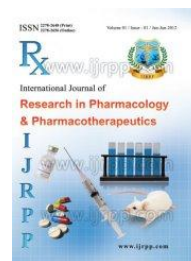




International Journal of Research in Pharmacology & Pharmacotherapeutics



ISSN Print: 2278 – 2648

IJRPP |Vol. 3 | Issue 2 | April-June- 2014

ISSN Online: 2278-2656

Journal Home page: www.ijrpp.com

Research article

Open Access

Assessment of self-medication among rural village population in a health screening and patient counseling campaign

*Amareswara Reddy Gangula, Divyaja M, Gowthami Reddy V, Siva Kumar Reddy K,
Samjeeva Kumar E.

P Rami Reddy Memorial College of Pharmacy, Rajiv Gandhi Institute of Medical Sciences,
Kadapa, Andhra Pradesh, India.

* Corresponding author: Amareswara Reddy Gangula.

E-mail id: amarpdtr@gmail.com

ABSTRACT

Objective

The study aims at identifying self-medication pattern among rural population and various factors influencing it like occupation, habits, literacy rate, extent of awareness, source for drug information etc.

Method

A patient counseling and health screening campaign was held in a rural village called Utukur by P.Rami Reddy Memorial College of pharmacy located at kadapa town in Andhra Pradesh, India. A total number of 124 patients were assessed to identify the self-medication pattern and after the collection of data, the patients were counseled regarding the rational use of self-medication.

Results

Out of 124 rural patients (68 male and 56 female), majority of them (40) who take self-medication are from age group of 20-39 years. High illiteracy rate (72%), being farmers and daily wage workers (79%), high consultation fee (26%), obtaining quick relief (15%), lack of awareness about drug-drug, drug-alcohol, drug-smoking interactions (96%), easy availability from nearby pharmacy stores (88%), suffering from one or another chronic illness (58%) etc were found to be important factors influencing self-medication habit among them. Other parameters like symptoms for which they take self-medication, since how many years they are on self-medication, did they experienced any adverse consequences, their personal habits were also assessed.

Conclusion

There is an immediate necessity to provide awareness about the use of medicines in more number of villages. The staff and students of pharmacy colleges can have a greater impact upon self-medicating behavior of illiterates in rural areas by conducting awareness and patient counseling campaigns. As pharmacy stores are major source to purchase OTC medications, community pharmacist has got a major role to play in assisting and providing information to the patients about rational use of medicines

Keywords: Self-medication in rural village, Health screening, Patient counseling campaign.

INTRODUCTION

Self-medication is the rising form of self-care¹ and it is becoming a major problem in making the correct diagnosis.² Self-medication is the use of medication by a patient on his/her own idea or on the suggestion of pharmacist on the opinion of a lay person instead of taking the advice of consulting a medical practitioner.³ Self-medication entails the use of medicinal products by the consumer to treat the symptoms of disease or disorder, minor ailments and persistent disease. Self-medication does not rely on the age or gender of the people.⁴ The medication which is available as over the counter (OTC) drug and doesn't need the doctor's prescription and accessible through pharmacies, especially in the developing countries.⁵ There are many reasons such as urge of self-care, feeling sympathy towards family members in sickness, poverty, ignorance, misbeliefs for the rising tendency of self-medication. The main reason among all, is the ease in the access of medication due to wide spread availability of OTC medicine by the contribution of Pharmaceutical companies which are well developed in recent days.⁶ For this reason, the drugs may get misuse or abuse potentially.¹

The major consequence with self-medication includes the leftovers of resources, increased pathogenic resistance and usually entails serious hazards such as adverse effects. The resistance to the Anti-microbial agents is a worldwide problem, generally develops due to the usage of antibiotics(OTC) without prescription particularly in developing countries where antibiotics are often available without any prescription.⁷ The irregular usage of medication by self will result in the irrational use of drugs which further increases the risk of adverse effects, occurrence of infections, hypersensitivity reactions and often some withdrawal symptoms exclusively results in the delayed diagnosis. The incorrect diagnosis will progress into the growing resistance and worsening of health condition.² People choose self-medication due to the generation of considerable benefits related to the economy through saving the travel charges, consultation fee and the financial cost of the treatment. But there is necessity to take certain measures to ensure the safety of taking self-medication.⁸

They include;

- The indicated drug usage for self-recognizable conditions
- The consumer should know the usage of drugs, effects and possible side effects as well as monitoring ways for side-effects
- The consumer should know the duration of course
- The user should be aware of possible interactions

Now-a-days the consumers (patients) desire to take care of their own health and sometimes proficient to manage the uncomplicated chronic and recurrent illness after medical diagnosis and take the professional advice intermittently. For example, Usage of oral contraceptives, antacids and H₂-receptor blockers etc.⁹ The major draw-back of controlling the self-medication in developing countries is the availability of OTC drugs, which can be purchased only with the prescription in developed countries. Additionally people prefer to use self-medication due to the expensive professional health care cost in developing countries.³ Self-medication is well-situated practice for patient and it has been reported as being on rise internationally. In particular, the self-medicated antibiotics have been reported widely. As a result WHO paid its attention towards the harm of self-medication practice due to the resistance of antibiotics.¹⁰ Self-medication is influenced by many factors such as family, education, society and availability of drugs etc. The extrapolative factor for self-medication is high level of education and professional status.³

In countries like India, Wide spread availability of drugs and insufficient health services together results in the increase proportion of self-medication practice when compared to the usage of prescribed drugs.¹ The Governments and health authorities need to take steps forward to control the practice of self-medication or provide adequate information about the use of drugs over the counter. The awareness should be created among the patients about the good as well as harm of drugs.¹¹ The students should be educated about the harm of indiscriminate use of drugs and the physician should be more cautious while prescribing and must maintain demand on drugs being supplied by druggist/ chemist only on valid prescription.³

AIM

The study aims at identifying self-medication pattern among rural population and various factors influencing it like occupation, habits, literacy rate, extent of awareness, source for drug information etc.

MATERIALS AND METHODS

A patient counseling and health screening campaign was held in a rural village called Utukur by P. Rami Reddy Memorial College of pharmacy located at kadapa town in Andhra Pradesh, India. The staff and

students actively participated in the campaign. A total number of 124 patients had participated in the campaign from morning to evening. The patients were assessed to identify the self-medication pattern by using specially designed “Self-medication data collection proforma”. After the collection of data, the patients were counseled regarding the rational use of self-medication. The event was covered by local media “SAKSHI”, the Telugu daily newspaper.

RESULTS AND DISCUSSION

Table-1: Age wise distribution of patients participated in the campaign

Age group	Male (n=68)	Female (n=56)	Total (n=124)
0-19	9	8	17
20-39	18	22	40
40-59	22	12	34
>60	19	14	33

Table-2: Occupation of patients participated in the campaign

Occupation	Number of patients	Percentage
Farmers and daily wage workers	98	79%
Small scale business	9	7%
Students	6	5%
Employees	5	4%
No work	6	5%

Table-3: Number of patients who experienced various episodes of illness

Number of episodes of illness	Number of patients (n=124)	Percentage
>3 episodes	61	49%
3 episodes	29	23%
2 episodes	21	17%
1 episode	13	11%

Table-4: Habits of patients participated in the campaign

Habits	Number of patients (n=124)	Percentage
No habits	33	27%
Alcohol	27	22%
Smoking	35	28%
Both alcohol and smoking	20	16%
Other habits	29	23%

Table-5: Table showing number of patients on self-medication since number of years

On self-medication since	Number of patients	percentage
>5 years	37	30%
3-5 years	26	21%
1-3 years	31	25%
1 year	22	18%
<1 year	8	6%

Fig-1: Pie chart showing various reasons for not consulting a Doctor

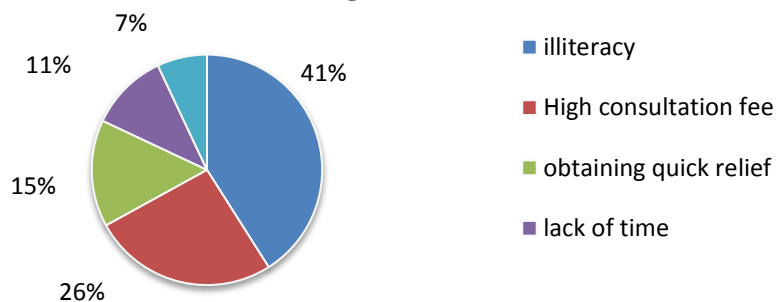
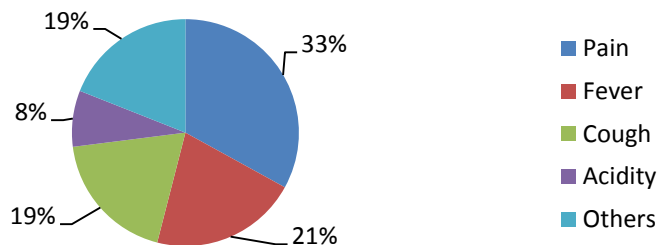


Fig-2: Pie chart showing major symptoms of illness for which the patients take self medication



**Fig-3: Yes/No response by patients for various questions
D-D/D-A/D-S: drug-drug/drug-alcohol/drug-smoking interactions**

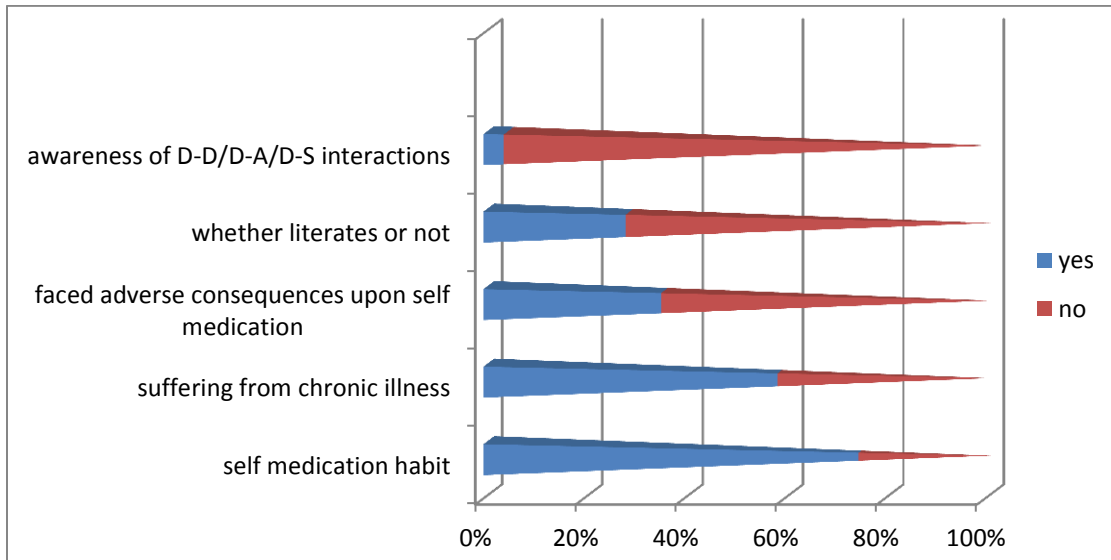


Fig-4: Pie chart showing various dosage forms taken by patients as self medication

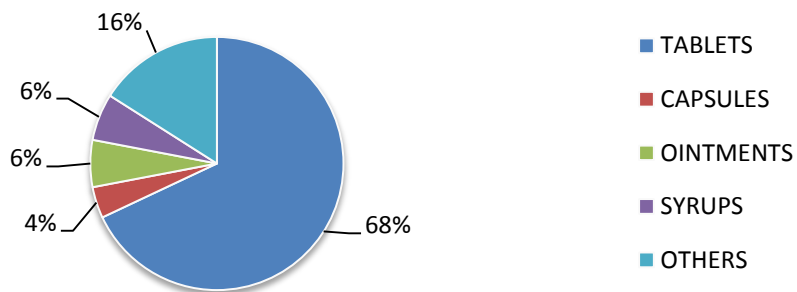
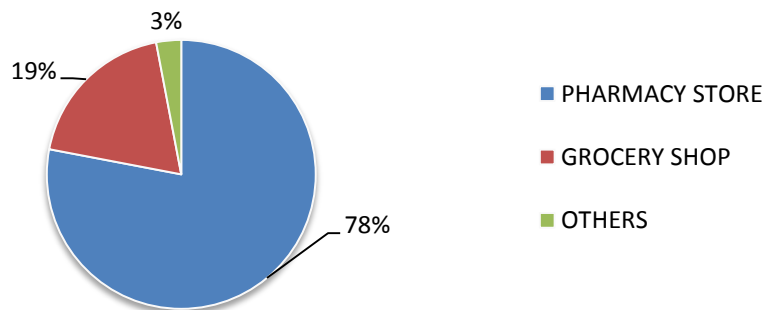


Fig-5: Pie chart showing various sources for obtaining OTC drugs by patients



A total number of 124 patients have participated in the health screening and patient counseling campaign held on world pharmacist day in a rural village called Utukur in Kadapa district of Andhra Pradesh. Among them male patients were 68 (55%) and female patients were 56 (45%). Maximum number of patients was in the age group of 20-39 years. There were almost equal numbers of patients (34, 33) from the age groups 40-59, >60 years respectively (Table - 1). Most of them were illiterates (72%) and literates were only 28% (Fig-3). Farmers and daily wage workers comprise the largest portion (79%) of patients followed by small scale business holders (7%), students (5%), employees (4%), and 5% of them won't do any work at all (Table 2). 74% (92) of them have agreed that they have habit of taking medicines of their own without consulting a physician and 26% (32) have refused it (Fig-3). For the question "what was the main reason for not consulting a doctor?", the answers were as follows, illiteracy (41%), high consultation fee (26%), obtaining quick relief (15%), based on previous prescription (7%), and 11% of patients have stated lack of time as reason (Fig-1). 49% (61) patients had reported that they had experienced more than three episodes of illness for which they take self-medication to get relief from symptoms (Table-3). Major symptoms of illness for which the patients take self-medication were observed as pain (33%), fever (21%), cough (19%), acidity (8%) and others (19%) (Fig-2). 58% of the population was suffering from one or another chronic illness, while 42% were not. (Fig-3) 65% of the patients had stated that they have not faced any adverse consequences upon self-medication and 35% of them experienced some adverse consequences (Fig-3). Important finding of the present study was that 96% of total population was not aware of any drug-drug (or) drug-alcohol (or)

drug-smoking interactions. Only 4% of them reported as they were aware but the extent of their awareness was uncertain (fig-3). Undoubtedly, tablets (68%) were the major type of dosage form taken by patients followed by capsules (4%), syrups (6%), ointments (6%) and others (16%) (Fig-4). 27% of the patients were not addicted to any personal habits, 22% of them were alcoholics, 28% of them were smokers, and 16% of them were addicted to both alcohol and smoking (Table-4). Another important finding is that 37 patients (30%) were on self-medication without any consultation to any health care provider for more than 5 years, 26 (21%) of them were taking for 3-5 years, 31 (25%) of them for 1-3 years, 22 (18%) of them from 1 year, and 8 (6%) of them were taking from less than 1 year (Table-5). It was found that whenever they were in necessity of any OTC medications, they approach the pharmacy stores in the nearby town, Kadapa and procure them. 88% of them obtain their OTC drugs from pharmacy stores, 9 % of them obtain from any grocery shops and 3 % of them obtain through various other means (Fig-5).

CONCLUSION

It is very clear that most of the people in rural areas rely on OTC medications to treat self-diagnosed symptoms. And, the only major source to procure such medications is the pharmacy store. Hence, community pharmacist has got a major role to play in assisting and providing information to the patients about rational use of medicines. There is an immediate necessity to arrange lot of such campaigns to provide awareness about the use of medicines in more number of villages. The staff and students of pharmacy colleges can have a greater impact upon self-medicating behavior of illiterates in rural areas by conducting awareness and patient counseling campaigns.

REFERENCES

- [1] Sonam Jain et al. Concept of Self-medication: A review, International Journal of Pharmaceutical and Biological Archives 2011; 2(3) : 831-836
- [2] Dayani G et al. Responsible Self-medication: review of the process of pharmaceutical attendance, Brazilian J Pharm Sci 2009; 45(4): 625-633
- [3] Rohit K Verma et al. Evaluation of self-medication among professional students in North India: proper statutory drug control must be implemented, Asian Journal of Pharmaceutical and clinical Research, vol.3 issue 1, Jan-Mar 2010, Pg.no: 60-64

- [4] Afolabi AO. Factors influencing the pattern of self-medication in an adult Nigerian population, *Annals of African Medicine* 2008; 7 (3) : 120-127
- [5] Pawar *et al.* how safe : Ask to your pharmacist, *The Pharma review* 2009; 7 (47) : 150-152
- [6] Hussain A, Khanum A. Self-medication among university students of Islamabad, Pakistan-a preliminary study, *southern Med Review* 2008; 1(1) : 14-16
- [7] Pgane JA *et al.* Self-medication and health insurance coverage in Mexico. *Health Policy* 2007; 75: 170-177
- [8] AESGP(2004). The economic and Public health value of self-medication. Brussels, Belgium. Available from: [http:// www.aesgp.be/researchproject/finalreport.pdf](http://www.aesgp.be/researchproject/finalreport.pdf).
- [9] Self –medication: Bennett PN, Brown MJ. *Clinical pharmacology*, 9th ed. Churchill Livingstone; 2003.p.25-26
- [10] Kamat VR *et al.* Self-medication and pharmaceutical marketing in Bombay India 1948, *socsci Med* 1998; 47(6) : 779-794
- [11] World Health Organization: The role of pharmacist in self-care and self-medication. Report of the 4th WHO consultative group on the role of the pharmacist.