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A STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICE ABOUT SELF-MEDICATION AMONG RURAL POPULATION OF KALABURAGI CITY

Mohammed Sohail Ahmed[1]*, Neelambika S. Ghanti[1], Meera Reji[1], Namrata G. Thombre[1] and Manjunath Waggi[2]

[1]Pharm D. Interns, Department of Pharmacy Practice, Rajiv Memorial Education Society's College of Pharmacy, Kalaburagi, Karnataka, India.

[2]Assistant Professor, Department of Pharmacy Practice, Rajiv Memorial Education Society's College of Pharmacy, Kalaburagi, Karnataka, India.

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***Corresponding Author**
Mohammed Sohail Ahmed
Pharm D. Interns,
Department of Pharmacy Practice, Rajiv Memorial Education Society's College of Pharmacy, Kalaburagi, Karnataka, India.

ABSTRACT

Background: Self-medication is very rampant in south Asia countries especially in India, which may be a cause of concern regarding health issues, despite its solitary effects. Majority of population consume SM for prophylactic, minor ailments; with most medicines being used like PPI's, NSAIDS etc. But it's after maths effects are over looked. **Aim and Objectives:** To assess the Knowledge, Attitude and Practice about self-medication in rural population of Kalaburagi city by means of questionnaire (before & after intervention). To assess the impact of self-medication. To identify the most common conditions and medications preferred for self- medication among rural population. **Materials and Methods:** Six months study was carried out by collecting the data with the help of questionnaire. Paired t-test was applied for statistical significance. **Results:** Total 120 subjects were enrolled in the study. The common conditions reported by study were cold & cough 25 (20.8%). Majority of the participants have stated that they prefer self-medications such as analgesics 36 (30.0%). As we analyzed the study, the mean knowledge score (28.6%), attitude (24.1%) and practice (25.4%) were significantly improved after the intervention. **Conclusion:** The study findings have revealed that some of the rural population were in favour that SM is not safe and can harm their health and had a habit of knowing/checking expiry date. A clinical pharmacist can play a pivotal role by increasing the knowledge towards SM as an education intervention.

KEYWORDS: Self-Medication, World Health Organization, Rural population, Over the Counter.

INTRODUCTION

The World Health Organization (WHO) has defined Self-Medication (SM) as the use of drugs to treat self-diagnosed disorders or symptoms, or the intermittent or continued use of prescribed drugs for chronic or recurrent diseases or symptoms.[1]

By and large, SM is one of the socio-economic public health issue in many developing and developed countries as well. SM may be consumed in any of the form like traditional, herbal or modern (i.e. allopathic) medicines which are at parallel with schedule H and other schedule drugs.

SM has led to increased bacterial resistance, failure in optimal treatment, unintentional and intentional poisonings, drug market disruption financial loss and increasing per capita of drugs consumption in the community.[2]

Many individuals prefer SM as they are easily procurable and other major reason being longer distance to the hospital, over crowd, lengthy diagnosis procedure, ultimately with an impact on their economic burden, they may prefer SM as an alternate option. But this practice in long run may put them in many adversities like drug related problems (DRPS), masking of original disease, even hospitalization in few cases were also evident.

The trend of using SM among literates is much higher in metro cities and is on rise in the tier cities as well. There citizens are in opinion of that, they are well versed regarding all aspects of OTC medication with major information source being from internet media.[3]

MATERIALS AND METHODS

An institutional review board (IRB) clearance was obtained.

STUDY DESIGN: - Community based prospective educational study.
STUDY SITE: - Rural population of Kalaburagi City.
STUDY DURATION: - Six Months.
INCLUSION CRITERIA: - The data was collected among rural population of age ≥18yrs of Kalaburagi city.

EXCLUSION CRITERIA: - Health care professionals, psychiatric patients were excluded from the study in Kalaburagi city.

SOURCE OF DATA

1. Informed consent form.
2. Self structured questionnaire.

SAMPLE SIZE: - 120 subjects.

STUDY PROCEDURE: - The study was initiated after the approval from Institutional Review Board (IRB). During this study, 120 people were interviewed and those fulfilling the inclusion criteria were enrolled into the study. The subjects who were willing to participate in the study were provided with informed consent form which was duly signed by them. After obtaining the consent, face to face interviews were conducted using questionnaire. Questionnaire is a predesigned proforma which includes patient demographic details (Name, age, sex, occupation etc). In our study, we have included total 30 questions. Out of which, Knowledge based questions were 8, Attitude were 10 questions and Practice were 12 questions. The participants were then given brief information about Self-Medication, its advantages & disadvantages. Then Knowledge, Attitude and Practice towards the medications were assessed. Drug and disease details were also collected. Two weeks after pre-test, all the participants were educated regarding Self-Medication by providing information leaflets. Post-test has been conducted after 14 days of education by means of same questionnaire.

STATISTICAL ANALYSIS: - The data was analyzed by IBM SPSS 20.0 version software. Collected data were spread on excel sheet and master chart was prepared. Through the master chart, tables and graphs were constructed. For quantitative data analysis, paired t-test was applied for statistical significance. If P-value was less than 0.05 it was considered as significant.

RESULTS AND DISCUSSION

A total of 120 rural participants were enrolled in the study, out of which the percentage of females 72 (60.0%) were more when compared to the percentage of males 48 (40.0%) which was identical to study conducted by **Javed A et al**.[3] (Figure 1).

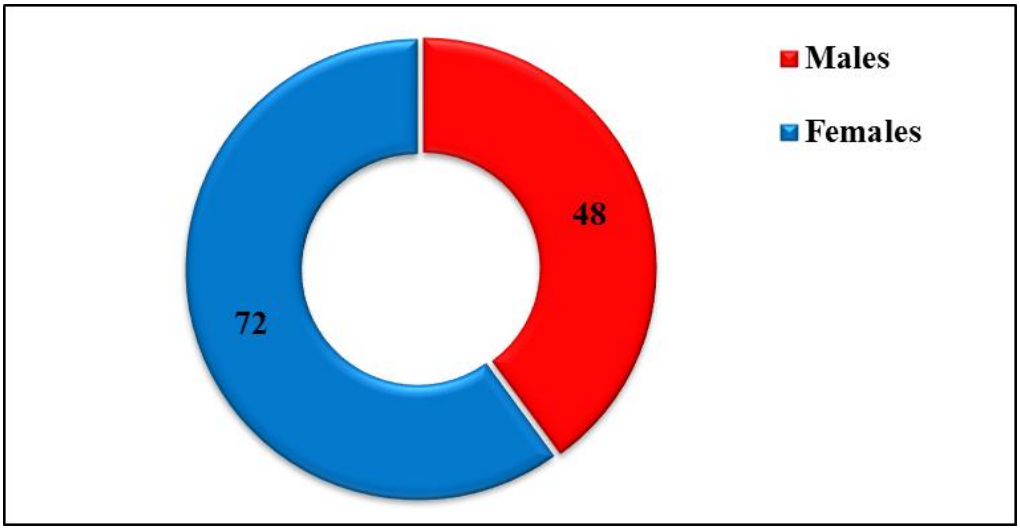

Figure 1: Gender wise distribution.

The study participants age was categorized into 4 groups of 10-year interval each comprising of 21-30 years is 43 (35.8%), followed by 31-40 years include 27 (22.5%), 41-50 years include 20 (16.7%) and only 16 (13.3%) belonged to the age group of 51-60 years which was in concurrence with the study conducted by **Sinha U et al[4],** in rural area of Bhopal. (Figure 2).

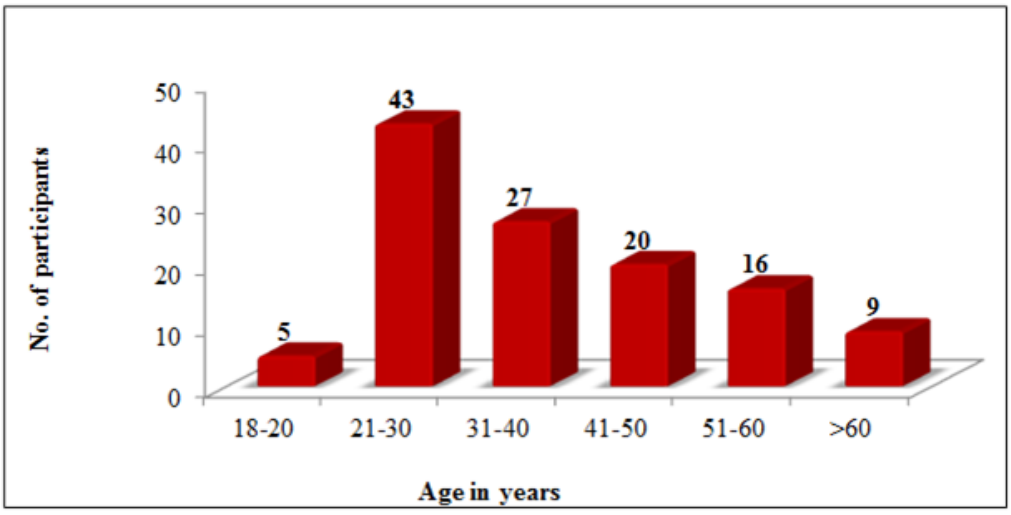

Figure 2: Age wise distribution.

Most of the subjects occupation of our study were housewife 50 (41.7%), followed by unemployed 22 (18.3%), farmers and agriculture labours 17 (14.2%), employed 16 (13.3%) and only 15 (12.5%) were skilled labours which was similar to the study conducted by **Mariappan V A et al[5],** in a rural population in Tamil Nadu. (Table 1).

Table No 1: Occupation wise distribution of study subjects.

Occupation	Study subjects	
	No.	%
House wife	50	41.7
Unemployed	22	18.3
Farmers and agriculture labours	17	14.2
Employed	16	13.3
Skilled labours	15	12.5
Total	120	100.0

The common conditions reported by our study participants were cold and cough 25 (20.8%), followed by body pain 23 (19.2%), fever 22 (18.3%), acidity 15 (12.5%), headache 13 (10.8%), diarrhea 11 (9.2%), vomiting 7 (5.9%) and only 4 (3.3%) itching which were identical to the previous studies conducted by **Pentareddy M R et al[6],** and **Cecyli C et al.[2]** (Figure 3).

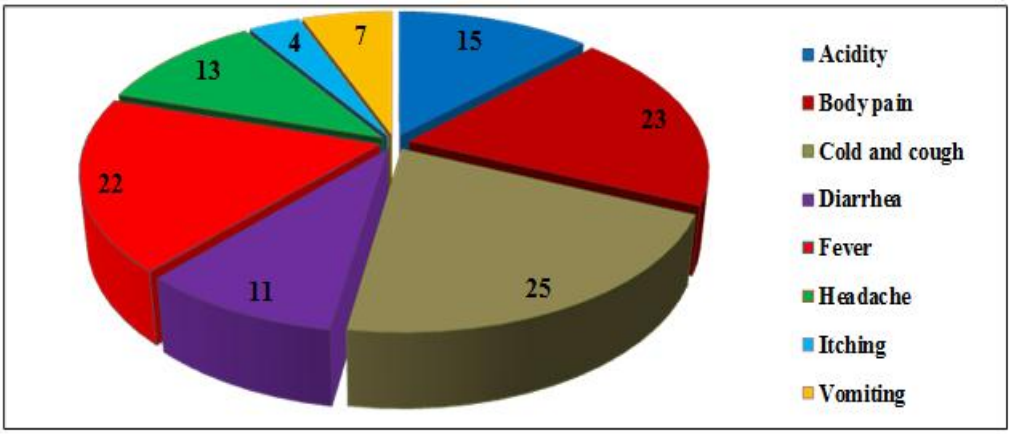

Figure 3: Common condition reported for self medication.

Majority of the participants of our study had stated that they prefer self-medications such as analgesics 36 (30.0%), Antipyretics 22 (18.3%), Antacids and Antihistamines 15 (12.5%), Antitussives 14 (11.7%), Antidiarrheal 11 (9.2%) and only 7 (5.8%) Antiemetic respectively which were replicable to previous studies by **Singh N P et al[7],** conducted among urban & rural areas in Etawah district and **Kalyani V et al[8],** which was conducted among rural & urban population in Uttarakhand.(Figure. 4).

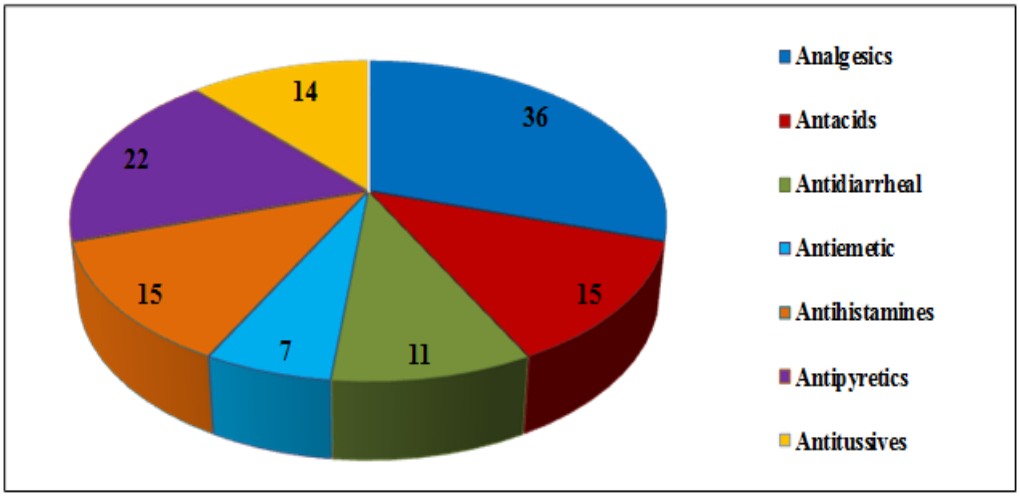

Figure 4: Common medication preferred for self medication.

As we analysed the present study, the mean knowledge scores of participants in pre-test & post-test was 4.17 and 6.46 respectively. And the mean attitude score of self-medication among the participants in the pre-test was 5.26; where as in the post-test score was 7.67 respectively. The practice mean score of participants in pre-test & post-test was 6.60 and 9.65 respectively. (Figure 5).

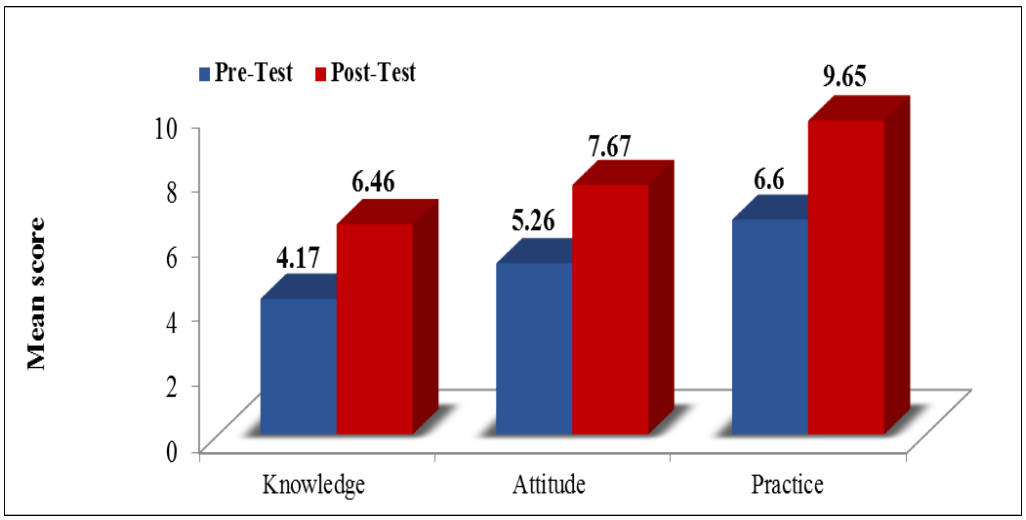

Figure 5. Pre-test & Post-test comparison.

In accordance to our study, we designed 30 questions.

During pre-test in Attitude related questionnaire, 64 (53.3%) participants felt **self-medication is safe**. This finding was similar to the study conducted among medical & non-medical students by **Agarwal M et al[9],** which cited that almost half of the subjects, 49.5% were neutral to the statement that self-medication was safe for use. However, majority of medical

students disagreed to it, 50% versus only 22% in non-medical students. Even though our study was similar but participants were discrete in nature. Therefore, no previous articles were found in this outlook. In post-test it has been reported that only 74 (61.6%) participants had felt self-medication is safe.

In our study post-test values revealed that, majority 106 (88.3%) participants felt that **continuous use of self-medication may cause dependency or addiction.** About 83(69.1%) of them felt by self-medication conditions can be treated successfully. The results of our study were synchronous to **Kalyani V et al[8],** a study conducted among rural & urban population in Uttarakhand.

In our study during post-test when our participants were asked, 98 (81.6%) believe **self-medication may harm their health.** About 91 (75.8%) believe **self-medication is time saving & cost effective**; 95 (79.1%) believe **diseases treated by self-medication can reoccur. (Table no 2).**

Table no 2: Responses of specific attitude related questions.

Questions	Pre Test		Post Test	
	No.	%	No.	%
Self-medication harm your health	63	52.5	98	81.6
Self-medication is safe	64	53.3	74	61.6
Self-medication is time saving and cost effective	60	50	91	75.8
Continuous use of Self-medication may cause dependency or addiction	62	51.7	106	88.3
Diseases treated by Self-medication can reoccur	70	58.3	95	79.1
By Self-medication conditions can be treated successfully	71	59.1	83	69.1

One of the aspects of our study to assess practice of rural participants is **checking the expiry date of medicine.** About 107 (89.1%) participants will ask the chemist to check the expiry date before using the medications which was similar to the results done by previous studies conducted among medical & non-medical students by **Agarwal M et al[9],** in which the expiry date on the medicine was checked by 96.5% of subjects before using it for self-medication, the incidence of not checking the expiry date was 6 times more in non-medical students (6%) & only (1%) in medical students. Even after intensive literature search we lack proper evidence to support the above observations.

During pre-test, in Practice related questionnaire; only 41(34.2%) **will visit the physician if adverse reaction occurs on self-medication** and is in concurrence with the study by

Kalyani V et al[8], conducted among rural & urban population in Uttarakhand which reported that there was no significant difference in practice for ADR happening when taking medicine for self-treatment. Although, the frequency of happening ADR among rural people is higher than urban, that is, 53% & 43% respectively.

Findings of post-test also reported that majority 113 (94.1%) participants had the habit of visiting physician if adverse reaction occurs on self-medication.

Our findings reported that in post-test about 103(85.8%) subjects **will consume medication according to the dose advised by the pharmacist.** This finding was identical to the study conducted among rural & urban population in Uttarakhand by **Kalyani V et al.[8]**

In post-test our results indicate that, only 72 (60%) will clarify about the medicines with pharmacist before they consume. Even though many studies were conducted, no previous articles were found in this aspect. (Table no 3).

Table no 3: Responses of specific practice related questions.

Questions	Pre Test		Post Test	
	No.	%	No.	%
Check the expiry date before using the medications	46	38.3	107	89.1
Clarify about your medicines with pharmacist before you consume	50	41.7	72	60
On self-medication if adverse reaction occurs will you visit physician	41	34.2	113	94.1
Do you consume medication according to dose advised by the pharmacist	53	44.2	103	85.8

CONCLUSION

- Our study findings have revealed that majority of the rural population were using self-medication for conditions such as cold & cough followed by body pain, fever, acidity, headache, vomiting, diarrhoea and itching and for the same medication used were analgesics and antipyretics followed by antacids, antihistamines, antitussive, antidiarrheal, antiemetics.
- The main findings of our study revealed that the rural population have insufficient knowledge regarding self-medication.
- The outcomes have shown that educational intervention has significant impact on knowledge, attitude and practice of self-medication among rural population. Community pharmacists have pivotal role in providing information about the medications to patients.

- After educational intervention the knowledge, attitude and practice regarding self-medication were significantly improved.

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