



## Research Journal of Pharmaceutical, Biological and Chemical Sciences

### Self Medication in Dermatological Conditions - A Northern Indian Tertiary Hospital Experience

V Khajuria<sup>1\*</sup>, Shallini Gupta<sup>1</sup>, Sapna Arora<sup>1</sup>, Shamia Sadiq<sup>1</sup>, N Kumar<sup>2</sup>, and R Sharma<sup>2</sup>

<sup>1</sup>Department of Pharmacology, Government Medical College Jammu, J&K, India, 180001

<sup>2</sup>Registrars, SMGS Hospital, Government Medical College Jammu, J&K, India, 180001

#### ABSTRACT

The study was conducted in a tertiary hospital of northern India with aim to study pattern of self medication in patients attending skin OPD over a period of one month. Out of 410 patients, 170 (42.5%) practiced self medication and was more in males (56.5%), in age group of 11 to 30 yrs (63.5%) and in matriculates (30.5%). Self medication was more prevalent in urban patients (57.6%). Local chemists were chief source of information (65.8%). Steroids were main self medicated drug (41.1%). Most common reason for indulging self medication was belief that doctor is not needed for common ailment (65.8%).

**Key Words:** Self medication, Self medication in dermatology, Rational drug use, Dermatology.

*\*Corresponding author*

## INTRODUCTION

Self medication is defined as obtaining and consuming drugs without advice of physician either for diagnosis, prescription or surveillance of the treatment. It also includes acquiring medicines without prescription, resubmitting old prescriptions, sharing medicines or using left out medicines at home [1, 2].

Self medication is commonly practiced and factors like mild illness, previous experience of treating a similar illness, non availability of medical personnel, easy availability of drugs and differences in education status contribute to its high prevalence [3]. Self medication has a positive impact as it saves time to consult physician, saves life in acute conditions and contribute to decrease treatment cost [4] However, there is a concern about irrational use of drugs as it leads to increase in resistance, adverse effects, interactions, drug dependence besides wastage of financial resources [5].

Self medication is more a problem in developing countries. In India easy availability of drugs due to mushrooming of pharmaceutical industry that was just worth INR 1500 Crores in 1980 had grown to over a more than INR 68,000 Crores industry by 2008, compounded with inadequate health services further complicate the scenario .The picture could be more gloomy in management of skin disorders as there is a scarcity of dermatologists which comprise 1 in 200000 population [6]. We examined the problem of self medication in patients reporting to skin OPD as there is no such report from Indian setup.

## MATERIAL AND METHODS

Patient reporting for the first time to skin OPD in SMGS hospital of Government Medical College Jammu, a tertiary institution of northern India over a period of one month [Nov 2011] were studied . Detailed history regarding self medication prior to reporting to OPD was obtained. Questionnaire elucidating details of self medication regarding nature of medicines, route of administration, source of information, reasons for self medication, education status, residence details and reasons for seeking medical assistance was provided to them. This observational study was approved by the institutional ethics committee.

## RESULTS

Result obtained revealed that total 410 patients reported to OPD , and 170 patients (42.5%) out of them earlier practiced self medication before seeking medical advise. Among them 96 patients (56.5%) were males while 74 patients (43.5%) were females. Maximum number of patients comprised of 108 (63.5%) were between 11to 30 years age group while minimum number of 12 patients each were below 10 years or above 51 years (7%) . 98 patients(57.6%) were from urban area while rest 72 patients (42.55%) were from rural area ( Table 1).

**Table 1. DISTRIBUTION OF AGE , SEX AND AREA WISE DISTRIBUTION**

Age( yrs)	M	F	Urban	Rural	Patients (n)	Percentage (%)
0-10	7	5	8	4	12	7.05
11-20	32	24	32	24	56	32.94
21-30	32	20	24	28	52	30.98
31-40	8	10	12	6	18	10.58
41-50	8	12	14	6	20	11.76
> 50	9	3	8	4	12	7.05
Total	96(56.5%)	74(43.5%)	98(57.6%)	72(42.5%)	170	100

Evaluation of educational status showed that self medication was highest among matriculates (30.58%) and least in post graduates (4.7%) (Table 2).

**Table 2. EDUCATIONAL STATUS OF PATIENTS**

Educational Status	Patients (n)	Percentage (%)
Post graduate	8	4.7
Graduate	40	23.5
Secondary school	26	5.29
Matriculate	52	30.58
Primary	30	17.64
Illiterate	14	8.2

Steroids were most commonly self medicated drug in 70 patients(41.1%) followed by antifungals in 38 patients(27.15%) , antibacterials in 28 patients(16.45%), antihistaminics in 6 patients(3.5%) . 24 patients used combination of above drugs while 18 patients used ayurvedic drugs (TABLE 3).

**Table 3. CATEGORY OF SELF MEDICATED DRUGS.**

Drug category	Patients (n)	Percentage (%)
Steroids	70	41.17
Antifungal	38	22.35
Antimicrobial	28	16.47
Antihistaminics	6	3.52
Combinations	10	5.5
Ayurvedic	18	10.5

Local application was frequently used route in 130 patients(76.4%) comprised of creams in 96 patients (73.8%) , ointments in 26 patients (20%) and lotions in 6 patients(4.6%) and mud application in 2 patients(1.5%) . Only 6 patients (3.55%) used oral medication and 34 patients (20%) used both oral and local combination (Table 4).

**Table 4. ROUTE OF ADMINISTRATION**

Route of administration	Patients(n)	Percentage (%)
Topical	130	77.05
Oral	34	20.0
Parental	6	2.94

Main reason for practicing self medication in 112 patients (65.8%), was that patients thought that doctor is not needed for treatment of common ailments. 34 patients(20%) had no time to consult physician , while 16 patients (9.4%) had no access to physician (Table 5).

**Table 5. REASONS FOR SELF MEDICATION.**

Reason for self medication	Patients (n)	Percentage (%)
Doctor not needed	112	65.88
No time to a doctor	34	20.0
Lack of money	-	-
Lack of trust in doctor	8	4.70
Non availability of doctor	16	6.44

Reason for seeking physician advice in majority of these patient who practiced self medication was failure to improve in 136 patients (80%) while 30 patients (17.6%) there was suboptimal response and worsening of condition in 4 patients (2.3%) (Table 6).

**Table 6. REASONS FOR REPORTING TO SKIN OPD**

Reasons for reporting OPD	Patients(n)	Percentage (%)
Failure to improve	126	80.0
Suboptimal response	30	17.6
Worsening of condition	14	2.3

Local chemist was main source of information in 112 patients (65.8%) and friends and relatives in 52 patients (30.5%) (Table 7) Average cost of self medication was Rs 232 and duration 57 days. Acne vulgaris was main presenting skin disorder which was present in 48 patients(28.2% ), followed by malasma in 24 patients (14.1%) pruritis in 22 patients (12.9% ), tinea in 19 patients (11.1%), eczema in 16 patients (9.4%) folliculitis in 13 patients (7.6%), psoriasis in 12 patients (7.05%), dermatitis in 9 patients (5.2%)and others like hair fall, mole, hyperkeratosis, warts and pityriasis in 9 patients (5.2%).

**Table 7. SOURCE OF INFORMATION.**

Source of information	Patients (n)	Percentage (%)
Local chemist.	112	65.88
Friends/ relatives	52	30.58
Previous prescription	4	2.35
Newspaper/magazine	2	1.17

## DISCUSSION

Analysis of result reveals that prevalence of self medication in high in dermatologic conditions (42%) comparable to early reported prevalence [7] and this underscores the scarcity of doctors particularly dermatologists . In current study higher number of patients were males (56.5%) than females .While number of studies have shown higher prevalence of self medication in female patients [7,8,9,10]. However, in the present study such discrepancy could

be due to increased number of males reporting to OPD as they are frequently involved in outdoor work and restricted movement of females and this is in accordance Sogunro T and Ogunremi O [11] reported higher incidence in males.

Most of patients were between in 11-30 yrs age group (63.5%) as this group had easy accessibility to local chemists and friends. Higher incidence of acne vulgaris in current study which exclusively affect above age group contributes to the higher prevalence of self medication in this age group. Patients from urban area practiced more self medication than rural and this is in conformity with Dinesh Kumar et al [12] report, may be due to more availability of chemist shops in urban area. Local chemist was main source of information and is in concurrence with early report [13].

Self medication was maximum in matriculates and least in post graduates. This makes evident that higher education the more is awareness about drugs and their possible adverse effects and resultant less incidence of self medication.

Steroids were most commonly self medicated drugs as they are ignorantly thought to be wonder drugs by local chemists because of their wide indications in skin disorders. Since majority of patients in current study suffered from acne vulgaris which resulted in high self medication with steroids. Similarly in a previous study steroids have also been shown to be mostly self medicated drug in patients of acne vulgaris [14] Local application remained main route of application as observed earlier [7], because the steroids common self medicated drugs were mostly applied topically.

Reason that physician is not needed for these ailments was main cause of self medication and this observations is in same pattern to a previous study [13]. Most of patients in current study reported skin OPD because of dissatisfaction with outcome. Mouhari TA et al [7] have reported dissatisfaction with outcome of self medication as a main cause of seeking medical attention.

## CONCLUSIONS

Current study demonstrates high prevalence of self medication for dermatological conditions and provides insight into circumstances, reasons, source of information. India, a developing country where there is a scarcity of dermatologists further compounds the scenario. There is need for urgent measures to ensure rational use of drugs, intensive health education, strict drug control, discouraging dispensing of drugs other than over the counter drugs by the chemists without doctor's prescription and better availability of medical care.

## REFERENCES

- [1] Monastrue JL, Bagheri H, Geraud T, Lapeyre MM. Therapie 1997; 52: 105-110.
- [2] Filho L, Antonio I, Costa Lima MF, Uchoa E. Cad Saude Publica 2004; 20: 1661-1669.
- [3] Shankar PR, Partha P, Shenoy N. BMC Family Practice 2002; 3: 17.



- [4] Hughes CM, McElnay JC, Fleming GF. Drug Safety, 2001; 24(14): 1027-1037.
- [5] Conn VS. Public Health Nurs 1992; 9(1): 29-36.
- [6] Verma, Shyam. Int J Dermatol 2007; 46(suppl 2): 42-45.
- [7] Mouhari TA, Kombate K, Saka B, Akakpo S, Boukari OB, Pitche P, Tchangai Walla K. Med Trop (Mars) 2010; 70(3): 303-304.
- [8] Lau GSN, Lee KKC, Luk CT. Asia Pac J Public Health .1995, 8(3): 153-157.
- [9] James H, et al. Int J Clin Pharma Th 2008; 46(1): 23-29.
- [10] Zafar SN et al. J Pak Med Assoc 2008; 58(4): 214-217.
- [11] Sogunro T and Ogunremi O. Drug Alcohol Dependence 1980; 5: 479-484.
- [12] Dinesh Kumar B, Raghuram TC, Radhaiah G, Krishnaswamy KPharmacoeconomics. 1995; 7: 332-346.
- [13] Shveta S and Jagmohan S. Indian Journal of Pharmacy 2001; 4(2): 43-47.
- [14] Khalid T and Iqbal T. JUMDC 2010; 1(1): 10-13.