

**CONSUMER AND CHEMIST PREFERENCES TOWARDS ANALGESICS
AND ANTIPYRETICS IN DRUGSTORES IN NASHIK CITY*****Vaibhav Ramesh Bhalerao, Nilesh R. Berad**

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Management and Research
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vaibhav.bhalerao@rediffmail.com**ABSTRACT**

Most drug consumers today show a habit of self medication when it comes to problems like fever and the resulting headache & body ache from it. This may be to get rid of waiting time outside the Doctors cabin or even to save medical checking fees. The same behavior may also be attributed to the unawareness towards complications of self-medication among the sufferers. It is always advisory to consult a registered medical professional before getting medicated. The objective of the study was to study the preference of consumers and chemists towards different molecules and brands while purchasing and selling analgesics and antipyretics in Nasik. For this purpose 91 medical store retailers (chemist) were sampled randomly from Nasik city and MIDC area (or close to MIDC) and data were collected from them using a structured questionnaire. The data were analyzed using various statistical techniques. It was revealed that paracetamol was the drug of choice sold to patients complaining fever and body ache while Crocin and Combiflam were the most demanded brands by

similar kind of patients. It was further analyzed that Nise was more preferably recommended by chemists to such patients without a proper prescription.

Key words: Paracetamol, Analgesic, Antipyretic, OTC and Chemist.**INTRODUCTION**

Self-care may be defined as a person's care and concern for the health and well being of his own and family members. This self care might be in the form of actions taken by individuals

to remain fit physically and mentally by performing exercises and yogasanas, prevent illness and accidents, avoid unnecessary risks and prefer self medication in minor ailments. Self-medication taken by individuals in minor health problems is by adopting the safe usage of drugs designed for use without referring to a registered medical practitioner. Such medicines for self-medication are often called 'non-prescription' or 'over the counter' (OTC) and are available without a doctor's prescription through pharmacies. In some countries OTC products are also available in supermarkets and other outlets. Medicines that require a doctor's prescription are called prescription products (Rx products).

Recently it has been observed that the trend towards self medication has increased among the ignorants as well as the educated crowd. There may be different reasons such as unawareness of the potential hazards towards self medication among the ignorants while knowledge or over confidence about different drugs among the educated. The ignorants and the poor are inclined towards self medication might be due to the inability to pay the doctors fees while the educated may not be having sufficient time to wait outside the doctors cabin specially when it comes to treatment of mild problems like fever and the resulting body ache. All this may be attributed to the increasing awareness of OTC drugs and the deregulation championed by Pharma industry. In most of the cases the retailers (or chemist or druggist) also play a significant role in the proliferation of OTC drugs. Usually these are non-steroidal anti-inflammatory drugs which are mostly recommended during conditions of mild fever due to cough and cold and the resulting body/head ache. The patient's literacy for a particular brand may be attributed to various commercials being played on different channels and also word of mouth publicity from the nearby friends. In case of unawareness about a particular brand or a molecule, the pharmacist plays a major role in advising a brand to the patient specially when the patient is interested in self medication.

OTC Drugs

The phrase "OTC" means Over the Counter Drugs and has no legal consideration, all the drugs not included in the list of "prescription-only drugs" are considered to be non-prescription drugs (or OTC drugs). Hence "OTC Drugs" means drugs legally allowed to be sold "Over the Counter" by pharmacists, i.e. without the prescription of a Registered Medical Practitioner. Prescription-only drugs are those medicines that are listed in Schedules H and X of the Drug and Cosmetics Rules. Drugs listed in Schedule G (mostly antihistamines) do not need prescription to purchase but require the following mandatory text on the label: "Caution:

It is dangerous to take this preparation except under medical supervision". Currently, there is no specific law which prohibits the advertising of prescription drugs. The following OTC medicines advertising can be seen on TV in India:

1. Digestives
2. Antacids
3. Antiflatulents
4. Cold rubs and Analgesic balms/creams
5. Vitamins/Tonics/Health supplements (especially Herbals and Ayurvedic-registered)
6. Medicated skin treatment
7. Analgesic /Cold tablets
8. Antiseptic creams/liquids
9. Glucose powders
10. Cough liquids
11. Throat lozenges
12. Medicated dressings (band-aids)
13. Baby gripe water
14. Ayurvedic medicines and preparations.

India is currently ranked 11th in the global OTC market in size, with an estimate that it will reach 9th position within five years. (Source: Nicholas Hall & Company, India, DB6 2006)

Currently the Indian OTC market (i.e. non-prescription advertised medicines) is estimated to Represent approximately Rs.104 Billion growing at about 8-9% (Source: ORG-IMS) Main self-medication product groups.

Switch climate

Currently, aches/pains, cough, colds, hyperacidity, minor topical infections and indigestion are major OTC categories. Emerging categories include cuts, wounds and burns, muscle pains and sprains, diarrhea and constipation. There are many products in the Rx sector which could be revitalized through OTC switches. An analytical interpretation of various data places the focus on vitamins, cough & cold, antacids, antipyretics and NSAIDs as opportunity areas for switch in India. India does not have a well documented process or a specific regulation on switching Rx to OTC products and this is becoming need of the hour. Globally many countries have a formal process of transferring prescription (Rx) drugs to over-the-

counter (OTC) status, known as "Rx-to-OTC switch. In these markets Rx to OTC switch is also seen as an efficient way of reducing healthcare costs by expanding the most inexpensive form- of health care which is self-medication with OTC medicines. Regulators in India will sooner or later need to very clearly define OTC formally as an 8 category because at the end this will help promote access to market and will empower consumers who want to take a more active role in their own health care.

Table 1.

Category	2005	2006	2007	2008	2009
(Sales in US\$ Million)					
OTC sales-India	1243.4	1371.4	1491.0	1638.9	1813.4
Analgesics	178.8	192.9	201.7	223.4	258.6
Cough, Cold & Allergy	227.2	250.7	269.7	295.1	318.1
Gastrointestinals	231.4	256.7	281	301.2	332.6
Vitamins, Minerals & Supplements	447.1	494.3	538.6	583	634.5
Dermatologicals	144.1	160.3	181.9	212.4	236.5
Lifestyle OTCs	14.8	16.4	18.1	23.9	33.1

Source: Nicholas Hall & Company, India, DB6 2010

Objectives of the Study

- To identify the most sold molecule to patients without prescription complaining fever and body ache.
- To identify the most demanded brand by patients without prescription complaining fever and body ache.
- To identify the most recommended brand by Pharmacist to patients without prescription complaining fever and body ache.

MATERIALS AND METHODS

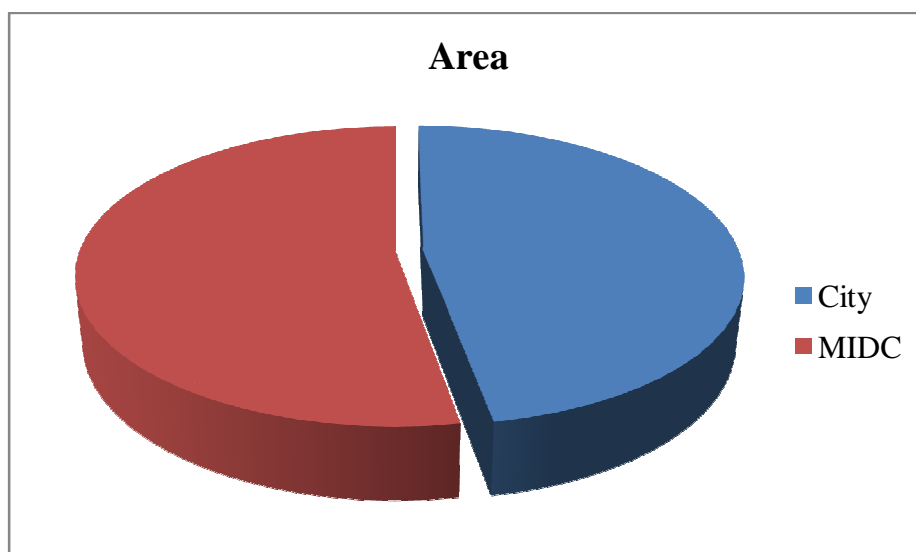
The present study is a descriptive research conducted between December 2011 and February 2012. For this purpose 91 Pharmacists (or druggist and chemist) from two different regions of Nasik namely City area and MIDC (Maharashtra Industrial and Development Corporation) area or area close to MIDC were sampled randomly. The number of Pharmacists from city area was 43 while from MIDC (or close to MIDC area) was 48 according to Table 1. Taking into consideration various objectives of this research a structured questionnaire was designed and used as a tool to collect primary data from the Pharmacists. The data was analyzed and hypothesis testing was done using SPSS 20. The statistics used were frequency, percentage and chi-square. The hypothesis were checked using chi square analysis at 3 degrees of freedom and α of 5%. The limitation of the study was its restriction to the city of Nasik Web and print media was referred for secondary data.

Sample Distribution

Table. 2

Area	No. Of Pharmacists	Percentage
City	43	47.25%
MIDC(or close to MIDC)	48	52.75%
Total	91	100%

Graph 1



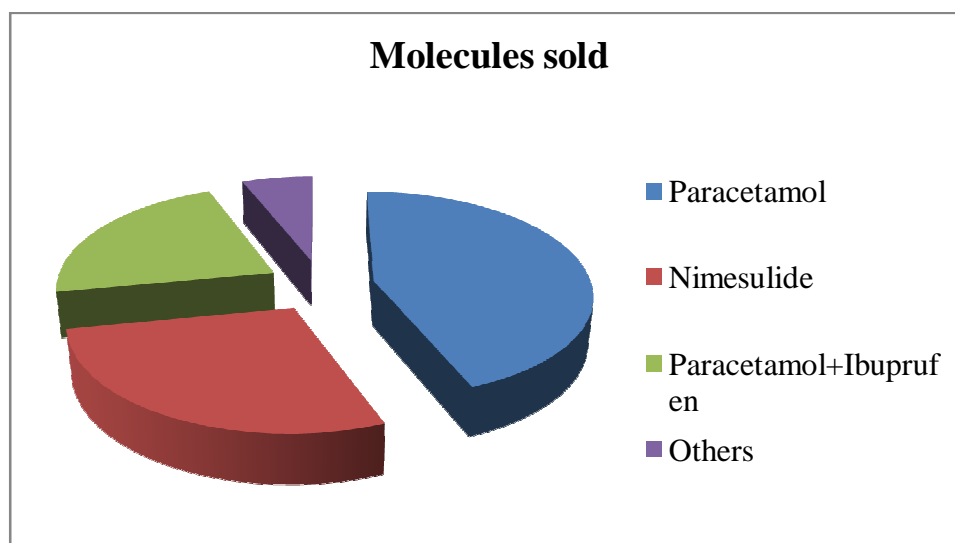
RESULTS AND DISCUSSION

1. Molecules sold by Pharmacists to patients (without prescription) complaining fever and body ache.

Table 3.

Sr.No.	Molecules	No. of Pharmacists	Percentage
1	Paracetamol	40	44%
2	Nimesulide	26	28%
3	Paracetamol+Ibuprofen	20	22%
4	Others	05	6%
5	Total	91	100%

Graph 2



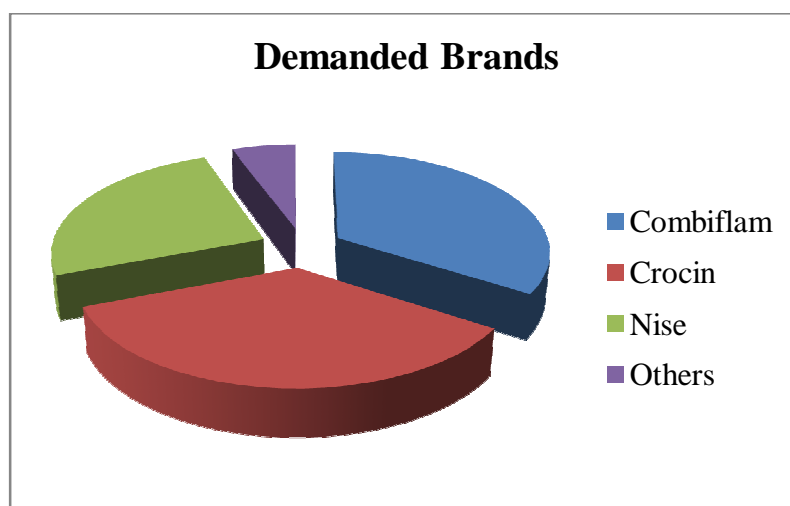
According to Table 3. Paracetamol was found to be the mostly sold molecule by Pharmacist (44%) to consumers while 28% Pharmacists sold Nimesulide, 22% Pharmacists sold a combination of Paracetamol + Ibuprofen while 6% Pharmacists sold other molecules.

2. Most demanded brands by consumers (without prescription) complaining fever and body ache.

Table. 4

Sr.No.	Molecules	No. of Pharmacists	Percentage
1	Combiflam	31	34%
2	Crocin	32	35%
3	Nise	23	25%
4	Others	05	6%
5	Total	91	100%

Graph 3



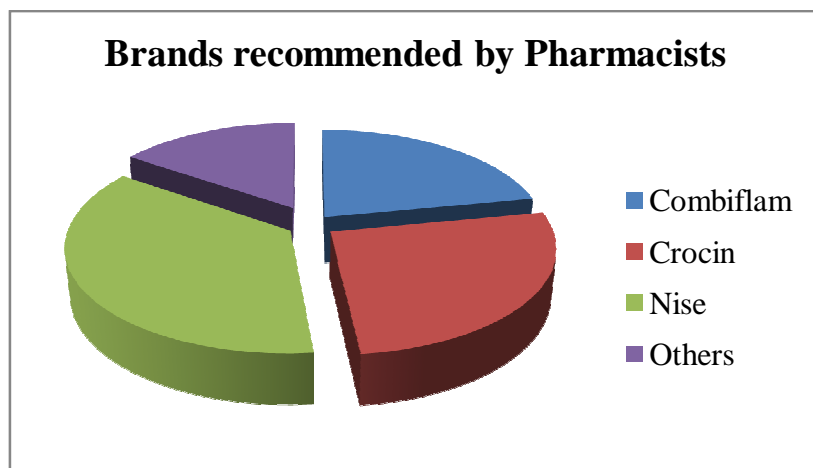
According to table 4, 35% of the Pharmacists were demanded Crocin by the consumers, 34% of the Pharmacists were demanded Combiflam, 25% of the Pharmacists were demanded Nise and 6% of the Pharmacists were demanded other brands by the consumers.

- Most recommended brand by Pharmacist to patients (without prescription) complaining fever and body ache.

Table. 5

Sr.No.	Molecules	No. of Pharmacists	Percentage
1	Combiflam	20	22%
2	Crocin	24	26%

3	Nise	33	36%
4	Others	14	16%
5	Total	91	100%

Graph 4

According to the Table 5, 36% of the Pharmacists recommended Nise to their consumers, 26% of the Pharmacists recommended Crocin, 22% of the Pharmacists recommended Combiflam and 16% recommended some other brands to their consumers.

Table. 5 Average numbers of consumers without prescription

Area	<10	11-20	21-30	>30	Total
MIDC	17	22	4	5	48
City	19	16	4	4	43
Total	36	38	8	9	91

Table. 6. Average numbers of patients demanding a particular brand of medicine.

Area	<10	11-20	21-30	>30	Total
MIDC	12	19	12	5	48
City	10	15	10	8	43
Total	22	34	22	13	91

CONCLUSION

From the study conducted in Nasik city it was found that 44% Pharmacists preferably sell Paracetamol as against 28% sell Nimesulide and 22% sell a combination of paracetamol + ibuprofen. 35% Pharmacists agreed that Crocin was more demanded by consumers while 34% and 25% Pharmacists experienced the demand of Combiflam and Nise respectively from consumers. As against this Nise was pushed over the counter by 36% of the Pharmacists while 26 % Pharmacists pushed Crocin, 22% pushed Combiflam while other brands were pushed by over 16% of the Pharmacists. Thus it is clear that Paracetamol is more popular among the consumer fraternity while Nimesulide is more preferred by the Pharmacists. Using chi square analysis following were the outcomes.

1. Average number of patients without prescription complaining fever and body ache in areas of City and MIDC (or close to MIDC) are the same.
2. Average number of patients without prescription complaining fever and body ache in areas of City and MIDC (or close to MIDC) are the same.
3. Combiflam, Crocin, Nise and other brands are not equally demanded by patients without prescription suffering from fever and body ache.
4. Combiflam, Crocin, Nise and Others are not equally pushed Over The Counter Brands by Chemists.

The above study also throws light on the awareness of different molecules among the consumers and their willingness to go for self medication in case of minor health problems like fever and the resulting body ache.

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