

DETERMINANTS OF SELF MEDICATION PRACTICES IN COMMUNITY OF URBAN AREAS OF BIKANER, RAJASTHAN

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ABSTRACT

Self Medication is defined as "Use of pharmaceutical or medicinal products by the consumer to treat self-recognized disorders or symptoms, the intermittent or continued use of a medication previously prescribed by a physician for chronic or recurring disease or symptom or the use of medication recommended by lay sources or health workers not entitled to prescribe medicine."

The primary objective of our study was to determine the pattern of self medication practice in the communities of urban areas of Bikaner. This cross-sectional questionnaire-based study was carried out from February 2013 to July 2013 among '365' participants and it was found that self medication practice was quite prevalent (82.1%) among them. Headache, fever and cough/cold were the most common illnesses for which analgesics/antipyretics and cold remedies were found to be consumed by the subjects. The other frequently self taken medicines belonged to antispasmodic, antiallergic and antacid group. This shows that for minor illnesses people show reluctance to consult the physician and take medicines by themselves for quick relief. Chemists were found to be giving the information about medicines most commonly, however, participants do get the information about medicines from previous experiences and from relatives also. It was further observed that patients have been obtaining medicines without prescription mostly from either pharmacies or grocery shops.

Key words: *Self medication determinants; Urban area; Over-the-Counter (OTC); Questionnaire for self medication.*

INTRODUCTION

William Osler once commented, "The desire to take medicine is perhaps the greatest feature which distinguishes man from animals." This desire is perhaps the key factor for the practice of self-medication which can be defined as "Use of pharmaceutical or medicinal products by the consumer to treat self-recognized disorders or symptoms, the intermittent or continued use of a medication previously prescribed by a physician for chronic or recurring disease or symptom or the use of medication recommended by lay sources or health workers not entitled to prescribe medicine."¹

The concept of self medication which encourages an individual to look after minor illnesses with simple and effective remedies has been adopted world wide. Self medication is common practice in economically deprived communities where its prevalence is in the range of 12.7% to 95%.^{2,3}

Medicines for self medication are often called 'nonprescription' or 'Over the Counter' (OTC) medicines. OTC drugs are sold directly to a consumer without a prescription from a healthcare professional from pharmacies and grocery shops, as compared to prescription drugs, which may be sold only to consumers possessing a valid prescription.

There is paucity of studies on self medication practice in Bikaner city. Therefore, this study was carried out to provide practical insights into the issue of self medication in community of urban areas of Bikaner.

MATERIAL AND METHODS

A cross-sectional questionnaire-based study of self-medication practice in community of urban areas of Bikaner, Rajasthan was conducted from February 2013 to July 2013 among 365 participants. The data were collected from different groups like students, government employee and employee of private sector.

Inclusion criteria were as follows: **1)** Men/women between the age 18-65 years. **2)** People consuming any category of medicine without any prescription at time of study. **3)** People able to communicate by at least one of the means viz. speaking or writing. **4)** Patients voluntarily giving consent.

Exclusion criteria were as follows: **1)** age below 18 years or above 65 years. **2)** Patients having drug dependence (other than alcohol and nicotine consumption). **3)** Persons working in health care sector at any level. **4)** Persons who are taking medicines with valid prescription.

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A questionnaire was developed containing two sections. First section included the questions regarding the socio-demographic information such as name, age, gender, residential address, marital status, education level and occupation.

Second section consisted of questions related to reasons for self-medication, diseases/symptoms in which people use self medication, medication knowledge, sources of obtaining medicines, the group of drugs used for self medication.

QUESTIONNAIRE

Section - I

Socio-demographic information

1. Name _____
2. Age _____
3. Gender : 1) Male
2) Female
4. Full Residential Address
5. Marital Status :
(i) Single (iii) Widowed
(ii) Married (iv) Divorced
6. Education Level :
(i) Illiterate
(ii) Primary School
(iii) Secondary School
(iv) College and above
7. Occupation:
(i) Student
(ii) Government employee
(iii) Employee of Private Sector
(iv) Other than above category
[Domestic Servant, Housewife, Small Shops]
8. Average Monthly income _____

Section - II

- Q.1 What is the reason for self medication?
- | | | |
|--|---|--|
| (1) High consultant fee <input type="checkbox"/> | (2) Quick relief <input type="checkbox"/> | (3) Busy Schedule <input type="checkbox"/> |
| (4) Minor illness <input type="checkbox"/> | (5) Far place <input type="checkbox"/> | (6) Other <input type="checkbox"/> |
- Q.2 In which conditions do you use self medication?
- | | | |
|---|--|--|
| (1) Headache <input type="checkbox"/> | (2) Fever <input type="checkbox"/> | (3) Cough/Cold <input type="checkbox"/> |
| (4) Diarrhoea <input type="checkbox"/> | (5) Skin problems <input type="checkbox"/> | (6) Lack of sleep <input type="checkbox"/> |
| (7) Eye & Ear problems <input type="checkbox"/> | (8) Other <input type="checkbox"/> | |

SELF MEDICATION PRACTICES IN URBAN BIKANER

Hasan Najmul and Barar Kiran V

- Q.3 From where do you get the knowledge about the medicines?
(1) Advertisement (2) Chemist (3) Relatives
(4) Internet (5) Previous experience (6) Books
- Q.4 From where do you obtain the medicines ?
(1) OTC (Grocery Shop, Supermarket, Retail Outlets)
(2) Pharmacies
(3) Home medicine cabinet and Left over medicine
(4) Relatives & Neighbours
(5) Free sample obtained from known people
- Q.5 Which drug do you use for self medication ?
(1) Analgesics & antipyretics
(2) Antimicrobials
(3) Anti-allergics
(4) Cough/Cold remedies
(5) Antacids
(6) Antispasmodics
(7) Multivitamins
(8) Antiemetics
(9) ORS
(10) Others
- Q.6 Which antimicrobial did you take and whether you completed the course ? _____
(1) Yes (2) No
- Q.7 Did you find any Adverse Drug Reactions (ADRs) and what were the most common ADRs _____?
(1) Yes (2) No
- Q.8 Do you think self medication is harmful?
(i) Yes (ii) No
- Q.9 How many episodes of any illness have you had in the preceding six months? Name the illness and frequency _____.
(1) 1 episode (2) 2 episode (3) 3 episode
- Q.10 Do you use same prescription of your family members for a disease which had occurred earlier?
(1) Yes (2) No
- Q.11 Do you check expiry date of medicines (specially left over medicine)?
(1) Yes (2) No
- Q.12 Have you used medicines without consulting a doctor in the preceding six months?
(1) Yes (2) No
- Q.13 Did you have knowledge about dose, side effects, interactions of the medicines you have taken?
(1) Yes (2) No

SELF MEDICATION PRACTICES IN URBAN BIKANER

RESULTS

Out of the total 365 participants, 66% were males and 34% females. Among them 82.1% participants were taking medicines by self (Fig.1).



Fig. 1: Prevalence of self medication

Common illnesses for which self medication was practiced were headache (81%), cough/cold (73%) and fever (69%). Other illnesses reported were diarrhoea, skin problems etc.(Fig.2)

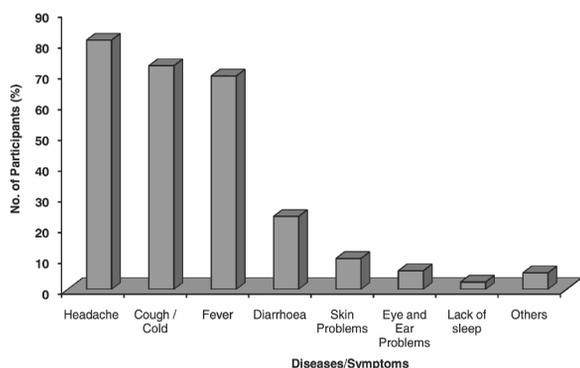


Fig. 2 : Diseases/Symptoms for seeking self medication

Commonly used drugs for self medication were antipyretics/analgesics (87%) followed by cough/cold remedies (76%) and antispasmodics (33%). Other drugs used in small proportion were antiallergics, antacids etc.(Fig.3)

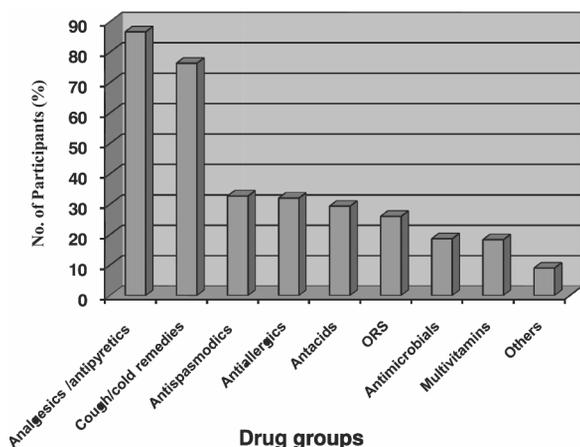


Fig. 3 : Drug groups used for self medication

Hasan Najmul and Barar Kiran V

In 62% cases chemists were the source of information for self medication and previous experience in 43% cases. Relatives, Books and advertisement were also found to be the sources of getting knowledge about medicines.(Fig.4)

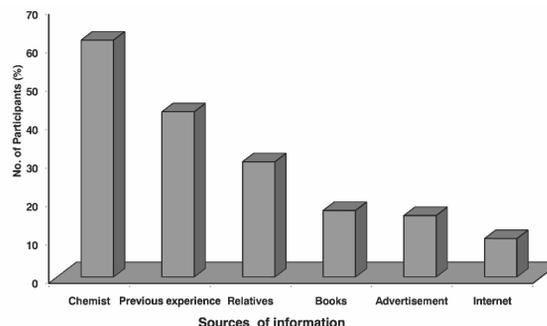


Fig. 4 : Sources of information for self medication

Pharmacies (64%) and grocery shops (Over the Counter (OTC)) (41%) were found to be the places from where the medicines are mostly obtained. Some of the participants used to get medicines for self use from relatives & neighbours etc.(Fig.5)

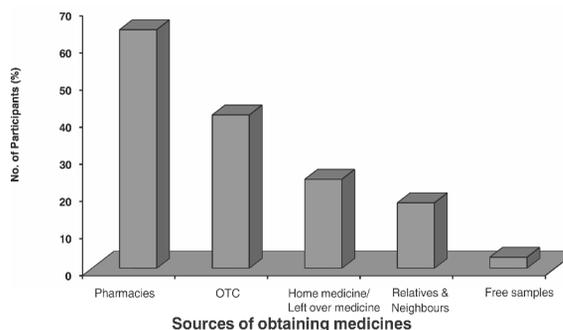


Fig. 5 : Sources of obtaining medicines for self medication

Most common reasons cited for practicing self medication were minor illness (62%) and quick relief (44%). Other reasons observed were busy schedule, high consultancy fee etc.(Fig.6)

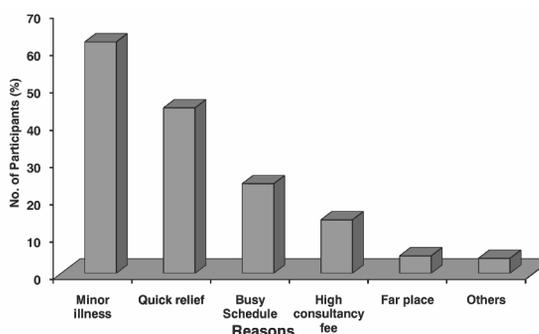


Fig. 6 : Reasons for self medication

DISCUSSION

Self medication for common ailments is widely prevalent in the developing countries. In our study, out of the 365 participants 82% were taking the medicines without prescription. Similar results were found in another study conducted on self medication in khartoum state of sudan.⁴

The high prevalence may be due to easy availability of medicines, high influence of peers, relatives and friends and socioeconomic condition of the country. In contrast to this, result found in another study conducted on self medication in Pokhara valley, Nepal showed that 59% of the respondents were doing self-medication.⁵

The commonest illness that led to self medication in this study was usually self limiting minor illness that has been widely reported in other studies also.^{6,7}

Headache, fever, cough/cold etc. were found to be common ailments that led to self medication. Similar finding was also reported in study conducted by Parakh R, *et al.*⁸

The commonest used drug groups were analgesics/ antipyretics, cough/cold remedies and antispasmodics which is similar to the other studies done earlier.⁶

Most of the respondents received knowledge about the medicines for self medication from their chemist. This finding was in accordance with the results of the study conducted by Islam MS and Reetesh M, *et al.*^{9,10}

In present study, the major sources of obtaining medicines were pharmacies and OTC which was in concordance with other studies done earlier.^{11,12}

Limitation of the study - As the study was conducted on a small sample; the results cannot be generalized to the population.

CONCLUSION

Self medication practice was quite prevalent (82.1%) among the individuals in the community of urban areas of Bikaner. Headache and cough/cold were the most common illness while analgesics and cough/cold remedies were the most commonly used drugs. Minor illness was the major reason for self medication and chemists were found to be the major source of information for self medication practice.

The patients should be encouraged to obtain the medicines only through prescription as written by the physician.

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REFERENCES

1. Guidelines for the regulatory assessment of medicinal products for use in self-medication. Geneva: World Health Organization; 2000. <http://apps.who.int/medicinedocs/en/d/Js2218e/> -accessed 4 January 2012.
2. Sinclair HK, Bond CM and Hannaford PC. Long Term Follow-Up Studies of Users of Non prescription Medicines Purchased from Community Pharmacies. *Drug Safety*. 2001; 24 (12):929-38.
3. Figueiras A, Caamano F and Gestal OJ. Socio-demographic factors related to self-medication in Spain. *Eur J Epidemiol*. 2000;16(1):19-26.
4. Awad AI, Eltayab IB and Capps PA. Self medication Practices in Khartoum state, Sudan. *Eur J Clin Pharmacol*. 2008;62:317-24.
5. Shankar PR, Partha P and Shenoy N. Self medication and non doctor prescription practices in Pokhara Valley, Western Nepal. *BMC Family Practice*. 2002;3:17.
6. James H, Handu SS, Khalid AJ, Khaja A and Otoom S. Evaluation of the knowledge, attitude and practice of self-medication among first-year medical students. *Med. Princ Pract*, 2006;15:270-75.
7. Hughes CM, McElnay JC, Fleming GF: Benefits and risks of self medication. *Drug Safety* 2001;24: 1027-37.
8. Parakh R., Kohli S., Kulshreshtha S., Advani U. and Kumar B. Self-medication practice among medical students in a tertiary care medical college in north India. *IJPRBS*. 2012; Vol. 1 (4): 282-95.
9. Islam MS. Self-Medications Among Higher Educated Popu-lation in Bangladesh: An Email-Based Exploratory Study. *The Internet Journal of Health*. 2007; Volume 5, Issue 2.
10. Malvi R, Bigoniya P and Jain S A. Study of self medication among the people of Bhopal Region Madhya Pradesh, India. *IRJP*. 2011;2(12), 163-65.
11. Solomon W and Abebe G. Self medication practice in Jimma town, Ethiopia *Journal of development*. 2003; 17(2): 111-16.
12. Grigoryan L, Burgerhof JGM and Haaijer-Ruskamp FMH. Is self-medication with antibiotics in Europe driven by prescribed use? *J Antimicrob Chemother*. 2007; 59 :152-56.