

Dispensing Pattern of OTC Drugs for Dental alignments by Retailer Pharmacist in Amritsar, North India**Gagan Deep, Joydeep Kaur, Tarandeep Pannu, Harinder Paul Singh, Simranjot Kaur, Sandeep Kaur, Khushbinder Kaur, Manveen Kaur**

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ABSTRACT:

Over the counter drugs (OTC) are sold without the prescription of a registered medical practitioner. There are reports that OTC drug market in India is on the rise. Overall, dispensing of OTC drugs without prescription is a widespread practice in the studied area and is contributing to the overuse of drugs particularly antibiotics which is one of alarming cause of antibiotic resistance. This could attributed to the rising cost of health care, difficulty in accessing healthcare, and an alarming tendency to self manage symptoms. Possible ways of intervention would include educating the public and pharmacists as well as strict implementation of the rules and regulations.

Keywords: Analgesics, Antibiotics, Dispense, Pharmacist.**INTRODUCTION:**

Over the counter drugs (OTC) means drugs that is sold without prescription of a registered medical practitioner.¹ They are also known as non prescription medicines. The Indian OTC market is ranks 11th in the global OTC market¹. The repeated use of OTC drugs lead to harmful effects like gastrointestinal bleeding and antibiotic resistance etc.² Retailer pharmacies in developing countries are one of the important sources of advice on oral health care.^{1,3} Various studies have shown that the use of OTC is twice as common as that of prescribed medication.⁴ In Amritsar, people are in a habit of narrating their minor health ailment to the pharmacists, who gracefully will act as a poor man's dentist by giving him/her a medicine to relieve the pain momentarily. As reflection of increasing drug usage, we have noted that most of the dental patients referred to SGRD Dental College hospital have used not only many types of home remedies, but have obtained and consumed potentially fatal. This constitutes an important public health concern. In view of the above said context the

present study was conducted to describe the role of pharmacist and pattern of sale of OTC drugs for dental ailments in Amritsar region.

MATERIALS AND METHOD

A cross-sectional study was conducted among 120 randomly selected sample of the retailer pharmacists from Amritsar District. Area wise list of all the pharmacists was obtained from pharmacist registered association. Data was collected using closed ended questioner by investigators themselves who personally met the pharmacists and explained the purpose of study and filled the Performa. The collected data was entered in the Microsoft Excel sheet and frequency was analyzed using SPSS 11.5 version.

RESULTS

Among the 120 pharmacies 100% of the pharmacists working where male. In response to the questioner, do you dispense medicines for dental problems, without prescription, 95.2 % of them told yes, 4.8% said no to the dispensing without prescription.

OTC Medicine Prescribed: Among the pharmacists who dispense medicines without prescription, 88.5% said they dispense analgesics and antibiotics, mouthwashes, drugs for mouth ulcers commonly whereas 11.5 % said the only dispense analgesics. The most

commonly prescribed drugs are analgesics (57%), antibiotics (22%), drugs for mouth ulcers (14%) and mouthwashes (7%). (Figure 1)

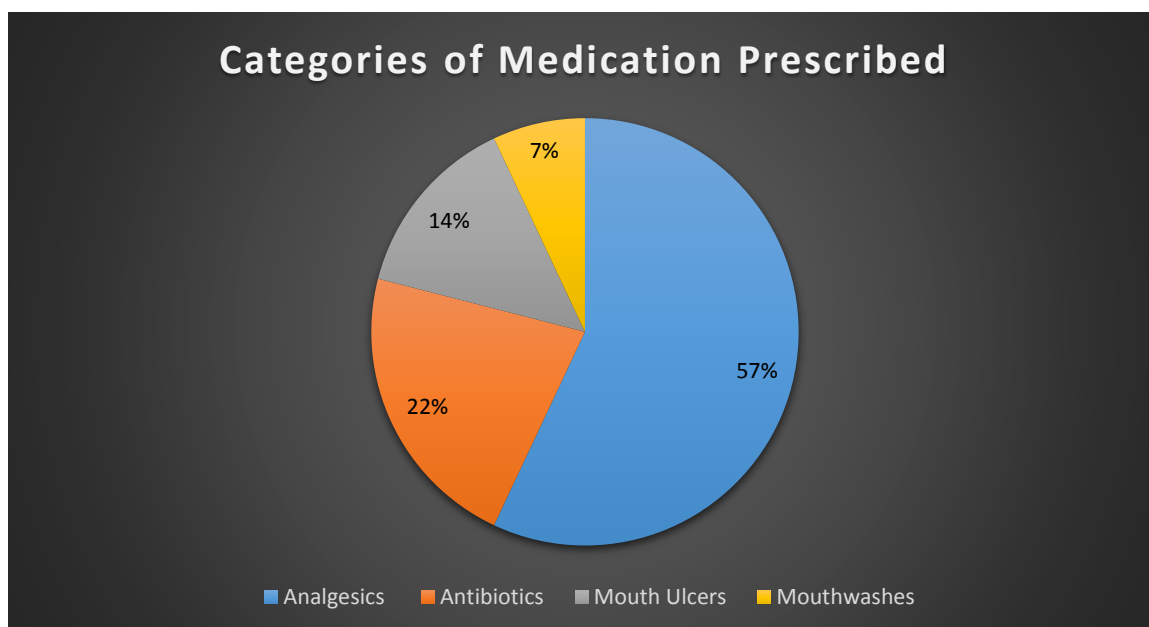


Figure 1: Categories of Medicine prescribed

Reason for OTC drug dispensing: When asked what was reason for dispensing medicine OTC for dental problem, 53% pharmacist said patient’s poverty, followed by patient attitude (33%), followed by non availability of dentist (14 %). 59.6% said, they call up to dentist for permission regarding substitute of prescribed drugs. and Few pharmacists claim that the prescription are not clearly readable and hence they dispense on their own. (Table 1)

Dosage of drug prescribed: 68 % of the pharmacist said yes they dispense the drugs in correct dosage form for proper number of days. 32 % pharmacist said they give mostly fixed dose combinations only and don’t take into consideration the number of days. Mostly said the patient take drugs for maximum 2 to 4 doses only keeping money factor in mind.

Table 1: Reason for OTC dispensing.

| Sr. No | Reason for OTC dispensing | Percentage |
|--------|---|------------|
| 1 | Poverty – Low socio economic strata | 53 |
| 2 | Poor Patient attitude or Negligence | 33 |
| 3 | Non availability of dentists | 14 |
| 4 | Other reason like fear factor of dentist, noncompliance of patients | <.01 % |

Knowledge of side effects of OTC drugs: Majority of the pharmacist acknowledged that they lack the knowledge of certain side effects

of the drugs. Almost all pharmacist failed to deliver the knowledge of adverse effects and contraindications to the patient.

In response to the reason why patient approach them rather than dentist , majority 75.4%

pharmacist said all the three reason i.e. costly treatment, time consuming nature of dental treatment and fear of dentist .

DISCUSSION

OTC drugs are the drugs which are dispensed without the prescription of a registered dentist. This is the first systematic study showing the improper dispensing of drugs in Punjab, North India with neither a prescription nor a diagnosis from a physician. The most commonly prescribed drugs were analgesics followed by antibiotics which was in concordance with the study done by Gazibara TD et al.⁵ The analgesics were followed by the antibiotics, whose inappropriate use has led to the phenomenon of antimicrobial resistance, which is becoming a worldwide public health problem.^{6,7} In addition no comment was made in most of the cases of the indication of the antibiotic dispensed, risking administration of an ineffective antibiotic and inadequate treatment. Similar results were seen in the study conducted by Nagaraj M et al in Bangalore.⁸

The major factors associated with OTC with dental problems is assumed financial status with majority patients belonging to low economic strata which prevents the patient from going to dentist. Another reason for this problem was lacklustre attitude of the patients for the dental treatment and un-seriousness of the nature of illness. The non-availability of dentist remained the remote cause for the dispensing of OTC drugs.

The unique feature of this study was that most of the drugs belonged to Schedule H category which was not supposed to be dispensed over the counter. The other findings from this study were that drugs were dispensed appropriate to the disease condition and in appropriate doses. The alarming observation was that the pharmacists did not ask about drug allergy and the existing co-morbid conditions while dispensing the OTC drugs. Appropriate instructions were not given to all patients and adverse effects of the drugs were

not explained. Drugs were not dispensed according to the appropriate dosage regimen.

So, to basically further understand the exact attitude and the reasons for pharmacist dispensing medicine over the counters, a similar kind of study in a very large area, different scenarios like both urban and rural and patient's prescription should be conducted with prescribed format for correct dosage of drugs and its adverse affects.

Remedy for problem:

A first step to change the situation was the institution of a federal regulation that prevents drugs from being sold without a medical prescription. However, other efforts should be taken because most pharmacies do not adhere to the regulation. One possible strategy might be to create health education programs about the dangers of misusing drugs that are directed both to the population as well as to the pharmacists and attendants. Preventing the sale of unprescribed drugs can be a way to inhibit bacterial resistance, a worldwide health problem, and the unnecessary adverse reactions and allergies caused by antibiotics⁹. Organized team meeting should be arranged where in the dentist and pharmacist's professional interaction take place to provide resources for upgrading their knowledge regarding dental ailments

CONCLUSION

The high prevalence of self-medication emphasizes the role of the primary care physician who should advise patients about the correct use of the prescribed antibiotics. Another important intervention to reduce the major problem of self-medication that legislative changes banning unregulated sale of drugs without medical prescription. It can thus also be concluded from the study that more awareness of patients and pharmacists about OTC drugs and their adverse effects are required to prevent the harmful effects of the same.

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