

A study of self medication pattern in Punjab

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ABSTRACT

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The objective of this study was to describe and examine the self medication pattern in the state of Punjab. A sample of 300 nuclear families from 5 different districts of Punjab were randomly selected for the study. The study showed that the prevalence of self medication was high in the educated group rather than uneducated group. Self medication was mostly employed for pain, cough, fever, and cold. After analgesic there was priority for food supplements, as 73% of population used to go for self medication of food supplements. Chemists/ Pharmacists were the major source of information for self medication, followed by friends and advertisement. From the study it was concluded that majority of the persons go for self medication without proper knowledge of dose, Adverse drug reactions, Drug interactions. Hence, the issue needs to be addressed by the responsible authorities of State Pharmacy Council/Ministry of Health.

Keywords: Self medication, Punjab.

INTRODUCTION

Self-medication can be defined as obtaining and consuming drugs without the advice of physician either for diagnosis, prescription or surveillance of treatment.¹ This includes acquiring medicines without a prescription, resubmitting old prescriptions to purchase medicines, sharing medicines with relatives or members of one's social circle or using leftover medicines stored at home.² There is a lot of public and professional concern about the irrational use of drugs. In developing countries like India, easy availability of wide range of drugs coupled with inadequate health services result in increased proportions of drugs used as self-medication compared to prescribed drugs.³ Although, OTC (over the counter) drugs are meant for self-medication and are of proved efficacy and safety, their improper use due to lack of knowledge of their side effects and interactions could have serious implications, especially in extremes of ages (children and old age) and special physiological conditions like pregnancy and lactation.^{4,5} There is always risk of interaction between active ingredients of OTC drugs and that of prescription medicines, as well as increased risk of worsening of existing disease pathology.

Rational use of drugs has drawn public health attention globally with the aim of maintaining quality health care at lower cost.⁶ As dispensing medication in an appropriate way is a cornerstone of rational use, the dispenser should be regularly updated with information, tools and skills.⁷ Internationally, self-medication has been reported as being on the rise.⁸⁻¹⁰ Various studies have shown that the use of self-medication is twice as common as that of prescribed medication, and that self-medication is often used together with prescribed medication.¹¹

METHOD

Five different districts of Punjab were selected for the study. These include (Moga, Ludhiana, Jalandhar, Ferozepur, Barnala). From these districts 50 nuclear families were selected randomly by stratified sampling. A self administered questionnaire was distributed among the families and also that interview was conducted in local language. Participants' were informed regarding the purpose of the study. The study questionnaire was adapted from similar study conducted previously.¹² In case the families were not well educated, questionnaires were filled by qualified assistants. The questionnaires include the questions pertaining to identification of data (name of the head of the family, no. of children, no. of adults, address, qualification, employment, income), practice of self medication by the family, commonly used medicines as self medication, knowledge of the family

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regarding the dose of a drug, source of information regarding the drug, Knowledge regarding allopathic, homeopathic, and ayurvedic system of medicines.

RESULT

A trend towards self medication was observed, which was high in educated population as compared to uneducated population. Conditions which were treated by the self medication include fever, cough, cold, headache, nutritional loss etc. Ongoing trend was observed towards use of Ayurvedic and Homeopathic system of medicines. From the study it was observed that the most frequently class of drug used for self medication is NSAIDs. As shown in Table 1, about 78% of the study population uses this class of drug for

Table 1 : Drug utilization pattern (Self medication)

Category	Percent	Drug	Percent n=300, N=%
Analgesic and antipyretics	78	PCM	59
		Ibuprofen	11
		Diclofenac	5
		Others	3
Food Supplements & Tonics	73	Becasule	56
		Calcium	10
		Multivitamin	07
Drug for cold and cough	39	D'Cold	27
		Benedrayl	7
		chericof	5
Antimicrobials/	11	Norfloxacin	3
		Amoxicillin	5
		Others	3
Ayurvedic drugs			62
Homeopathic drugs			45

treatment of fever, body ache, head ache etc. Most preferred drugs under this category include Paracetamol, Ibuprofen and Diclofenac. About 73 % prefer to overcome nutritional loss by themselves by taking Becousules, Calcium and Multivitamin. 39% treats cold and cough by themselves and only 11% of the study population prefers antimicrobials. Regarding the ayurvedic system of medicine surprising results were obtained as 62% of the population tends to prefer kitchen medicines for the chronic illnesses like joint pain, asthma, obesity, baldness etc. and 45 % prefer homeopathic medication keeping in view that they are free from side effects.

The trend of self medication was high in adults as compared to children and old aged persons who mostly tend to prefer ayurvedic medication, if asked for the self medication. Table 2, shows that 50% of adults, 15% of child and only 10% of old

aged persons go for self medication. When asked about the source of information 75% agreed that they take medication in consultation with chemists rather than going for formal prescription from doctors, reason being lack of time and money. 30% take medicines on the advice of relatives and friends. The trend of self medication has been increased as result of the advertisement; about 16% agreed that they prefer medicines on the basis of advertisement. All the above data was found to be good enough to support the previous studies that the trend towards self medication is increasing day by day, but coming to the part of knowledge regarding safety and efficacy results observed were disappointing as only 32% had the knowledge regarding the dose of the drug (Table 2) 23% knows the side effect of the drug taken by them as self medication and only few reported adverse drug reaction like sedation, rashes etc.

Table 2: Pattern of self medication

Parameters	Percent
Life Cycle	
Adults	50
Children	15
Old aged	10
Source of information	
Chemist	75
Friends	30
Advertisement	16
General awareness	
Dose	32
Side effects	23
Reasons of self medication	
Doctors advise not needed for common illness	58
Lack of time to visit doctor	26
Unaffordable doctors fee	35

On asking for the reasons of the self medication most of the population (58%) agreed that there is no need of doctors visits in case of minor illness like cold, cough, fever, itching etc. 26% respondents said that they prefer self medication because of lack of time to visit doctors and 35% said that they are not capable of paying fees to doctors.

DISCUSSION

In the present study, trend of self medication was found high in educated compared to uneducated population. Similar results were obtained in the study carried by Deshpande and Tiwari. In their study 26% of graduates and 23.1 % of illiterate

people practiced self medication.¹³ Other studies also have shown the prevalence of self medication as 37% in urban areas and 17% in rural areas in India,¹⁴ where as 12.7% to 95% in other developing countries.^{3, 15, 16} Antipyretics and analgesics were the most commonly used class of drugs for self medication. A study carried by Rajput et al also showed similar results. In their study about 85.38% preferred antipyretics and analgesics.¹⁷ Other studies also support the results.^{18,19} Followed by them are food supplements, drugs used for treatment of cold and cough and the antimicrobials. About 39 % of the population tends to prefer cough and cold remedies by themselves. Antimicrobials are also preferred class of self medication. The information regarding dose of the drug was quite rare. There was little or no information regarding the side effects and drug interactions which was in accordance with the previous studies.^{12, 20} All the information was gathered using self administered questionnaires supported by interview in local language.

Trend was observed towards homeopathic and ayurvedic system of medicines for chronic illness likes joint pains, bronchial asthma, obesity, baldness. Moreover herbs and homeopathic drugs were considered safe and free from adverse effects, but the risk of possible drug interactions is always with their use. However no serious side effects were reported with drugs used as self medication. However few episodes of epigastric discomfort, sedation and rashes were observed with the use of NSAIDS, cough and cold remedies.

Previous studies²¹ showed chemists as prime source of drug information, similar trend was observed in the current study also. Drug advertisement was also an important source of information. Although patients use of advertised medicines could have important health benefits if used appropriately in the early stages of disease.

There are various factors that play important role in influencing this type of self-medication pattern among the population. These factors include patient satisfaction with the health care providers, cost of the drugs, education level, socioeconomic factors, age and gender. Our study indicated the variation in pattern of self medication among educated and uneducated population and this variation could probably be because educated group has more ability to self medication. Education appeared to be more important variable as higher the consumer education, more the complied with reading the patient's information sheet, following the label instructions and reading the expiry date, but socioeconomic variation was difficult to assess because of

knowledge of true income of the family for multiple source of income. Moreover, failure on part of gender and age was due to non-availability of all the members at the time of interview, which could be considered as lacuna of our study. However respondents were very cooperative and answered all in questions properly.

Although, self medication, using non-prescription drugs, could be beneficial to patients, healthcare professionals, the pharmaceutical industry and government, provided these drugs are used rationally. This asks for the quite important role to be played by the pharmacists regarding education of the persons for rational use of the drug as the practice of self medication often has many severe adverse effects and can lead to many problems.

Hence, provisions should be made for proper education regarding rational use of the drug by the consumers. Apart from community education, safety and efficacy of OTC drugs must be assured, so that these products could be safe even in the event of improper use. For registration as an OTC drug, specific efficacy trials may be conducted in real self-medication situation. Due to the difficulty in accessing health care services, self medication is often the simplest option for the patients. Since traditional practitioners are easily accessible, people also turn to them for their health care needs. However, traditional practitioners need to be educated about when to refer a patient for more specialized care.

CONCLUSION

The prevalence of self medication practices is alarming in the state. Fever, cough and cold were the most common reasons for non doctor prescription. NSAIDs were the drugs most commonly used for self medication and tonics and food supplements were frequently taken without prescription. We recommend that holistic approach should be taken to prevent this problem, which include proper awareness and education regarding the self medication and strictness regarding pharmaceutical advertising. More-over especially in case of Punjab state ban should be applied in free sale of medicines in buses and other traveling modes. Dispensing modes in the state needs to be improved through proper education, regulatory and managerial strategies.

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