

**PREVALENCE STUDY OF SELF -MEDICATION PRACTICE USED
AMONG NURSING WORKERS IN IBN SINA HOSPITAL IN COAST
HADHRAMOUT GOVERNATE –YEMEN.**

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ABSTRACT

Background: Self medication is a major form of self-care It involves the use of medicinal products by the consumer to treat self recognized disorder, symptoms, recurrent disease or minor health problems.^[1] Self-medication is a frequent practice in many age groups and in different cultures and is defined as a person's spontaneous selection and use of any medicine considered appropriate to remedy their own health problem.^[2,3] Self-medication is defined as selection and use of medicines by individuals to treat self - recognized or self -diagnosed conditions or symptoms. Self-medication can lead to various health

problems like adverse drug reactions, prolonged suffering and drug dependence and increase resistance among various pathogens. According to the world health organization, the self-medication is defined as "selection and use of medicines by individuals (or a member of the individuals' family) to treat self-recognized or self-diagnosed conditions or symptoms".^[4,5] To conclude, the problem of self-medication is widely spread in developing countries. Yemen is one of this country. In Yemen the quality of healthcare services isn't in a good condition and it needs great efforts to be developed The private sector's pharmacies are the most accessible health facilities and people can obtain most types of medication without prescription making the self-medication easy to be practiced.^[4,6] In our study we will explore the prevalence of self-medication of drugs without medical, prescription practice used among nursing workers in Ibn Sina Hospital in Coast Hadhramout Governate –Yemen. **Objective:** To assess the prevalence of self -medication practice used among nursing workers in Ibn Sina Hospital in Coast Hadhramout governate. **Subject and Methods:** The study design was descriptive cross-sectional -based study was carried out from August to October 2017 among 110 nursing worker randomly selected by using self-administered questionnaire. **Results:**

The statistical analysis for data obtained in this study showed that self - medication was widely practiced 73%, self medication use (0-2) per month among nursing workers in Ibn Sina Hospital in Coast Hadhramout governate. **Conclusion:** The present study indicate that self - medication was widely practiced among nursing workers in Ibn Sina Hospital. There is dire need to make them aware about the pros and cons of self-medication in order to ensure safe usage of drugs. We recommend to the ministry of health to do more efforts to make close observation for all pharmacies (private and government) to prevent giving medications without prescription.

KEYWORDS: Self medication is a major self recognized without prescription.

INTRODUCTION

Self-medication is the use of drugs with therapeutic intent but without professional advice or prescription. It has also been defined as the use of nonprescription medicines by people on their own initiative.^[4] Drugs that are prone to self -medication include analgesics, anti malarial, antibiotics and cough syrups, among others.^[7]

It is now becoming a common practice in many countries mainly due to lack of access to health care, easy availability of 'over the counter' (OTC) drugs in market and poor drug regulatory practices.^[8] Self-medication is the use of drugs without a doctor's advice.

Medicines may be recommended by a family member or a friend or a pharmacist. Reasons for self-medication are lack of time to see a doctor, inability to get a quick appointment, illness may be too mild and long distance away. Too much information culled from the internet or magazines make people confident about treating their own illness.^[9]

Advantage and disadvantage of self –medication: It is a growing trend of 'self-care' which has its positive and negative aspects. In several studies it has been found that inappropriate self-medication results in wastage of resources, increases resistance of pathogens and generally entails serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence.^[10,11,12] On the other hand, if done appropriately, self-medication can readily relieve acute medical problems, can save the time spent in waiting to see a doctor, may be economical and can even save lives in acute conditions. It is now accepted that self-care in the form of responsible self-medication can be beneficial for patients, healthcare providers, the pharmaceutical industry and governments.^[10,11] The World Health

Organization has also pointed out that responsible self-medication can help prevent and treat ailments that do not require medical consultation and provides a cheaper alternative for treating common illnesses.^[10,13,14] However, it is also recognized that self-medication must be accompanied by appropriate health information. The WHO Expert Committee on National Drug policies in 1995 stated that Self-medications is wide-ly practiced in both developed and developing countries. Medications may be approved by the national drug regulatory authority as being safe for self-medication. These medicines are normally practiced for the prevention or treatment of minor ailments or symptoms, which usually do not justify medical consultation. In some chronic or recurring illnesses, self-medication is possible with the doctor retaining an advisory role after initial diagnosis and prescription.^[15]

The Dangers of Self-medication are many such as habituation, allergic reactions that may be severe or even fatal. Under-dosage may not cure the symptom. Over-dosage can produce collateral damage to many organs^[9] self-medication result in the wastage of the resources, increase resistance of pathogens and generally cause serious health hazards such as adverse drug reaction, prolong suffering and drug dependence.^[16]

Studies have indicated a high prevalence of self-medication around the world; this has led to public concern in irrational use of drugs. The prevalence of self-medication in Europe is reported 68%, while it is higher in developing countries. For instance, the prevalence of self-medication has been reported 92% in Kuwait and 76% in Karachi and 73.9% in Sudan And 55.7% in Cameron.^[6] Several factors are involved in the increase of self-medication such as lifestyle and access to medicines.^[17] In addition, factors such as gender, race, occupation, health status, high cost of physician visits, shortage of time, lack of access to health systems, and physician shortages play a crucial role in self-medication.^[18]

A study in Greece showed that the most common ailment for which self-medication was practiced were throat symptoms and bronchitis while main medication pharmacies and previous prescription.^[19] Another study in Uganda showed that fever, cough, abdominal pain accounted for the most common ailment while drug sources included drug shops, privet clinics, ordinary shops and government health center. The place where these drugs are gotten also serves as source of knowledge about the drugs.^[19,20]

Self-medication has number of potential risks; Incorrect self-diagnosis, failure to seek appropriate medical advice promptly, incorrect choice of therapy, failure to recognize special

pharmacological risks, rare but severe adverse effects, failure to recognize or self-diagnose contraindication, interaction, warning and precaution, incorrect route and excessive dosage, risk of dependence and abuse.^[21]

Therefore, the purpose of this study was to assess the prevalence of self-medication practice used among nursing workers in Ibn Sina Hospital in Coast Hadhramout Governate –Yemen.

MATERIAL AND METHODS

Research design

This was a descriptive cross sectional study aims to determine self medication practices among nursing workers in Ibn-Sina Hospital- Coast Hadhramout Governate district (August-October) 2017.

This study achieved by team group of new nursing trainers. The study conducted as survey using questionnaire methods to explore the self medication practices among nursing in Ibn-Sina Hospital- Coast Hadhramout Governate -Yemen.

Research population

Study area

This study will carried out between nursing workers in Ibn Sina Hospital in Al-Muklla district in- Coast Hadhramout Government, Republic of Yemen during the period (August-October) 2017.

Time of study

The period of study during (August- October) 2017.

Sample size and methods

Stratified random sampling are the method of selection sample, to ensure that all nursing workers in Ibn Sina Hospital is included in the study sampling. The sample was randomly chosen 110 nurses who worked in the hospital from the total of them which were 201 nursing workers (August- October) 2017.

To do this research we need to know the sample size which is calculated by the following equation:- $ss = Z^2 * (p) * (1-p) / c^2$

Where: ss=size of the sample

Z =confidence level when $95 = 1.96\%$ as tabled. P =expected proportion.

C =margin of error at 5% (standard value of 0.05) =confidence interval. $SS=1,96*2*201*(1-201)/0.05*2$

$SS=61.7$ nurses

So, we estimated a sample size of approximately 110 for an assumed prevalence of self-medication with drugs of 50%, a 95% confidence level and a 5% margin of error.

Data collection procedure

The data will be collected from of difference ages female and male nurses in Ibn Sina Hospital during end quarter of 2017, by trained nurses group.

Self-administrated questionnaire was designed, which included the following:

1. The personal data (age, sex, level of education and level of experience)
2. Prevalence of self-medication of drugs use among nursing and frequency of use drugs self medication per month
3. The main practical knowledge of self medication source of self medication among nurses in Ibn-Sina Hospital- Coast Hadhramout Governate.
4. Conditions for which Self-Medication Practiced
5. The main reasons of self-medication of drugs use (without prescriptions)
6. Groups of medicines taken as self-medication by nursing, and the sources of drug taken for self-medications.

Data Processing and Statistical analysis

The data will be coded and analysis by statistical package for the social sciences (SPSS version 19) to ensure the accuracy of data such as frequencies and percentage were calculated and present in tables and graphs by using computer office programs (word and excel office 2010).

Ethical Consideration

Approval of the project will be obtained from nursing college management and we took a letter to Ibn Sina hospital management to facilitate our work and data collection. So, participate will be informed about the research including the objectives and ensuring confidentiality those are agree to participated will be enrolled in the study and that information will be taken in secrecy and will be used just for the research objective and for

the benefit of the community.

RESULTS

A hundred and ten respondents were approached for participation. All of them provided complete information. The demographic characteristics of the respondents are presented in Table (1). In our study, most of the participants were males (67.3%) and (32.7%) were female, On the Other hand, the majority percentage of the age was between (20-30) years (70.9%). But according to level of education, Higher diploma was the higher percentage which (37.3%). On the Other hand, the majority percentage of Experience years was under 5 years (52.7%).

Prevalence of self-medication of drugs use supporting among nursing in Ibn Sina Hospital, Figure (1) shows that (38%) reported that be supported taking drugs without prescribed, while 62% reported that not be supported to take drugs without prescribed. On the other hand, Figure (2) shows that the majority percentage of the Frequency of use drugs as self medication per month was between (0-2) times/month (74%), (23%) was between (3-2) times/month and (3%) was between (6-8)times/month respectively.

The prevalence rates for taking self-medication (practice) without a prescription were the highest percentage (74%) used (0-2) times/month although they not support using of self-medication in general. From statistical analysis for data obtained in this study showed that self-medication of drugs use among nursing workers in Ibn - Sina Hospital in Coast Hadhramout governate -Yemen was widely practiced used.

Figure (3) shows that the most common symptoms warranting self-medication practice were sore throat (94.5%) and other disease (90%) and 14 followed by vomiting (89.1%), compared to the lowest percentage in fever symptoms (33.6%) Antipyretic drugs (82.7%) and antiemetic drugs (40%) were the most commonly used drugs followed by multivitamin (30%) for self-medication among respondents. (72.7%), (29.1%) and (19.5%) of the participants using self-medication reported practice of antimicrobial drugs, ophthalmic (drops) and hormones used respectively shows in figure (4).

The main reasons of self-medication of drugs use (without prescriptions) that shows in table (2) the participants vary in responding to the causes of self-medication. The highest percentage was for “.Previous experience with the disease and treatment (80%)” as compared

to the lowest percentage “Uses of drugs in emergency (1.8%)”. High cost of treatment (clinic) and availabilities of medicine (get it easy) were other reasons which their percentage (54.5%), (45.5%) respectively.

Finally, from our study we reported that the main sources of drug taken for self-medication was take from family members/friend (88.3%) which was also Second most common source was pharmacy store (72.7%),. All sources of drug taken for self-medication are summarized in table (3).

Table (1): Socio-demographic characteristics of participants.

Socio- demographic characteristics among private pharmacies visitors	Frequency	%
Age:	78	70.9%
20-30 years	23	20.9%
31-40years	7	6.4%
41-50 years	2	1.8%
≥50 years		
Gender : Male Female	74	67.3%
	36	32.7%
Level of Education :	32	29.1%
Diploma	41	37.3%
Higher diploma	37	33.6%
Bachelors		
Experience:	58	52.7%
Under 5 years	24	21.8%
5-9 years	14	12.7%
10-14 years	14	12.7%
Over15 years		

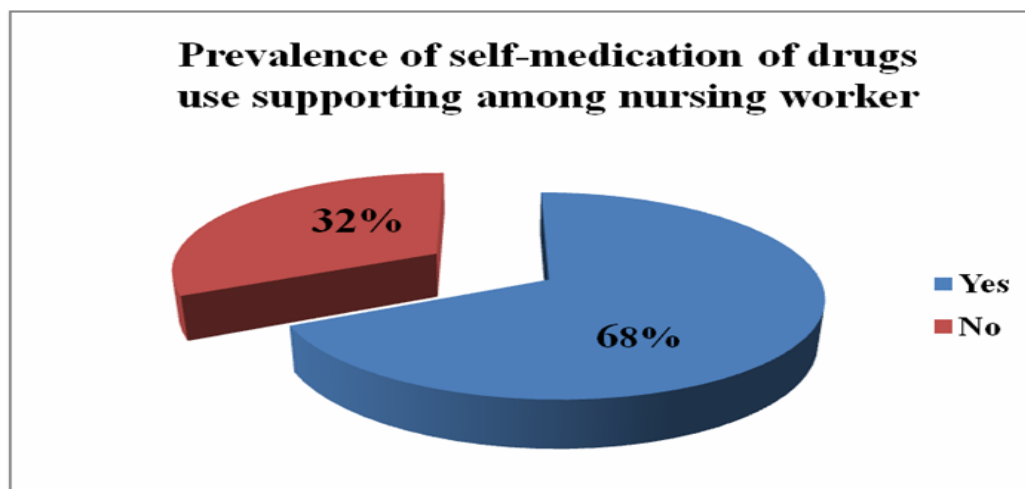


Figure (1): Prevalence of self-medication of drugs use supporting among nursing worker.

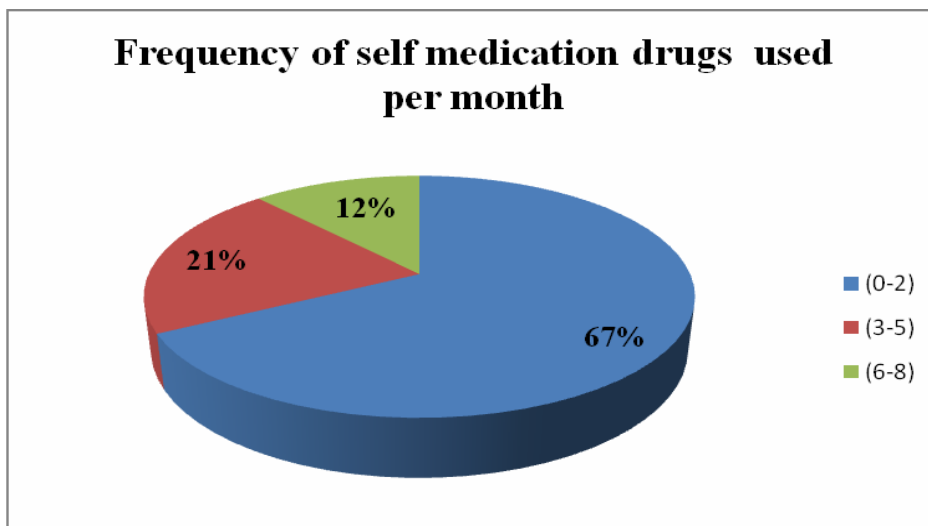


Figure (2): Frequency of self medication drugs used per month among nursing worker.

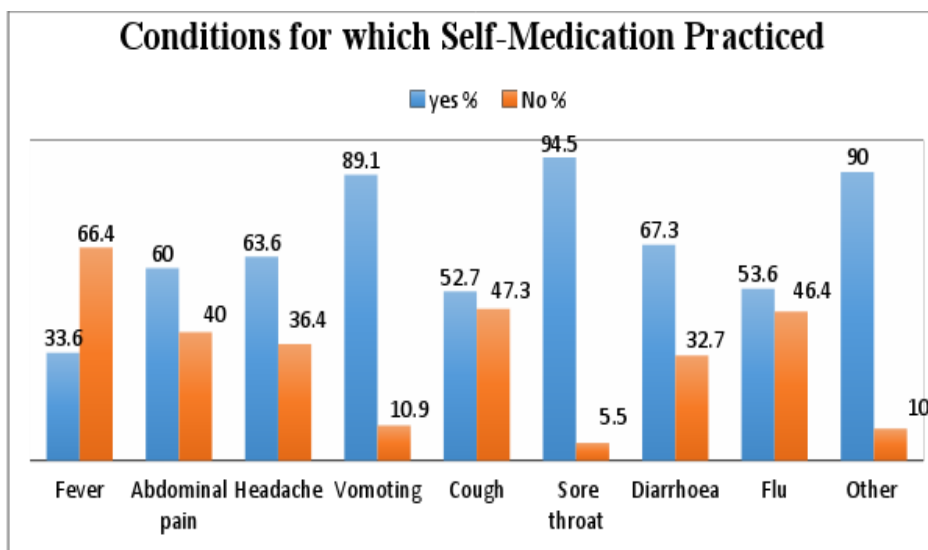


Figure (3): Conditions for which self-medication practiced among nursing worker.

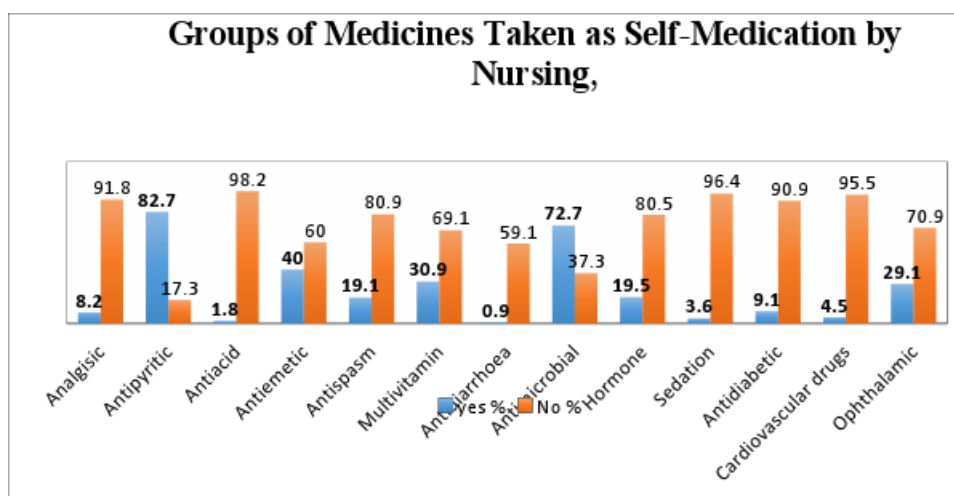


Figure (4): Groups of medicines taken as self-medication among nursing worker.

Table (2): The main reasons of self-medication of drug use (without prescriptions).

The main reasons of self-medication of drugs use (without prescriptions)	Agree		Disagree	
	Freq.	%	Freq.	%
Previous experience with the disease and treatment	88	80	22	20
The difficulty of accessing health services	36	32.7	74	67.3
High costs of treatment (clinic)	60	54.5	50	45.5
Availability of medicine without prescription (easy)	50	45.5	60	54.5
Safe time	22	20	88	80
Uses of drugs in emergency cases	2	1.8	108	98,2
Availability of medicine without prescription (fast treatment)	44	40	66	60

Table (3): Sources of drug taken for self-medications.

Sources of Drug Taken for Self- Medication	Agree		Disagree	
	Freq.	%	Freq.	%
Pharmacy	80	72.7	30	27,3
Left over prescription medication	11	10	99	90
Family or friends	97	88.3	13	11.7

DISCUSSION

Self-medication is the treatment of common health problems with medicines that are taken on patient's own initiative or on advice of a pharmacist, without professional supervision. It is now becoming a common practice in many countries mainly due to lack of access to health care, easy availability of over the counter (OTC) drugs in market and poor drug regulatory practices.^[4]

Many articles have described self-medication in different nations like India, Saudi Arabia, Pakistan, China, Malaysia and Emirate. The results of this study showed that the self-medication practices were prevalence in various which the highest percentage of age groups is (20-30) years (70.9%), gender is males (67.3%) and education levels is higher diploma (37.3%). The prevalence of self-medication of drugs use supporting among nursing in Ibn Sina Hospital, (38%) that be supported taking drugs without prescribed, while (62%) reported that not be supported to take drugs without prescribed. On the other hand, the majority percentage of the frequency of use drugs as self medication per month was between (0-2) times/month (**74%**), (23%) was between (3-2) times/month and (3%) was between (6-8)times/month respectively. This finding is similar to study done by Yamani study (Mogalis. et) (2015) that showed that prevalence rate of self-medication practice was 85% which was higher than what have been reported in countries like Nepal 59%, Bambui 54%, Mexico 34%, Ethiopia 26.2%, 61.2% Pakistan, Indonesia around 60%, Honk Kong of China 63.1%, Palestine 56.0%, Malaysia 62.7%, Puduchery in India 71% and finally in Uganda 75%.

Nevertheless, the prevalence rate in Yemen still less than that reported in some other countries like the UAE reaching 89.2%, Slovenia 94.9% and Brazil 86.4%.^[7,22]

The most common symptoms warranting self-medication practice are sore throat (94.5%) and other disease (90%) and follows by vomiting (89.1%), compares to the lowest percentage in fever symptoms (33.6%) This result agree with study in the main symptoms and disagree with lowest one by Patel. P et. (2013) in India.^[9,23]

Antipyretic drugs (82.7%) and antiemetic drugs (40%) are the most commonly uses drugs follows' by multivitamin (30%) for self-medication among respondents. (72.7%), (29.1%) and (19.5%) of the participants using self-medication practice of antimicrobial drugs, ophthalmic (drops) and hormones using respectively without prescription. This result disagree with study by Patel. P et (2013) in India of the main groups of self-medication (non prescription) and restricted of using prescription as self- medication.^[23] Previous experience with the disease and treatment (80%)” is the main reasons of self-medication of drugs use, on the other hand the lowest percentage is the “Uses of drugs in emergency (1.8%)”. High cost of treatment (clinic) and availabilities of medicine (get it easy) are other reasons which their percentage (54.5%), (45.5%) respectively. The participants vary in responding to the causes of self-medication. This finding is similar to study done by Indian study (Patel. P et) (2013).^[9,23]

Finally, from our study we found the main sources of drug taken for self-medication is taking from family members/friend (88.3%) and the second most common source is pharmacy store (72.7%). This result disagree with study by Mogali S (2015) in Yemen and by Patel .P et (2012) in India.^[7,9,22,23]

CONCLUSION

The present study indicate that self - medication was widely practiced among nursing workers in Ibn Sina Hospital. There is dire need to make them aware about the pros and cons of self-medication in order to ensure safe usage of drugs. We recommend to the ministry of health to do more efforts to make close observation for all pharmacies (private and government) to prevent giving medications without prescription.

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