



## AN ASSESSMENT OF COMMUNITY PHARMACIST ATTITUDE TOWARDS PROFESSIONAL PRACTICE AND KNOWLEDGE OF ADR IN SOUTH INDIA

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### ABSTRACT

The activities of Indian community pharmacist involvement in management of modern medicines were still unknown. This has increased some adverse effects. The pharmacists are losing their confidence in fulfilling their professional aspirations in developing their professional role. The objective of the study was to determine the community pharmacist attitudes towards professional practice in South India. This cross sectional study consist of questionnaires determining the four activities namely managerial activity, dispensing activity, pharmaceutical care activity and health care activity which was asked to fill by the pharmacist. The data was collected, entered into excel and analyzed for descriptive statistics. Out of total 50 community pharmacists 90% of them were male and 10% were female. A maximum of 74% have below 10 years of experience. Nearly 54% of them not studied even diploma but have ample years of experience. The highest percentage was scored by managerial and dispensing activity. In pharmaceutical care activities, the percentages were lower being 50-60%. The knowledge of ADR was relatively poor. The health care activities scored the lowest among entire questionnaire which shows least importance in public care activities. This study shows clear view that community pharmacist were still in traditional practice i.e just dispensing the medicines. Pharmaceutical care, ADR and self-care were still distant from community pharmacist. The pharmacist's role in patient care is expected to grow as professional and educational standards develop. The health care services in community pharmacy are currently insignificant and must undergo changes to meet the changing needs of the modern medicine users.

**Key Words:-** Community Pharmacist, Pharmaceutical Care, Health Care, Adverse Drug Reactions.

### INTRODUCTION

The pharmacy practice scenario and especially community pharmacy practice during pre-independence era was highly unregulated and there were no restrictions on the practice of pharmacy in India (Subal Chandra Basak and Dondeti Sathyanarayana, 2009). One common perception amongst members of the pharmaceutical industry/ profession other than those involved in community pharmacy is that pharmacists/chemists work

merely like traders and do not provide any professional service and that there is no image of high esteem for them in society as shown to other members of the health care team (Hepler CD and Strand LM, 1990). The expansion of the role of community pharmacists was given an important boost in 1990, when Hepler and Strand coined the term 'pharmaceutical care'. However, community pharmacy is not considered a well-established healthcare profession in India (Muhammad Tanweer Alam, 1995). Many pharmacists are unaware of their professional roles and responsibilities. The professional practice is adjusting to a market-oriented economy. The pharmaceutical sector has been liberalized giving rise to a

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significant increase in the number of community pharmacies. This has led to some adverse effects on the profession of pharmacy with pharmacists having considerable difficulties fulfilling their professional aspirations and possibly losing confidence in further developing their professional role. Here the present study is to assess the community pharmacist service in professional health care.

## MATERIALS AND METHODS

The entire study was planned to be carried out for a period of a three months from December 2012 to February 2013. The study was conducted in Nellore and Mahabubnagar districts of Andhra Pradesh. The Pharmacy has been selected based on the following inclusion and exclusion criteria

### *Inclusion criteria*

- Community pharmacy

### *Exclusion criteria*

- Chain pharmacy
- Hospital pharmacy
- Supermarket cum pharmacy
- Pharmacies attached to the clinic

A special questionnaire was prepared from the reference of the various community pharmacy based articles collected from different standard journals. The questionnaire contains two proforma for incorporating the details.

### *Proforma I*

Pharmacist informed consent form and demographic data of the pharmacist.

### *Proforma II*

Pharmacist assessment questionnaire which consisted of 35 questions divided into 4 sections which addressed various aspects of practice

- Managerial activity
- Dispensing activity
- Pharmaceutical care activities
- Health care activities

This cross-sectional study comprised of 50 community pharmacies working in the parts of Nellore and Mahabub Nagar districts of Andhra Pradesh, India. Out of 50 questionnaires 35 were taken from Nellore district and 15 from Mahabub Nagar Districts. The pharmacies have been selected according to the inclusion and exclusion criteria. They were first asked to fill the informed consent form and also demographic data. The questionnaire formats were then given and asked to fill by

the pharmacist and it is in Yes or No format.

## RESULTS AND DISCUSSION

From the demographic data Table 1 it shows that males are mostly engaged in community pharmacy than female. Similar studies have been reported in community pharmacists working in Pakistan (Cordina *et al.*, 2008). However, this might not be similar in other countries where majority of females are also engaged (Basak SC and Sathyanarayana D *et al.*, 2009).

The results of the study highlighted that most of the dispensers working at community pharmacies are not qualified but have ample years of experience. Low knowledge of dispensers and absence of qualified persons has also been reported by several studies from developing countries (Mac T *et al.*, 2006; Rabbani *et al.*, 2001; Butt *et al.*, 2005; Oun *et al.*, 2005; Wolffers I, 1987). The presence of legally qualified persons is negligible at the pharmacies and in the most of the cases owners are substituting the qualified persons, similar findings have been reported from India (Holland RW and Nimmo CM, 1999).

Respondents assigned relatively high percentage to activities related to pharmacy management and dispensing indicating that they feel relatively comfortable and competent to conduct the activity. This is excepted since there activities are associated with the more traditional functions of pharmacist Table 2. In fact full percentage of the entire questionnaires were assigned to the activities of ensuring a pharmacy is well supplied with medicines, ensuring that the medicines are store in appropriate conditions, the pharmacy makes a good profit and having at least one source of drug information at their pharmacy.

In dispensing activity Table 3 only few respondents are dispensing the drugs as prescribed this shows that pharmacist are changing the brand without prior notice of doctor. Nearly half of the pharmacists were not seeing the affordability of the patient.

In answering questions relating to pharmaceutical care Table 4, the lowest relating to keeping patient records and knowledge about ADR. The overall percentage is conducting pharmaceutical care activities was also lower than the more traditional activities. It appears that respondents are not fully convinced that pharmaceutical care activities are the responsibility of the pharmacist and are still somewhat distant from the concept of the pharmacist as a provider of patients care. When looking at the results in the light of the total pharmacy care model for pharmacy practice proposed by Holland and Nimmo (Holland RW, Nimmo CM, 1999), it appears that respondents identify mainly with the distributive practice

model and are rather distant from the pharmaceutical care practice model, which includes the tasks of assuming responsibilities on the patient care team, for modifying or dispensing, recommending, monitoring and evaluating a patients pharmacotherapy, to ensure the outcomes of the pharmacotherapy provided . Out of the total respondents only 40% know about adverse drug reaction report form. The pharmacist with poor knowledge of ADR this same results were also reported by Oreagba in 2011, Green et al. in 1999, Joseph o fadare in 2011, Ramesh madhan in 2009, Sweis D in 2000, *Prakasam A* in 2012 (Oreagba et al., 2011; Green et al., 1999; Joseph O Fadare et al., 2011;

Ramesh Madhan and Parthasarathi G, 2009; Palaian et al., 2010) Majority of the pharmacist 80% don't know when to report and how to report, where to obtain ADR and where to report ADR. Similar findings have been already reported from south India where there is lack of knowledge about pharmacovigilance and under reporting of ADR is a common.

When addressing public health activities Table 5 the results were not satisfied. The pharmacist role in health promotion and disease preventing are rarely non-existent, similar facts have been reported by the study conducted in republic of Moldova.

**Table 1. Demography of Community Pharmacist**

Data	% of Pharmacist
<b>Sex</b>	
Male	90
Female	10
<b>Age(yrs)</b>	
25 – 30	38
31 – 35	22
36 – 40	26
41 – 45	12
46 – 50	2
<b>Qualification</b>	
D. Pharmacy	26
B.Pharmacy	18
M.Pharmacy	2
Others	54
<b>Experience(yrs)</b>	
0 – 10	74
11 – 20	18
21 – 30	8

**Table 2. Managerial activities of community pharmacist**

Q.No	Managerial Activities	Yes %	No %
1	Is your pharmacy is well supplied with medicines	100%	0%
2	Does your pharmacy has appropriate storage conditions for medicines	100%	0%
3	Does your pharmacy Makes a good profit	100%	0%
4	Does your pharmacy has separate counseling room for the patient	12%	88%
5	Does Your pharmacy is billed with computer generating billing	44%	56%
6	Did you have any source for drug information's at your pharmacy?	100%	0%
7	Does your pharmacy is fitted with air conditioner and refrigerator?	54%	46%

**Table 3. Dispensing Activities of the community pharmacist**

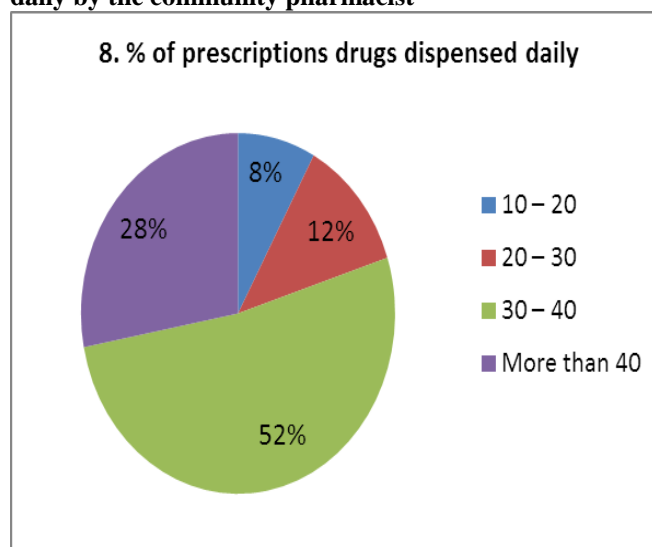
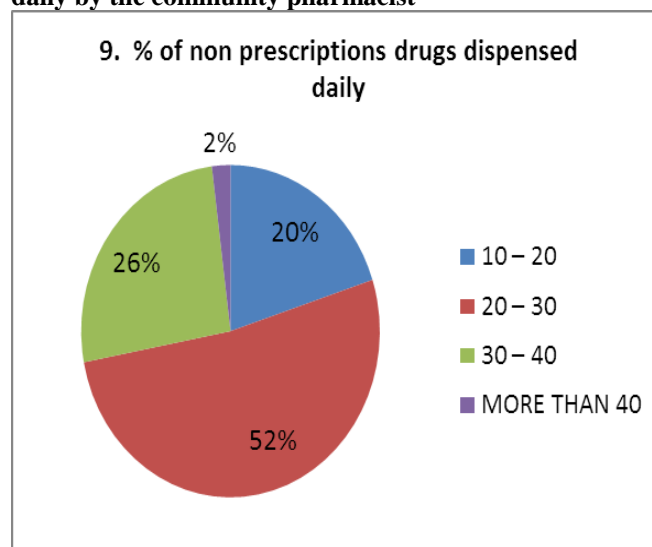
Q.No	Dispensing Activities	Yes%	No%
10	Do you dispense a prescription item only against prescription	24%	76%
11	Do you assess that a prescription is a legally valid	82%	18%
12	Did you assess that the medication is most economically viable for the patient i.e affordable cost	54%	46%
13	Did you have noticed any medication errors in the prescription	36%	64%

**Table 4. Pharmaceutical Care activities**

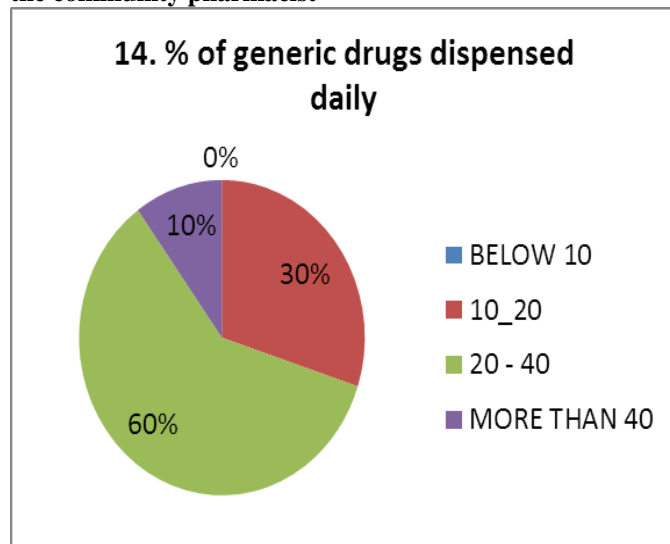
Q.No	Pharmaceutical Care Activities	Yes	No
Q No 16	Did you assess appropriateness of medication for the individual e.g. checking for contraindication, drug interactions etc.	54%	46%
Q No 17	Do you double check the prescription before dispensing	90%	10%
Q No 18	Do you provide the patient with information regarding the medicine	70%	30%
Q No 19	Do you explain to the patient how to take the medication and for how long to use	64%	36%
Q No 20	Do you explain the possible side effects to the patient	52%	48%
Q No 21	Do you monitor patients progress after dispensing the medicine	52%	48%
Q No 22	Did you refer the patient to the doctor when necessary	82%	18%
Q No 23	Did you keep the records of patient medication history, allergic reactions?	32%	68%
Q No 24	Do you know about adverse drug reaction report form?	40%	60%
Q No 25	Do you know where to obtain ADR form from	22%	78%
Q No 26	Did you ever report an ADR and know where to report	20%	80%
Q No 27	Did you ever report an ADR and know where to report	20%	80%

**Table 5. Health care activities**

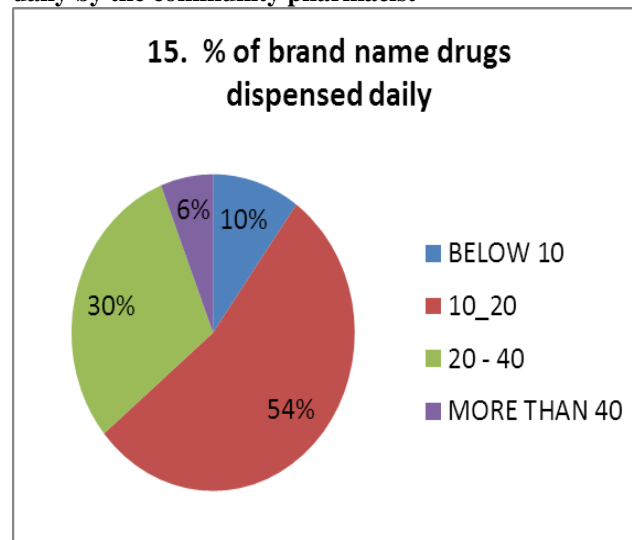
Q.No	HEALTH CARE ACTIVITIES	Yes	No
Q No 28	Do you aware about communicable diseases?	62%	38%
Q No 29	Do you provide counseling about communicable diseases?	62%	38%
Q No 30	Do you provide any diet plan/advice for disease patients such as hypertension, diabetes mellitus etc?	56%	44%
Q No 31	Do you provide any awareness to people in protecting child against diseases like immunization etc?	58%	42%
Q No 32	Do you participate in any health education program?	52%	48%
Q No 33	Have you conducted any health education program?	36%	64%
Q No 34	Did you check B.P, Glucose BMI for the patients who are visiting your pharmacy?	40%	60%
Q No 35	Did you council about alcoholism, drug abuse etc?	68%	32%

**Figure 1. Percentage of Prescription drugs dispensed daily by the community pharmacist****Figure 2. Percentage of non prescription drugs dispensed daily by the community pharmacist**

**Figure 3. Percentage of generic drugs dispensed daily by the community pharmacist**



**Figure 4. Percentage of brand name drugs dispensed daily by the community pharmacist**



## CONCLUSION

Community pharmacists in South India lack in pharmaceutical care, pharmacovigilance and self-care. They still follow traditional methods i.e., only dispensing of medicines. The importance of qualification, experience, training and knowledge of dispensers working at community pharmacies is not much emphasized. Pharmacists have very little basic knowledge about pharmacovigilance. The pharmacist must practice and engaged in reporting and monitoring ADR. The pharmacy care services form the backbone of the profession and thus

the pharmacists should be more proactive in this area other than dispensing. However in India only supply of medicines remains the core activity of community pharmacist as is evidenced in this study. Pharmacists are under-utilized in the Indian health care system. The pharmacist's role in patient care is expected to grow as professional and educational standards develop. The health care services in Community Pharmacy are currently insignificant and must undergo changes to meet the changing needs of the modern medicine users.

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