

**VISION OF RURAL PHARMACIST IN PATIENT COUNSELING AND CONTINUING PHARMACY EDUCATION PROGRAMS****Ranjeet B Ugale<sup>\*1</sup>, Vilas B Ghawate<sup>2</sup>, Prashant J Ghule<sup>2</sup>**<sup>1</sup>Mula Rural Institute of Pharmacy, Sonai, Tal – Newasa, Dist. Ahmednagar. M-S-414105<sup>2</sup>MES's College of Pharmacy, Sonai, Tal- Newasa, Dist. Ahmednagar. M.S.-414105**ABSTRACT**

The objective of this study is to study the perception of community pharmacists towards patient counseling and to identify the extent to which pharmacists provide information on medication use, side effects and interactions orally and to assess the importance patients place on pharmacist provided information. As a methodology a semi structured questionnaire was developed by the researchers. The research was carried out in rural areas mainly in newasa taluka. The filled questionnaires were analyzed as per the study objectives. Altogether, 60 community pharmacists were included. Among them, 88.33% (n=53) were male. More than 50 patients visit most of the community pharmacies [53.38% (n=32)] daily. Most of the dispensers [58.33% (n=35)] took 1-5 minutes for dispensing a prescription. In most of the pharmacies the qualification of owner is D.Pharm [64% (n=45)], Most of them [60% (n=150)] believed that counseling was necessary as it was their own duty, but however, 6% (n=15) said that it was necessary to increase patient compliance. Our finding suggests that 80.00% (n=48) of retailers were facing some problems during patient counseling. All participants were interested in the continuing pharmacy education program. It is concluded on the whole that the community pharmacists had a positive response towards patient counseling. Our findings suggest the need for continuing pharmacy education programs in rural areas to strengthen the concept of patient counseling.

**Correspondence to Author****Ranjeet B Ugale**Mula Rural Institute of  
Pharmacy, Sonai, Tal – Newasa,  
Dist. Ahmednagar. M-S-414105**Email**

prashantpharma07@gmail.com

**Key Words**community pharmacists, patient  
counseling, continuing pharmacy  
education program etc.

## INTRODUCTION

Across the world, every day, millions of people visit community pharmacies for their health care needs<sup>1</sup>. Pharmacists are placed at the first point of contact in the health care system due to their free accessibility and friendly approach. In contrary to this scenario, many general practitioners do not regard pharmacists as potential members of the health care team<sup>1</sup>. In recent times, much focus was laid on the new roles of the community pharmacists in developed countries like Australia, United States of America and the United Kingdom. The role of the pharmacist, especially as a health adviser, is highly esteemed and acknowledged by general practitioners in these countries<sup>1</sup>. The need and potential for counseling the patients regarding their drug therapy has been an important part of the pharmacy practice and pharmaceutical care. It has been

**Table – 2: Strategies suggested by dispenser to overcome these problems (n=86)**

Strategies	Number	Percentage
Increasing Number of pharmacist	33	38.37
Providing separate space for counseling	13	15.11
Procuring adequate books	14	16.27
Attending CPE programme	18	20.93
Providing extra money for conseling	03	3.48
Other	05	5.81

**Note :- One community pharmacist might have had suggested more than one strategy to overcome the barrier.**

### Qualification of dispensers of community pharmacies (n=112)

The qualifications of a majority of dispensers were other qualifications [66.96% (n=75)] followed by D.Pharm holders [33.03% (n=37)].

### Common sources of drug information available in the community pharmacies (n=110)

The commonest sources of drug information were, the Current Index of Medical Specialties CIMS[ 54.54% (n=60)], followed by Monthly Index of Medical Specialties (MIMS) [27.27% (n=30)] and Indian Drug Review [(IDR) 18.18% (n=20)].

### The purpose of giving medication counseling (n=120)

There are different feelings among the dispensers regarding the counseling. Nearly one fourth [25% (n=30)] of them considered counseling as their duty. The views

the responsibility of the pharmacist to counsel the patients before dispensing the medication<sup>2</sup>. [13.33% (n=8)] and B.Sc. [11.66% (n=7)] other qualifications [0% (n=0)].

### Problem faced during patient counselign (n=90)

Forty seven percent (n=43) of community pharmacists felt that lack of time was the major problem or barrier faced during patient counseling, followed by lack of knowledge 27.77% (n=25), and lack of patient interest 14.44%(n=13). Eight point eighty eight percentage (n=8) of them felt that they do not face any problems during patient counseling and 5.55% (n=5) had other problems.

### Strategies suggested by dispensers to overcome the barriers (n=90)

The various strategies suggested by the dispenser to overcome the experienced barriers, are given in ( Table 2).

expressed by them regarding the purpose of counseling are given in ( Table 3).

**Table – 3: Purpose of giving medication counseling (n=120)**

Purpose of giving advice	Number	Percentage
To improve compliance	32	26.66
To improve sales	28	23.33
To have professional satisfaction	12	10
Strategy to overcome competition	08	6.6
Duty	30	25
Other	10	8.33

**Note :- One community pharmacy provide more than one purpose for giving medication counseling**

### Frequently asked questions by the patients (n=210)

Patients asked several questions to the pharmacists while counseling. The details on frequently asked

questions are given in (Table 4).

**Table – 4: Frequently asked question by patient (n=230)**

Question asked	Number	Percentage
Dose	45	19.56
Cost	48	20.86
Administration time	35	15.21
Side effect	13	5.62
Disease	18	7.8
Storage aspect	10	4.34
Duration	47	20.43
other	14	6.08

**Note :- One patient might have asked more than one question regarding their medications .**

#### **The dispenser's interest in the CPE program (n=110)**

All the participants ( community pharmacists or respondents ) were interested in the Continuing pharmacy education (CPE) program and all of them felt that Continuing pharmacy education program would help in improving their knowledge. Furthermore, more number of dispensers were interested in the CPE program on common drugs [51.81% (n=57), followed by the CPE program on diseases [30% ( n=33)], the CPE program of lifestyle [10.9% (n=12)] and others [7.2%(n=8)]

#### **DISCUSSION :**

Surveys have found that community pharmacies are very often the first and only source of health care outside the home. For running a community pharmacy, the Pharmacy council of India has allowed pharmacists, who had taken a minimum qualification D.Pharm, as capable for running a pharmacy<sup>7</sup>. In our study, the qualifications of the majority [66.96% ( n=75)] of dispensers and pharmacy owners ( 75% n=45) were found to be other and D.Pharm respectively, Several studies have suggested that private drug sellers generally have little formal education or professional training<sup>8,9</sup>. Our study found that on an average 50 patients visit most of the community pharmacies per day. Most of the dispensers took 1-5 minutes for dispensing a prescription. The major source of drug information available at community pharmacies was the

Current Index of Medical Specialties (CIMS) [54.54% (n=60). Most of dispensers in this study feel that providing counseling to the patient is the duty of the pharmacist. Many professional organizations like the Society of Hospital Pharmacists Australia (SHPA) and the American Society of Health-system Pharmacists (ASHP), have also mentioned that patient counseling is the responsibility of pharmacists<sup>10,11</sup>.

The preliminary evaluation of the services provided by the center concluded that the medication counseling center can play a definite role in enhancing the patient's understanding about medications and the disease pattern, which in turn may improve patient compliance<sup>12</sup>. Moreover, the newly drafted National Good Pharmacy Practice Guidelines also suggest that the pharmacist should provide counseling<sup>13</sup>. Lack of time was the major problem faced by the most of the dispensers, which was mainly due to the lack of manpower. However, a study conducted by Mishra et al. found language to be the major barrier for better counseling<sup>12</sup>. As lack of time was the major problem faced by a majority of dispensers the solution suggested by them to overcome the barriers, was to increase the number of pharmacists. According to the dispensers, frequently asked questions by the patients were related to costs, doses and duration of the medication. The query related to cost was the most expected one, as the per capital income of the Indians population is very less. Similarly, the query related to dose and duration of the medication was also common,

because it was always confusing when more than one drug was Counseling not only enhances compliance, but also reduces complications due to non-compliance to treatment<sup>3</sup>. Pharmacists are trying to move away from a drug- focused approach to a patient oriented approach according to the patient's needs, with the aim of achieving better outcomes from drug therapies<sup>4</sup>. This requires close co-operation between pharmacists and other health care professionals, especially physicians, and requires knowledge and skills extending beyond the product knowledge about medicines<sup>5</sup>. Despite the beneficial role of community pharmacists, not much research focusing on their role and responsibilities have been conducted in developing countries like Nepal . According to a study conducted in rural areas, self medication and non-doctor prescription were the common drug use problems there<sup>6</sup>.

In rural areas drug retailers do not have adequate understanding about the disease process in questions, in order to justify their sale of those antibiotics. More exhaustive efforts to educate drug retailers on their role in dispensing, along with increased enforcement of existing regulations, must be followed in rural areas. Therefore, there is a greater need to advocate and conduct research concerning long term health promotion and public education through the profession of pharmacy. In order to improve the professional roles of pharmacists in rural areas, there is a need for training the community pharmacists towards patient counseling. Evaluating the current perception of the community pharmacists can be useful to initiate appropriate interventions. Hence, the present study was undertaken with the following objectives.

#### **OBJECTIVES :-**

The objectives of the study were

1. To study the demographic details of the community pharmacists
2. To Study the sources of drug information used by the community pharmacists
3. To explore the community pharmacist's perceptions towards patient counseling and to

identify the major barriers for effective counseling.

4. To identify the extent to which pharmacists provide information on medication use, side effects and interactions orally and to assess the importance patients place on pharmacist provided information

#### **MATERIALS AND METHODS :-**

##### **Questionnaire**

A semi-structured questionnaire was formulated by the researchers ( Appendix-1) Table 1) as per the study objectives.

##### **Data Collection**

A prospective study was conducted between 15<sup>th</sup> July 2009 to 15<sup>th</sup> January 2010 ( Six months) in six major village in newasa taluka i.e. Sonai, Ghodegaon, Kukuana, Chanda, Newasa and Wadala. 10 randomly selected community pharmacies from each village were included in the study. Community pharmacists from the randomly selected pharmacies were interviewed with the formulated questionnaire.

##### **DATA ANALYSIS**

The filled questionnaires were analyzed as per the study objectives using Microsoft Excel version 2003.

##### **RESULT**

Altogether, 60 community pharmacists were included in this study. Among them, 88.33% (n=53) were males and 11.66% (n=7) were females.

##### **Number of patients visiting community pharmacies (n=60)**

Every, more than 50 patients visited 53.33(n=32) of the community pharmacies, followed by 30-50 patients [ 30% (n=18)], 20-25 patients [13.33% (n=08)] and 10-20 patients [3.33% (n=02)] to fill their prescriptions.

##### **Dispensing time in community pharmacies (n=60)**

More than half [58.33(n=35)] of the dispensers took 1-5 minutes for dispensing a prescription, followed by 5-10 minutes [30% (n=18)]. 12.67% (n=7) of them took more than 10 minutes, and no body take less than 1 minute.

In most of the pharmacies [50% (n=30)], there were single pharmacist, followed by a 2 dispensers in 41.66% (n=25) of pharmacies and only 8.33% (n=5) of pharmacies had 2-5 dispensers and more than 5 dispenser is nil.

### **Qualification of the owners of community pharmacies (n=60)**

The qualifications of the owners of the pharmacy were D.Pharm [75% (n=45)], B.Pharm prescribed.

All participants were interested in the Continuing pharmacy education (CPE) program and felt that the Continuing pharmacy education program would help in improving their knowledge. One of the studies on the effect of a continuous community pharmacy practice also suggested that the program was beneficial for all students and participating pharmacists also suggested that the program was beneficial for all students and participating pharmacist<sup>14</sup>. Community pharmacists participated in patient counseling more frequently than institutional pharmacists, while institutional pharmacists participated in drug monitoring more frequently than community pharmacists. Community pharmacists had more direct access to patients and so the counseling was effective<sup>15</sup>.

### **Conclusion**

Our study found that community pharmacists in rural areas meet a larger number of patients and are interested in patient counseling. Their education level is low and thus, there is a need for CPE programs for them in order to upgrade their knowledge. They are at present, equipped with a limited number of drug information sources needed to provide patient counseling. There is a need for research in this area, involving more number of community pharmacists, so as to extrapolate our findings.

### **Limitations**

Though the study was successful in evaluating the perception of the rural community pharmacists (mainly in Newasa Taluka) on patient counseling and CPE program, it had a few limitations. The total numbers of pharmacists studied were low and hence, our findings may not reflect the perception of the entire

community of pharmacists in rural areas (mainly in Newasa Taluka).

### **REFERENCES**

1. Adepu R and Nagavi B.G. General practitioners' perception about the extended roles of community pharmacists in the state of Karnataka : A study. *Indian J.Pharm. Sci.* 2006; 68:36-40.
2. Popovich NG. Ambulatory patient care. In : Gennaro A R editor Remington: The science and practice of pharmacy, Vol. 2. Mack Publishing Company, Pennsylvania, 19th Ed, 1995; 1995-1719.
3. Palaian S, Prabhu M, Shankar PR. Patient counseling by pharmacists : a focus on chronic illness. *Pak J Pharm Sci.* 2006; 19 : 65-72.
4. De Young M. Reflections on guidelines and theories for pharmacist- patient interactions. *J Pharm Teaching* 1996; 5: 59-81.
5. Kansanaho H, Pietila K and Airaksinen M. Can a long-term continuing education course in patient counseling promote a change in the practice of Finnish community pharmacists? *Int J Pharm Pract* 2003; 11: 153-60.
6. Shankar PR, Partha P and Shenoy N. Self – medication and non-doctor prescription practices in Pokhara valley, Western Nepal : a questionnaire- based study *BMC Fam Pract* 2002; 3: 1-7.
7. Department of Drug Administration 1979 (DDA). New pharmacy registration. Available on <http://www.dda.gov.np/pharmacy%20registration/karyabidhipasal2063R.pdf> (accessed on June 14,2008).
8. Ferguson AE. Commercial pharmaceutical medicine and medicalization a case study from El Salvador in *Cult. Med. Psychiat.* 1981; 5; 105-34.
9. Wolffers I. Drug information and sales practices in some pharmacies of Colombo, Sri Lanka. *Soc Sci Med* 1987;25: 319-21.
10. Dooley M, Lyall H, Galbraith K et al (1996). SHPA Standards of practice for Clinical Pharmacy. In SHPA practice standards and definitions :2-11.
11. ASHP guidelines on pharmacist- conducted patient education and counseling. *Am J Health – Sys Pharm* 1997; 54: 431-34.

12. Mishra P, Subish P, Upadhyay DK, Bista S, et al. Medication counseling center in a teaching hospital. J Nepal Med Assoc 2005; 44: 129-34.

13. Good Pharmacy Practice Guidelines (GPP) (November 2005 draft). Developed by Nepal Pharmacy Council, Kathmandu, Nepal, Available online on [http://www.dda.gov.np/guidlines/national\\_gpp.pdf](http://www.dda.gov.np/guidlines/national_gpp.pdf) (Accessed on May 19,2008).

14. Thomas, SG, Beck DE and Janer A. Effect of a continuous community pharmacy practice experience on student attitudes, motivation, and communication skills. Am J Pharm Educ 1997; 61 : 125-31.

15. Schommer JC and Cable GL. Current status of pharmaceutical care practice: strategies for education . Am J Pharm Educ 1996; 60: 36-42.

\*\*\*\*\*