



A study on the present status of Pharmacy and Pharmacists in health care sector

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Abstract

The observance of pharmacy practice to an authorizing pharmacist study was carried out during February to April 2013 in Moradabad (U.P) selected randomly with a total of 75 prescriptions in the hospital, urban and rural pharmacy practice. The practice of pharmaceutical care should be new, indifference to what pharmacists should have done now the present time, Because pharmacists frequently fail to accept responsibility for this care, they may not sufficiently document, monitor and review the care given. Therefore, In the present study, we have assessed the behavior, communication skill, qualification of the pharmacist, handled the doctor's prescription, frequency of dose, drug food interaction, prescription records and changing of drugs and error of medication In this survey, the pharmacist was not taken care the patient and they were not given proper guidelines to the patient. As per the rules and guidelines given by the Food and drug administration and Indian pharmacopeia commission was not followed by the pharmacist.

Key-Words: Journals, Net -date, Books, Prescriptions

Introduction

Community pharmacists regularly are the most voluntarily convenient health professionals within their communities. Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life¹ and self-treatment of a variety of minor health conditions for which non-prescription medications and dietary supplements are typically used. Pharmacists provide counseling about vaccination, sexual health, smoking cessation and weight management, thereby equipping patients with the healthcare and infrastructure they require to maintain a healthy lifestyle.^{2,3,4} Although pharmacists have been slow to join additional services into their practices, there is a movement in community pharmacies toward the running of acute care services. The pharmacist uniform code giving by the Kerala high court under section 42 & 46 in the Indian Pharmacopeia Commission.⁵ The professional response to this movement could help afford the stimulus to pharmacy practice beyond drug distribution to include a broader range of clinical services and patient care opportunities in the community setting.

The Pharmacist in relation to his Profession with their Professional care with law-abiding citizen.⁷ A study conducted in 2005 found about 50% of the pharmacies function without pharmacists.⁸ This study further observed that the majority of patients (70-80%) seek advice about sexually transmitted diseases, menstrual disorders, contraceptive methods and minor illnesses from community pharmacists. A majority of pharmacy owners, who are not pharmacists, hires pharmacists on a token basis and as a result, pharmacists are never available to dispense medications. Pharmacists are underpaid in retail outlets owned by people having no health related education or training. There are relatively few studies articulating the situation with community pharmacy services in India. One study reported that pharmacist's lack of proper training to conduct patient counseling.⁹ Another study suggested that community pharmacy practice in India is only limited to the supply of "ready to dispense drug packages".^{10,11} Therefore, public perception of community pharmacy and the pharmacist is very weak. The general population considers community pharmacists as drug traders and obviously not better than the general store owners. Consumers and patients consider a visit to the medical store to purchase drugs in much same way they consider a visit to a grocery to

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buy food items. The educated people consider the retail pharmacist as a person who has acquired a drug license to supply the medicines or a grocer who deals in medicines. The pharmacists are portrayed as poor compounders, who are assistants to doctors in mainstream films and dramas. This is not surprising because the national health policy 2002¹², while declaring current levels of health care professionals, maintain a stoic silence about the pharmacists. There are over 600,000 licensed retail outlets for medicines sale and supply in our country as said by National Rural Health Mission consumers. Patients' expectations from community pharmacists are that the medication should be effective, safe, and reasonable. Other expectations from Indian pharmacists would be to dispense the drugs according to the rules with proper advice on how and when the medicines should be taken, and what to do in the case of adverse drug reactions as well as the provision of advice on common disorders. However, it is an undeniable fact that the community pharmacist has failed to provide all these patients focused on services. India faces great challenges in providing health care for its vast and growing population. Pharmacists play a key role in providing quality healthcare to patients and use their clinical skill together with their practical knowledge to ensure the safe supply and use of medicines by patients and members of the public. A person indulging in supply of medicine has to be registered with the Pharmacy Council of India and should have experience for at least under the supervision of an experienced and qualified pharmacist, either in a hospital or community pharmacy.

Material and Methods

A prospective study on the present status of pharmacy was observed in the outpatient and an in-patient department on prescribing and handling the prescription in hospital, urban and rural area in Moradabad (U.P) during the period of Feb to April 2013. The data obtained from pharmacist, pharmacies and prescription related parameters were collected.

Results and Discussion

In our study, pharmacy practice in rural, urban and hospital. In table 2, showing the total no. of 75 pharmacies and pharmacists was studied in regard of handling the patients and prescriptions as per Drug and cosmetic Act 1948.

In most of the developed countries, patient counseling is regarded as an important professional responsibility of the pharmacists and in some countries it is mandatory.¹³ In table 1 showing that (92%) urban and (88%) hospital pharmacists behaved well and

persuasively with their patients as compared to rural pharmacists (64%).

Table 1: Number of Pharmacists, pharmacies and Prescriptions

Area	No. of pharmacists	No. of medical stores	No. of prescriptions
Hospital	25	25	25
Urban	25	25	25
Rural	25	25	25

All Pharmacists must wear a neat white over coat and should additionally wear a badge prominently displaying their name and designation and registration number of State Pharmacy Council.¹⁴ In our survey, out of 25 urban pharmacists (12%) few of them wore a proper dress at pharmacies, in hospital pharmacy (56%) but in rural area no one found in proper dress. The age of pharmacists was found above 18 years in urban, hospital and rural pharmacies (88% 84% and 64%) respectively. As per norm, Pharmacist who has attained the age of eighteen years shall be entitled and on payment of the prescribed fee to have his name entered in the first register if he resides, or carries on the business or profession of pharmacy, in the State.¹⁵ Communication should be opened in such a way that it encourages the client to convey his / her needs by producing a prescription or by asking for other medicines or advice.¹⁴ The communication skills of pharmacists were found privileged in the hospital and urban pharmacists (88% & 84% respectively) and average was found in rural pharmacists (60%) with patients in the intervening time. Most of the Hospital and urban pharmacists were not dispensed Prescription drugs without prescription (88% and 72% respectively) and rural pharmacists used to have practice to dispense under the schedule H drugs. Finally, as a means of patient empowerment, patient counseling and selection of medication should be made in collaboration with the patient, so that the patient bears joint responsibility for the chosen treatment and for his/her well being.¹⁶ The pharmacist is responsible for identifying minor signs and symptoms and should refer the patient to another team member when situations that may harm the patient's health are identified.^{17,18} The handling of patients by the pharmacists were healthier way and equally in hospital (92%) and urban (92%) as in rural practice (68%). Patients must be made to feel attended and comfortable by friendly gestures and ambiences soon as they come into the pharmacy.¹⁴ Few of rural pharmacists (12%) were advised in using O.T.C. And number of hospital & urban pharmacists were also not satisfactory (48% and 40%) respectively. Pharmacists are responsible for providing information to help

patients choose the most suitable, effective, safe, and convenient medicine.^{16,18} The hospital & urban pharmacist (76% & 36% respectively) very few (8%) have done the review procedure of prescription and All pharmacy personnel should be medically examined and adequately immunized periodically and their health data should be archived.¹⁴ The hospital & urban pharmacists (88% & 76% respectively) very few (8%) rural pharmacists check the accountable signature and finally the prescription should be stamped with 'Dispensed' seal and signed.¹⁴ Smoking/taboo using pharmacist both equally 28% but in rural pharmacist were found only 16% and Pharmacists will be available to support patients who want to quit smoking by adding to the choice of options for counseling, by providing quit smoking materials and by improving access to smoking cessation services for those with chronic diseases.¹⁹ The problem solving is a major part of the pharmacy practice so the high frequency was found 80% in hospital and 64% in Urban, 8% in rural pharmacist were found the patient problem solving that's got the good treatment and Therefore, help from a pharmacist is required when choosing a pharmacotherapeutic option so that the selected medication is the most effective, safe, and convenient.¹⁷ The attitude of the Pharmacists towards the patient must guarantee a correct understanding and confidence building in the mind.¹⁴ Excellent attitude of urban pharmacist (92%) and in the rural and hospital were found 84% and 64%.

Table 2: The pharmacist related points

Pharmacist related points	Hospital	Urban	Rural
Pharmacist behavior	88%	92%	64%
Proper dressing	56%	12%	0%
Prescribed age	84%	88%	64%
Communication skill with patient	88%	84%	60%
Controlling on prescription drug	88%	72%	44%
Patient sympathy	72%	84%	60%
Handling the patient	92%	92%	68%
Customer service	80%	84%	68%
Customer satisfaction	76%	84%	60%
Advise on o.t.c. Drug	48%	40%	12%
Review procedure	76%	36%	8%
Accountable signature	88%	76%	8%

Smoker/taboo using person	28%	28%	16%
Problem solving	80%	64%	8%
Attitude	92%	84%	64%
Qualified	84%	64%	24%

The pharmacist has been engaged in the compounding of drugs in a hospital or dispensary or other place in which drugs are regularly dispensed on prescriptions of medical practitioners for a total period of not less than five years prior to the date notified under sub-section (2) of section 30.¹⁵ The qualified pharmacists was found low in rural (24%), hospitals and urban was having 84% and 64%, but in customer service and satisfaction urban was found efficient (84%) as comparing to the hospital and rural.

Prescription related errors occupy a protuberant place in the list. The frequency of dose by pharmacist in hospital 88% and urban and rural pharmacist were found (56% and 28%) respectively, ensure that the right patient receives the appropriate medicine in the correct dose, form, frequency and route.¹⁴ The pharmacists should dispense the drug with information regarding the drug-food interaction with patient. In this survey, we found 64% hospital pharmacists were counseled and 68% only advised the patients and In India, consumers' (or patient) expectations from community pharmacists are that the medication should be effective, safe, and affordable. Other expectations from Indian pharmacists would be to dispense the drugs according to the rules with proper advice on how and when the medicines should be taken, and what to do in the case of adverse drug reactions as well as the provision of advice on common ailments.²⁰ The study about the review the date of the prescription, in hospital and Urban were found (76% & 20%) and very low condition was found (0%) respectively. A prescription for a controlled substance must be dated and signed on the date when issued. The prescription must include the patient's full name and address, and the practitioner's full name, address, and DEA registration number.²² Signature of doctors seen by hospital pharmacist 92% and in urban and rural pharmacist were found (76% and 40%) respectively. In the changing of prescription hospital and Urban were found (12% & 20%) and in rural was found to be (28%). A study has shown that up to 25% of all medication errors are attributed to name confusion and 33% to packaging and labeling confusion Thousands of medication name pairs have been confused based on similar appearances or sounds when written or spoken or have been identified as having the potential for confusion.²³ In this study prescription record should be

necessary for the proper treatment so hospitals and rural were found (88%&8%) and in rural was found to be (0%). To maintain the records, A pharmacist cannot give medications to those without prescriptions unless the medications are legally sold over the counter. They are further responsible for making patients understand how to properly use prescription drugs. Many pharmacists maintain records of patients, when patients use the same pharmacy for all their prescriptions, to be certain that no medications the patient currently takes conflicts with newly prescribed drugs.²⁴ A small prescriptions survey in Moradabad revealed that prescriptions rarely comply with the rules in all parameters. In the private sector, providers are disposed to errors of commission - they are more likely to behave according to the patient's expectations, resulting in the unsuitable use of medications, the overuse of antibiotics, and increased outlays. The excellent handling the prescription by urban pharmacist was found 88%.

Table 3: The Prescription related point

Prescription related points	Hospital	Urban	Rural
Frequency of dose	88%	56%	28%
Drug food interaction	64%	48%	8%
Proper advising	68%	44%	4%
Signature of doctor	92%	76%	40%
Review the date	76%	28%	0%
Handling the prescription	88%	92%	28%
Changing of drug	12%	20%	28%
Date of treatment/prescribing or dispensing	92%	56%	0%
Prescription records	88%	8%	0%

At present the Medical Stores Organization consists of 7 Government Medical Store Depots, located at Mumbai, Kolkata, Chennai, Hyderabad, Guwahati, Karnal and New Delhi. The depots in Mumbai, Kolkata, and Chennai have Chemical Testing Laboratories attached to them to ensure quality of drugs purchased from the firms. Registration/license visibility was found in hospital pharmacies 76%, in Urban and rural medical store were found 68% and 8% respectively. Regularly inspect and clean the outside premises of the storage facilities. The maintaining of a drug store was found in hospital pharmacies 92%, in urban and rural medical store were found 88% and 48%.

The storage system forms the key component of any materials management system. Thus storage store management has a very important role to play. Material

deterioration and careless handling may lead to lower availability of stocks to the users. The storage of drug in hospital pharmacies was found 88%, in urban and rural medical store were found 84% and 36%.

Maintaining proper storage conditions for health supplies is vital to ensuring their quality. Product expiration dates are based on ideal storage conditions and protecting product quality, until their expiration date is important for serving customers and conserving resources.

Table 4: About the medical store point

Medical store point	Hospital	Urban	Rural
Registration/license visibility	76%	68%	8%
Maintains of drug store	92%	88%	48%
Computer billing	68%	40%	0%
Refrigerator	80%	68%	8%
Cleaning standard	84%	80%	32%
Storage of drug	88%	84%	36%
Minimum space (100sq. feet)	72%	88%	20%
Furniture	92%	96%	48%

For the counseling of patients, the computer would be used on a large scale for the patient records and for dispensing date and refilling the prescriptions. The using the computer in the hospital was found in hospital 60%, in urban and rural medical store were found 40% and 0% respectively. For the storage of drugs and hormone products should must be used the refrigerator, the using of refrigerator in hospital was found 80%, in urban and Rural medical store were found 68% and 8%. The pharmacy should be equipped with refrigerated storage facilities (validated from time to time) for medicines requiring storage at cold temperatures¹⁴. In the proper pharmacy practice the cleaning standard of medical store was found in hospital 84%, in urban and rural medical store were found 80% and 32% respectively. To run the pharmacy practice for the medical store minimum space is required (110sq. Feet) was found in a hospital 72% but better space was found in urban medical store 88% and the low space was found in rural medical store 20%. This should be must by the state government will put together its own rules. It will call for increasing the minimum shop space from 110 square feet to 220 square feet, as the number of medicines has increased and they need to be stored in a wider space.²⁵

Conclusion

The status of pharmacy practice is not significant and effective. The condition of pharmacy practice in

hospital pharmacy is superior as compared to urban and rural pharmacy. They will not full-fill the requirement for running the pharmacy practice. The dynamic development of pharmacy practice, as seen through the eyes of new professional students, covers the need for improvements in medication safety, access to pharmaceutical care, reducing the frequency of adverse drug events, enhancing cultural competence in the deliver of care, incorporating the sensible use of technology and supportive personnel, the achievement of advanced training for delivering Pharmaceutical care, involvement in disease state management, and the delivery of medication therapy management services. Correct diagnosis of the disease and its management constituent important aspects of patient care. Therefore, in the article the effort sorts of national pharmacy leaders and the demographic and attitudinal impact of the aging big population, the individual and collective efforts of practitioners are critical for realizing this vision. The articles provided in this article show that our students clearly see the nature of the problems relating to medication therapy in our health care system, but they are excited about the role they will play as future pharmacists to help solve these problems.

References

1. Mikeal R.L., Brown T.P., Lazarus H.L., Vinson M.C. (1975). Quality of pharmaceutical care in hospitals, *Am J Hosp.Pharm*, 32:567-574
2. Dancer S.J. (2001). The problem with cephalosporin's, *Journal of Anti-microbial Chemotherapy*, 48: 463-78.
3. Anandi C., Alay raja D., Natarajan V., Raman than M., Subramaniam C.S., Thulasiram M. (2004). Bacteriology of diabetic foot lesions, *Indian J Med Microbial*, 22:175-8.
4. Vijaya D., Lakshmikanth, Sheshadri. (2000). Bacteriology of diabetic foot infection. *Biomedicine* 20 (3): 176-9.
5. The Indian Pharmacopoeia Commission (IPC) is an autonomous institution of the Ministry of Health and Family Welfare, Govt. of India.
6. Agarwal S.P., Knanna Rajesh. (2010-201). *Pharmaceutical Jurisprudence and Ethics*, published by Delhi, 5th Edition, 22
7. Agarwal S.P., Knanna Rajesh. (2010-201). *Pharmaceutical Jurisprudence and Ethics*, published by Delhi, 5th Edition, 23
8. Basak S.C., Prasad G.S., Arunkumar A., Senthilkumar S. (2005). An attempt to develop community pharmacy practice: results of two surveys and two workshops conducted in Tamilnadu, *Indian J Pharm Sci*, 67:362-367.
9. Varma D., Girish M., Shafanas K.K., Renjit P.B. (2000) A study on community pharmacy Kerala, *Indian J Hosp Pharm* 37:49-52.
10. Basak S.C., Arunkumar A., Masilamani K. (2002). Community pharmacists' attitudes towards use of medicine in rural India – An analysis of the current situation, *Int Pharm J*, 16 (2): 32-35.
11. Basak S.C., Raja R., Ramesh S., Senthil Kumar S. (2001). From policy to practice of community pharmacy in India: A growing need, *Indian J Hosp Pharm*, 38:169-172.
12. National Health Policy-2002, <http://www.mohfw.nic.in/> 2009.
13. Kesler D.A. (1991). Communicating with patients about their medications. *N Eng J. Med*. 5:16502.
14. <http://www.ksponline.org/content-page-56>
15. <http://www.ksponline.org/content-page-40>
16. Yousef A.M., Al-Bakri A.G., Bustanji Y., Wazaify M. (2008). Self-medication patterns Amman, *Jordan Pharm World Sci*, 30(1):24-30.
17. WHO. (1998). The role of the pharmacist in self-care and self-medication. The Hague: Report of aWHO Consultive, 26-28August.
18. PorteousT, Ryan M, Bond CM, Hannaford P. Preferences for self-care or professional advice for minor illness: adiscretechoice experiment. *Br J Gen Pract*. 2006; 56(533):911-915
19. <http://www.health.gov.on.ca/en/>
20. Basak S.C., Sathyanarayana D. (2009) *Community Pharmacy Practice in India: Past. Present and Future*. *Southern, Med Review*, 2; 1:11-14.14.
21. <http://www.deadiversion.usdoj.gov/>
22. Berman A. (2004) Reducing medication errors through naming, labeling, and packaging. *J Med Syst*. 28:9-29.
23. <http://www.safemedicinesindia.in/>
24. <http://www.safemedicinesindia.in/>