ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PERCEPTION TOWARDS GOOD PHARMACY PRACTICE IN COMMUNITY PHARMACISTS OF INDIA

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ABSTRACT

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 current Prospective Knowledge Attitude Practice (KAP) Questionnaire Study of 06 months duration was designed to assess the knowledge, attitude and perception of community pharmacists towards Good Pharmacy Practice and to study the attitudes towards their professional practice and to determine their perceived competence in various pharmaceutical activities. Among 100 participants, 74 were male and 26 were female, where most of them falls in age group of 31 to 40 years, with professional status being registered pharmacists were 56 being D. Pharmacy and 44 being B. Pharmacy. Professional experience was nearly 6 to 10 years in 34 pharmacists, 11 to 15 years in 34 pharmacists, 1 to 5 years in 22 pharmacists and more than 16 years in 17 pharmacists respectively, in which 67

participants owned their own pharmacies. The most important finding in the current study was the pharmacists low knowledge and practice level about GPP, while their attitude towards the subject was at high level. In Conclusion, the current practice of pharmacy surely needs an improvement which will be a core area to implement and improve pharmaceutical care with a concern on rationality use of medications.

KEYWORDS: Community pharmacists, cross sectional survey, pharmacovigilance, professional practice.

INTRODUCTION

In the last century the pharmacy profession consisted of compounding and dispensing medicines. As 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 to include pharmaceutical care concepts, making the pharmacist into a healthcare professional rather than a shopkeeper in a commercial enterprise.[2] The mission of a pharmacy practice is to provide medications and other health care products and services and to help people and society to make the best use of them.[3, 4] 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.[5-10] The pharmacist is often the last member of the health care team to see the patient, before the patient starts using the drug. Additionally, pharmacists are accessible to patients, often seeing them on several occasions between routine physician visits. Therefore, it is the pharmacist's responsibility to ensure the safe and appropriate use of the medication by the patient.[11-14] Across the world, millions of people visit community pharmacies for their daily healthcare needs. Pharmacists are placed at the first point of contact in the healthcare system due to their easy accessibility.[15] Patients counsel to community pharmacists because they are the most available and trusted healthcare providers.[16] Nowadays, pharmacists are trying to move away from drug – focussed approach towards a patient centred approach with the aim of achieving better outcomes of drug therapy.[17] 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.[16] This entire scope of patient centred services has been described as pharmaceutical care, a revolution in pharmacy practice.[18]

The principles of pharmaceutical care are implanted in the concept of Good Pharmacy Practice (GPP).[19] Pharmaceutical care services as an important undisputed positive effect on healthcare management and costs.[20] Various studies have showed that positive influences of community pharmacists contribution to healthcare promotion.[21] Good Pharmacy Practice (GPP) is at the very heart of the profession of Pharmacy; indeed it is the very essence of the profession. Moreover, it expresses our covenant with the patient not only to 'do no harm' but also to facilitate good therapeutic outcomes with medicines.[22] It is recognized that pharmacy practice varies enormously from one country to another and from one continent to another, incorporating developing, transitional and developed countries.

The applicability of the 2011 update of the joint WHO / FIP guidelines on Good Pharmacy Practice: Standard for quality of pharmacy services is intended to take these variations in practice in to 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 fulfil the mission of pharmacy practice in the new millennium.[22]

Good pharmacy practice in community pharmacies (CP) is essential in promoting the rational use of drugs (RUD).[23] 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 Preparations (WHO Technical Report Series, No. 885). Subsequently

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.

MATERIAL & METHODS

Study design: A Prospective Knowledge Attitude Practice (KAP) Questionnaire Study.

Study site & sampling: The study was carried out in 100 community pharmacists randomly selected from a population of 300 pharmacists in Anantapuramu, Andhra Pradesh, India.

Study Period: 06 Months.

Study Criteria

Inclusion criteria

+ All pharmacists with qualification as registered pharmacists as per Abbreviations of PCI & GOI.

  Pharmacy Council of India (PCI)

  Government of India (GOI)

Exclusion Criteria

+ Pharmacy technicians and assistants with no eligible qualification were being excluded.

Study Tools & Procedure

A Self administered questionnaire was prepared using information and thorough review from the literature survey and factors used in previous studies and it was validated by experts in pharmacy practice & pharmaceutical care services including concept of Good Pharmacy Practice (GPP).

This KAP questionnaire consisted of a total of 18 questions

Section (A) includes 05 questions related to basic knowledge and information.

Section (B) includes 06 questions related to pharmacist's attitude.

Section (C) includes 06 questions related to practice / perception regarding GPP.

Section (D) includes 01 question regarding demographic details.

Expertise, eminent pharmacy practice lecturers with experience in drug use research and Good Pharmacy Practice were asked to evaluate the clarity, relevance and conciseness of items included in the questionnaire. The observations and comments of the lecturers were taken in to the account. In order to test the validity and reliability of the questionnaire, the survey form was pilot tested by administering it to sample of 15 randomly selected pharmacists. The overall Cronbach's alpha value was 0.72 and no modifications have been carried out.

Data Analysis

The filled KAP questionnaires were analyzed as per the study objectives. The various parameters such as sex distribution, professional status, educational qualifications, and the knowledge, attitude and practice scores were analyzed. The data obtained were entered in Microsoft excel spread sheet and were analyzed.

RESULTS & DISCUSSION

During the 06 months study period, 100 community pharmacists participated and responded to the study. The study population of 100 students belongs to various qualifications of registration in pharmacy program. Demographic details of the participants involved in the study was categorized based on gender distribution, age, educational qualification, and professional practice, the results of which were thoroughly analyzed and reported in Table: 01 Description of Study population.

Table. 1. Demographic Details

S. no	Characteristics	N	%
Gender			
01	Male	74	74
02	Female	26	26
	Age	Age range (22 - 50)	
03	22 – 30	29	29
04	31 – 40	41	41
05	41 – 50	30	30

Practice / Professional Experience (in years)			
06	1 – 5	22	22
07	6 – 10	34	34
08	11 – 15	27	27
09	> 16	17	17
Educational Qualifications			
10	D. Pharmacy	56	56
11	B. Pharmacy	44	44
Pharmacy Ownership			
12	Yes	67	67
13	No	33	33

Knowledge about GPP: Pharmacists' knowledge about the GPP was evaluated by using five questions. The results are shown in Table: 02, Q5 and Q1 had respectively the maximum (24%) and minimum (4%) response rates among all knowledge questions.

Attitude about GPP: To explore pharmacists attitudes towards GPP, six questions were designed out of which Q1, Q6 & Q4, Q2 had respectively the maximum (67), medium (36) and minimal responses (32) rates among all attitude questions, The results are shown in Table: 03.

Practices / Perception about GPP: To get the responses on their practice and experiences of practicing pharmacy six questions were designed as Perception/Practice questionnaire, in which Q5 and Q1 had respectively the maximum (52) and minimum (08) response rates among all practice questionnaire, The results are shown in Table: 04.

Table. 2. Pharmacists Knowledge about GPP

Q. no	Correct Response	Incorrect Response	No answer
01	4	92	4
02	15	79	6
03	9	85	6
04	17	76	7
05	24	70	6

Table. 3. Pharmacists Attitude about GPP

Q. no	Completely + ve	+ ve	No idea	– ve	Completely – ve	No answer
01	67	23	2	1	5	2
02	32	31	22	6	2	7
03	22	39	22	9	2	6
04	36	34	18	4	1	7
05	21	38	22	10	1	8
06	36	39	10	5	3	7

Table. 4. Pharmacists Practice / Perception about GPP

Q. no	Correct Response	Incorrect Response	No answer
01	8	79	13
02	47	37	16
03	35	52	13
04	30	57	13
05	52	41	7
06	41	54	5

The most important finding in the current study was the pharmacists low knowledge and practice level about GPP (Good Pharmacy Practice), while their attitude towards the this subject was at high level. The fifth knowledge question had the maximum response rate among all knowledge questions. Twenty four percent of the positive response suggested that drug use by the patients can written, diagrammatically presented on the label, which can improve the compliance. Pharmacists' attitude towards good pharmacy practice was evaluated by using six questions regarding our pharmacists' opinion about different aspects of current scenario of pharmacy practice in India. Despite, our community pharmacists' low knowledge their attitude towards the practice was found to be high level. Also, they are enthusiastic about establishing pharmaceutical care in their practice.

Standard K A P Questionnaire of Good Pharmacy Practice

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?
18	**Demographic details of study participants** Age Gender Educational Qualification Professional experience Ownership

CONCLUSION

In conclusion, GPP (good pharmacy practice) is poorly applied worldwide. As the pharmacist have significant impact on society and public health. The current practice of pharmacy surely needs an improvement. Considering GPP, as a way to implement and improve pharmaceutical care is the main focus with a concern on rationality use of medications.

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