

**A STUDY BASED ON THE ASSESSMENT OF KNOWLEDGE AND PRACTICE IN BOTH
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ABSTRACT

Introduction: The role of the today's pharmacists needs to be expanded include pharmaceutical care concepts, making the pharmacist into a healthcare professional rather than a shopkeeper in a commercial enterprise.^[1] Effective therapy with prescribed medicines requires a collaborative process that includes physicians and pharmacists. Possible errors about the medication can be detected and reduced by pharmacists' interventions.^[3]

Materials and Methods: it is a Knowledge attitude practice, prospective questionnaire study. This study was conducted in 100 community pharmacies randomly for a period of 6 months. Samples were taken according to the inclusive and exclusive criteria. A Questionnaire was prepared and used for the study.

Conclusion: GPP (good pharmacy practice) is not well practiced worldwide. The current practice of pharmacy needs an improvement. Physicians were willing to collaborate with clinical pharmacists in monitoring drug therapy and improving patient care by identifying medication errors. However, Year of service and level of education were not significant predictors of physicians' knowledge and attitude towards the service.

INTRODUCTION

In the last century the profession of pharmacy consists of compounding and dispensing medicines. The main function of the pharmacist is compounding and dispensing of the drugs. The compounding functions were significantly reduced in the last decade, the new role of the profession needed to be developed.^[1] The role of the today's pharmacists needs to be expanded include pharmaceutical care concepts, making the pharmacist into a healthcare professional rather than a shopkeeper in a commercial enterprise. The major functions of pharmacy practice are dispensing of medications and other health care products and to counsel the patient about use of drug in treating the disease.^[2-3] Effective therapy with prescribed medicines requires a collaborative process that includes physicians and pharmacists. Possible errors about the medication can be detected and reduced by pharmacists' interventions. The pharmacist is often the last member of the health care team to see the patient, before the patient starts using the drug. The pharmacist should maintain the patient records and need to be follow-up in next visit to the hospital. Therefore, it is the pharmacist's responsibility to ensure the safe and appropriate use of the medication by the patient. Across the world, millions of people visit community pharmacies for their daily healthcare needs.^[5] Pharmacists are placed at the first point of contact in the healthcare system due to their easy accessibility. Patients counsel to community pharmacists because they are the

most available and trusted healthcare providers. Nowadays, pharmacists are trying to move away from drug – focused approach towards a patient centered approach with the aim of achieving better outcomes of drug therapy. Also as a consequence of the advancement in pharmacy profession, the pharmacist's role is changing from drug compounding and dispensing to providing drug information and patient care.^[6-7] This entire scope is patient centered services has been described as pharmaceutical care, a revolution in pharmacy practice.

The concept of pharmaceutical care is implanted in Good Pharmacy Practice (GPP). Pharmaceutical care services as an important undisputed positive effect on healthcare management and costs. Various studies have showed that positive influences of community pharmacists contribution to healthcare promotion. Good Pharmacy Practice (GPP) is the heart of the profession of Pharmacy; indeed it is the very essential for the profession. GPP will help to bring better therapeutic outcomes and improves the quality life of the patient. The practice of pharmacy varies from one country to another and from one continent to another. Incorporating developing, transitional and developed countries.

Standard for quality of pharmacy services is intended to take these variations in practice into account. The pharmacy profession is currently advancing at a considerable pace and new roles are being proposed and

promulgated, not only by the profession itself but also by other healthcare professions and by national and international authorities and agencies. Both WHO and FIP emphasize that these guidelines on GPP are for the use of national pharmacy professional associations, together with their national authorities and other relevant bodies responsible for drawing up relevant documentation and related laws and regulations in their individual countries. It does not establish national standards by itself but provides guidance on specific achievable roles, functions and activities that fulfill the mission of pharmacy practice in the new millennium.

Good pharmacy practice in community pharmacies (CP) is essential in promoting the rational use of drugs (RUD). Under the World Health Organization (WHO)'s Revised Drug Strategy adopted by the World Health Assembly in 1986, WHO organized two meetings on the role of the pharmacist, in Delhi, India in 1988 and in Tokyo, Japan in 1993. In 1992 the International Pharmaceutical Federation (FIP) developed standards for pharmacy services under the heading "Good pharmacy practice in community and hospital pharmacy settings". The text on good pharmacy practice was also submitted to the WHO Expert Committee on Specifications for Pharmaceutical Preparations in 1994.

Following the recommendations of the WHO Expert Committee and the endorsement of the FIP Council in 1997, the FIP/WHO joint document on good pharmacy practice (GPP) was published in 1999 in the thirty-fifth report of the WHO Expert Committee on Specifications for Pharmaceutical Preparation. WHO organized two more meetings on the role of the pharmacist, which reinforced the need for pharmacy curricular reform and the added value of the pharmacist in self care and self medication.

Therefore the proposed title "Assessment of Knowledge, Attitude and Practice towards Good Pharmacy Practice among Community Pharmacists in South India" aimed to achieve the following objectives (a) To assess the knowledge, attitude and perception of community pharmacists towards Good Pharmacy Practice and (b) to study the attitudes towards their professional practice and to determine their perceived competence in various pharmaceutical activities.

Difference between clinical pharmacy and community pharmacy

The discipline of pharmacy embraces the knowledge on synthesis, chemistry and preparation of drugs. But Clinical pharmacy is more oriented to the analysis of population needs with regards to medicines, ways of administration, patterns of use and drugs effects on the patients. Clinical pharmacy is a relatively new discipline in the pharmacy profession which is patient rather than drug oriented and aims to improve the quality of drug therapy.

The focus clinical pharmacy moves from the drug to the single patient or population receiving drugs. The goal of clinical pharmacy activities is to promote the correct and appropriate use of medicinal products and devices.^[11]

Pharmacists in Ethiopia practice in various settings, including community pharmacy, hospital pharmacy, drug information service, pharmaceutical industry, marketing, sales, regulatory agencies, academia, and drug distribution. There are few clinical pharmacists working in the public sector in Ethiopia and virtually none in the private sector. Thus, clinical pharmacy is in its infancy stage of development in Ethiopia and hence it requires greater attention to achieve the objective of pharmaceutical care

MATERIALS AND METHODS

Study Design: A Knowledge attitude practice, prospective questionnaire study.

Study Site and Sampling: This study was conducted in 100 community pharmacies randomly.

Study Period: 6 months

Study Criteria

1. Inclusion criteria – As per PCI (Pharmacy Council of India) and GOI (Government of India) all pharmacists with qualification as registered pharmacists.
2. Exclusion criteria – Assistants and pharmacy technicians were excluded.

Study Tools and Procedures

A Questionnaire was prepared by using information and review from the literature survey and factors used in previous studies and it was validated by experts in pharmacy practice and pharmaceutical care services including concept of GPP.

Q.no	Knowledge Questionnaire
01	What is the main purpose of standard drug dispensing?
02	What are the main items which should be mentioned on the label of drugs that should be counted from a bulk container?
03	Under which circumstances recycled containers can be used in pharmacy?
04	What are the minimum requirements for a container to dispense tablets and capsules in?
05	What is the best method for presenting drug use instructions to the patients?
	Attitude Questionnaire
06	Pharmacists professional services are a necessary part in Healthcare system?
07	Pharmacists are responsible for safe handling & evaluation of prescriptions?
08	Pharmacists are key factor in improving compliance of patient?
09	Pharmacists care services is essential in getting better health outcome?
10	Is pharmacists care services is appropriate in India?
11	Continuing pharmacy education programme is in practice of Indian setting?
	Practice / Perception Questionnaire
12	Reaction towards existence of drug-drug interaction in prescription?
13	Physician / Specialities contact address list is available in your pharmacy?
14	While delivering medication whether patient state, age, counseling is followed?
15	Pharmacy appearance?
16	Access towards drug information in pharmacy?
17	Time taken to address a patient & prescription is satisfactory?
	Demographic details of study participants
18	<div>Age</div> <div>Gender</div> <div>Professional experience</div> <div>Educational Qualification</div> <div>Ownership</div>

In conclusion, GPP (good pharmacy practice) is not well practiced worldwide. As the pharmacist plays a major role and had a great impact on society and public health. The current practice of pharmacy needs an improvement. Physicians were willing to collaborate with clinical pharmacists in monitoring drug therapy and improving patient care by identifying medication errors. However, Year of service and level of education were not significant predictors of physicians' knowledge and attitude towards the service.

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1. Westein MPD, Herings RMC, Leufkens HGM. Determinants of pharmacists' interventions linked to prescription processing. *Pharm World Sci*, 2001; 23: 98-101.
2. Tindall WN, Millonig MK. the dream of pharmaceutical care. In *Pharmaceutical Care: Insights from Community Pharmacists*. CRC Press, 2003; 3-12.
3. Hughes L, Whittlesea C, Luuscombe D. Patients Knowledge and Prescriptions of the side effects of OTC medications. *J Clin Pharm Ther*, 2002; 27: 243-8

4. Pray WS. Nonprescription Product Therapeutics. 1st ed. Baltimore, MD: Lippincott Williams & Wilins; 1999: 4-14
5. Shrestha UK, Singh DL, Bhattarai MD. The prevalence of hypertension and diabetes defined by fasting and 2-h plasma glucose criteria in urban Nepal. *Diabetes Med*, 2006; 23: 1130–5.
6. Gerber RA, Liu G, McCombs JS. Impact of pharmacist consultations provided to patients with diabetes on healthcare costs in a health maintenance organization. *Am J Manag Care*, 1998; 4(7): 991–1000.
7. Venkatesan R, Devi AS, Parasuraman S, Sriram S. Role of community pharmacist in improving knowledge and glycemic control of type 2 diabetes. *Perspect Clin Res.*, 2012; 3(1): 26–31. doi:10.4103/2229-3485.92304.
8. Mehuys E, Van Bortel L, De Bolle L, Van Tongelen I, Annemans L, Remon JP, et al. Effectiveness of a community pharmacist intervention in diabetes care: a randomized control trial. *J Clin Pharm Ther*, 2011; 36(5): 602–13 doi:10.1111/j.1365-2710.01218.x.
9. K C B, Alrasheedy AA, Ibrahim MI. Do community pharmacists in Nepal have a role in adverse drug reactions reporting systems? *Australas Med J.*, 2013; 6(2): 100–3. doi:10.4066/AMJ.
10. Karki P, Baral N, Lamsal M. Prevalence of NIDDM in urban areas of Eastern Nepal: a hospital based study. *S East Asia J TropMed Public Health*, 2000; 31: 163–6.
11. Upadhyay DK, Palaian S, Shankhar PR, Mishra P. Knowledge, attitude and practice about diabetes among diabetes patient in western Nepal.
12. Bhujy GB. Drug bulletin of Nepal. Kathmandu: Department of Drug Administration, 2013; 30.

13. Al-Maskari F, El-Sadig M, Al-Kaabi J, Afandi B, Nagelkerke N, Yeatts KB. Knowledge, attitude and practices of diabetic patients in the United Arab Emirates. *PLoS One*, 2013; 8(1): 1–8. doi:10.1371/journal.pone.0052857.
14. McMurray SD, Johnson G, Davis S, Mc Dougall K. Diabetes education and care management significantly improve patient outcomes in the dialysis unit. *Am J Kidney Disease*, 2002; 40: 566–75.
15. Basri MA, Yousef SEA, ElHajj M. Diabetes mellitus care in the state of Qatar: a survey of pharmacists' activities, attitude and knowledge. Qatar: Qatar University, 2013.
16. Cordina M, Safta V, Ciobanu A, Sautenkova N. An assessment of community pharmacists' attitudes towards professional practice in the republic of Moldova. *Pharm Pract.*, 2008; 6(1): 1-8.