container and (11.5 %) of them brought old

prescription papers. Other methods of drug requisition (21.5%) were by giving the name of drug, mentioned a diagnosis and sometimes by describing the color of the drug, (ex. red & yellow or black & red cap. (for tetracycline and ampicillin respectively).

Table (4): Methods of Drug Reacquisition:

Area	Describe the complaints	Brought the patient	Sample/Empty container	Old prescriptions	Others
Mukalla	144	32	81	36	87
Al-Shiher	104	16	56	26	108
Al-Gail	65	59	83	42	41
Sayoon	81	1	15	23	0
Total	394	108	235	127	236
%	35.8 %	9.8 %	21.4%	11.5%	21.5 %

C) Causes of drugs requisition:

The most common causes of self-drug use in the four cities were the good previous experience with the same drug in similar situation (50% of cases). (10%) of the patients thought that the condition was very simple and no need to go by the doctor,

while (10%) used drugs according to advises by relatives and friends. (10%) of self-drug users spoke about economic burden of going to the doctors. However, (21%) mentioned causes like confidence in the dispenser, information from the media (TV, Radio &News Papers) (Fig-7.)

Table (5) :Causes of drugs requisition:

Causes	Previous. Experience	Advised by other People	Economical causes	No need for the doctor.	Others
Mukalla	189	25	52	32	82
Al-shiher	145	24	50	15	76
Al-ghail	151	64	0	20	55
Sayoon	47	0	0	46	27
Total	532	113	102	113	240
%	48.3 %	10.3 %	9.3 %	10.3 %	21.8 %

d) Types of Used Drugs:

The most drug group requested by the patients were Analgesics- Antipyretics (36%), Antibiotics (26%) & drugs used in respiratory diseases (10%). Other groups of drugs were Anti-parasites (5%) , Antacids

(5%), Tonics (3%) , drug used in HTN&DM (2%). Other drugs asked for, were those of diarrhea, constipation, vomiting, urinary anti-septic & occasionally sedatives, table (6).

Table-6: Types of Used Drugs:

Areas	Antibiotics	Analgesic & antipyretic	Respiratory drugs	Tonics	Anti-parasitics	Antacids	DM &HTN	Others
Mukalla	62	237	30	11	15	14	11	35
Al-shiher	107	36	50	9	12	15	9	60
Al-ghail	133	134	23	8	26	27	9	36
Sayoon	18	33	25	11	10	6	4	26
Total	320	440	128	39	64	62	23	157

(e) Knowledge , Attitude &Practice of Self-drug Use:

Most of the patients (60%) mentioned that they know that drugs if used without doctor advice could be harmful and claimed that they heard about some side effects of the drug, while (25%)decided that

they know about but never had it before. (15%)of our patients turned out to be unaware about drug side effects.

Table (7) shows that most of the studied group practicing self-medication only some times in the simple cases (42%), (33%)doing it rarely while (25%) do it very frequently.

Table (7): practicing self – drug use:

Areas	Always		Some times		Seldom	
	No	%	No	%	No	%
Mukalla	150	39.5 %	185	48.7 %	45	11.8 %
Al-shiher	74	23.8 %	119	38.4 %	117	37.8 %
Alghail	49	16.9 %	125	43.1 %	116	40 %
Sayoon	20	16.6 %	47	39.2 %	53	44.2 %
Total	288	26.2 %	471	42.8 %	341	31%

Discussion

Self-medication is worldwide method in preventing and treating health problems. This is done either by using drug alone or other natural, cultural or spiritual methods or by integration between. In Yemen there are many non-drug methods for treatment but are beyond the scope of this study. This study is concerning with self-drug use because it is a common medical problem leading to misuse and appear of unwanted side effects of the drugs and probability of increased of drug resistance specially for antibiotics.

Self- drug use is found to be a common practice throughout the country. In study done in some governorates in Yemen, the prevalence of self-drug use was 63% in urban and 67% in rural areas ⁷. In our study it was only 27% of the respondents of urban were self drug users, most of them were those of primary school level of education and below, where it was less among those of high level of education. The common method of drug requisition was by describing the complaints to the dispenser either directly from the patient or by the relatives if the patient is a child or woman. This method could be reasonable if the drug dispenser is medically qualified but unfortunately, more than 40% of the drug store - keepers are not so, and even in some, are non-medical persons. Information available for them is very few, only 5% of them have or know about National Drug list (NDL) and National Standard Treatment Guideline (NSTG). Unfortunately this type of drug dispensers is greatly involved in the process of diagnosis and choosing drugs. Other methods of drug requisition were by showing empty container or sample of the drug, this found among patients of chronic diseases, Diabetes, Hypertension, Br. Asthma, in some occasions contraceptive pills and drugs for psychiatry were also requested by this way. *Most of drug groups asked for were analgesics –antipyretic, antibiotics, drugs used in respiratory system diseases mainly cough syrups and*

other drugs like anti- parasites, antacids and tonics. The most striking feature of it is the wrong indications; many patients use antibiotics like ampicillin for headache, others use tetracycline for all diarrhea, some using NSAIDS as non-stop drug for the problem of joint and arthralgia without knowing the underlying cause of their health problem specially in elderly patients. Others do the same with drugs of constipation, vomiting and even steroid (prednisolone). Most of the respondents (60%) told that they heard about some side effects of the drug and some (25%) claimed that they know about it, but all never experienced it and all previous uses were safe. Some they know if the drug may harm them (15%). In our study, those practicing self-medication always were about 26% in comparison to 36 % in other study and 42.8 % do it usually compared to 52% ⁽⁷⁾. The most common cause for self-medication was good previous experience with them in similar situation (48.3 %). Some (10.3 %) think that the problem is simple and no need to go to the doctor. Others spoke about trust and confidence in the dispenser, others got their information about the drug from the public media. (10.3 %) of the respondents used the drug according to advises from a friend or relative. (9.3 %) of them spoke about economic cause and high rate of doctor visits.

Conclusion:

1-Self-medication and self-drug use is a common practice in our community, it is practiced in all age group and at different level of education.

2-Among different way, the commonest method of drug requisition is by consulting the drug dispenser and this could be dangerous if many of them are non-qualified and sometimes non medical personnel, besides the availability of large amount of drugs in the market from different source and with unjustified quality.

3-Not only the simple Over The Counter(OTC) drugs but also almost

every drugs could be used in this way.

4-There is irrational overuse and misuse of drugs specially analgesic and antibiotic without awareness of their adverse reaction.

Recommendations:

To Health Authority:

1-Close and proper supervision over the types and quality of drugs in the market.

2-To ensure that all drug dispensers are qualified medical personnel.

3-Use the public mass media & public meetings for educational intervention to discuss the proper way of drug use and possible risk.

4-To instruct all drug dispensers that all drugs should not distributed without medical prescription, only in limited safe drugs and for short period of time.

5-Implementing Ministry of health pharmaceutical policy on NEDL & NSTG.

To the doctors and health workers:

1-Proper explanation to the patients about drug, duration of use, possible side effects.

2-Avoidance of irrational use of drugs.

3-Advise to the patients for regular checkup especially for patients of chronic disease.

Reference:

1-Andrew W: The significance of integrative medicine for the future of medical education. *AJM*.2000; 108:241-243.

2-Astin JA. Why patients use alternative medicine: result of

3-Peoples believed on self-medication as rapid and easy affordable as they have good previous experience as they heard from relatives, friends or public media.

national study. *JAMA*. 1998; 279:158-1553.

4-Eiaenberg DM, Davis RB, Ettner SI, et al. Trends in alternative medicine use in the United State, 1990-1997. *JAMA*, 1998;280: 1569-1575.

5-Self-medication. Why due consumers choose alternative medicine (As published by NDMAC in pharmacy post), July 1998 edition.

6-Diener W, Cair V, Cabezas M. Prevalence study of self medication. Regional scientific meeting, international epidemiological association. Jan24-30;1988; Pattay-Thailand.

7-Kafle KK, Gratulla RP. Self medication and impact on essential drugs in Nepal; WHO/DAP/93.10.

8-Hattab A, Abdo-Rabbo, et al. The current situation of drug use in Yemen (un published).

9-Abdo-rabbo A. Misuse of antibiotics in Yemen. A pilot study in Aden governorate. Presented to the first international middle-east conference on pharmaceutical sciences, Irbid, Jordan.

10-WHO (1992). The use of essential drugs. Geneva, WHO: 3-10.

11-Budon-Jackbowis P, WHO action program on essential drugs; What does it do. *Contact*. October 1994; 17-18.

12-Abdo-Rabbo A, Basherheel KH. (1999); Baseline prescribing and health facility indicator in Yemen (unpublished).