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Role of Pharmacist in New Millenium

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ABSTRACT

During the concurrent professional scenario pharmacists provide only dispensing services within pharmacies. Many opine that the presence of pharmacists in pharmacies is merely to satisfy the current legal requirements. They only count and pack tablets and capsules and distributes these to consumers. There is need to adopt new concepts of clinical & patient oriented practices. There is requirement to make medicines safe for patients by providing counselling than for proper use, clarifying correct dosages and right application. It involves checking new treatments that are compatible with other medicines that the patients might be taking. The future of pharmacy does not seem to lie merely in dispensing of medication batter in provision of relevant drug information and drug therapy recommendation to patients. A clinical pharmacist is an important source for furnishing clinical aspects of the drugs and delivery system particularly with respect to the safety and efficacy parameters.

Keywords: Pharmacist; Drug Information; Patients Care; Marketing; Pharmacy Education.

1.0 Introduction

Pharmacists are health professionals who practice the science of pharmacy. Pharmacists also participate in disease state management, where they optimize and monitor the drug therapy or interpret medical laboratory results in collaboration with physicians and other health professionals. Advances in prescribing medication and in providing public with health advice services are occurring in many countries. Pharmacists have many areas of expertise and are a critical source of medical knowledge in clinics, hospitals, medical laboratories and community pharmacies throughout the world. Pharmacists also hold positions in the pharmaceutical industry as well as in pharmaceutical education and research. [1]

2.0 Nature of the Work

Historically, the fundamental role of pharmacists is to distribute drugs that have been

prescribed by a healthcare practitioner to patients. In modern era pharmacists advise patients and health care providers on the selection, dosages, interactions, and side effects of medications. Pharmacists monitor the health and progress of patients to ensure the safe and effective use of medication. In some cases, pharmacists may practice compounding (mixing ingredients to form medications) despite most medicines are produced by pharmaceutical companies in a standard dosage and drug delivery form. In some jurisdictions, pharmacists have prescriptive authority to either prescribe independently or in collaboration with a primary care physician through an agreed protocol.[2] Pharmacists are trained in pharmacology, pharmacognosy, pharmaceutical chemistry, microbiology, pharmacy practice, pharmaceuticals, pharmacy law, physiology, anatomy, biochemistry, pharmacokinetics, drug delivery, pharmaceutical care, nephrology, hepatology, and compounding medications. Additional curriculum covers diagnosis with emphasis on laboratory tests, disease

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state management and prescribing appropriate medication for a given patient. [3]

3.0 Study Perspective

Pharmacy has been possessing exciting career since last 15 years that will continue in future for the time the following courses are taught in different Indian universities.⁴

S.N.	Name of Course	Duration	Qualification
1	Diploma in Pharmacy	2 Year	12 th
2	Bachelor in Pharmacy	4 Year	12 th
3	Master in Pharmacy	2 Year	B. Pharm
4	Pharm. D	6 year	12 th
5	Doctor of Philosophy	3-5 Year	M. Pharm

4.0 Academic Activities

Academic pharmacists are engaged in pharmaceutical education & research in schools of pharmacy. These aspects of academic activity are interrelated, and at the same time connected with manpower planning and management. Undergraduate, the continuing postgraduate and diploma education require the educators to have expertise in the various pharmaceutical affairs, but the achievements of professional and vocational goals of such education largely depends on investigative approaches throughout the service. The academic staff must also include a substantial role of pharmacists with appropriate professional with vast educational backgrounds.

5.0 Pharmacy Manpower Development for Health Care Systems

It should be the global objective to have a full fledged pharmaceutical service of the highest standard.

The circumstances of some countries do not yet permit this goal to be fully achieved; in such cases minimum acceptable standards should be established.

Manpower development for health services has three components: planning, production (education and training), and management. The purpose of planning is to determine qualitative and quantitative requirements for staff, production concerned with educating various types of staff required, in the specified numbers. The planning and management utilize and monitor recruited staff, and provides feedback so that all three components can continuously adjust to the changing needs of health systems.⁵

6.0 Training of Health Care Workers

Training provided by pharmacists may include efforts to optimize drug therapy, by promoting the rational use and storage of drugs, methods of reducing drug abuse, and is directed to medical and other prescribers or suppliers of drugs, including community health workers who handle drugs. Pharmacists with training responsibilities should receive some training in the planning and management of training program me in relation to the educational and health goals being served.⁶

7.0 Informing Health Care Professionals and the Public

The pharmacist can compile and maintain information on all particularly on newly introduced medicines, provide this information as necessary to other health care professionals and patients, thus uses promoting the rational use of drugs, by providing advice and explanations to physicians and to the public in general.

8.0 Industrial Pharmacy

Statutory provisions in some countries may require certain positions be held by pharmacists. The main activities of industrial pharmacists are described below.

9.0 Research and Development

Pharmacists contribute to research and their expertise in formulation development will particular relevance to the biological availability of active ingredients.

10.0 Manufacture and Quality Assurance

The pharmacist's broad knowledge of the pharmaceutical sciences ensures an integrated approach to quality assurance (including good manufacturing practice) through the validation of various stages of production and testing of products before release.

11.0 Drug Information

The pharmacist has the knowledge and expertise to provide detailed information on medicines to members of the health professions and the public. Also, pharmacists provide an information service within the company.

12.0 Patent Applications and Drug Registration

The pharmacist is ideally qualified to understand and collate the diverse information required for patent and authorization submissions.

13.0 Clinical Trials and Post-Marketing Surveillance

The pharmacist has the knowledge of drugs and health care provisions required to facilitate collaboration between companies, health professionals and governments in relation to clinical trials and surveillance.⁷

14.0 Sales and Marketing

The pharmacist, whose professional ethics demand a concern for the interest of patients, can make a contribution to proper marketing practices related to health care and to the provision of appropriate information to health professionals and the public.

15.0 Community Pharmacy

Community pharmacists are the health professionals most accessible to the public. They supply medicines in accordance with a prescription or, when legally permitted, sell them without a prescription. In addition to ensuring an accurate supply of appropriate products, their professional

activities also cover counselling of patients at the time of dispensing of prescription and non-prescription drugs, drug information to health professionals, patients and the general public, and participation in health-promotion programmes. They maintain links with other health professionals in primary health care.⁸

16.0 Processing of Prescriptions

The pharmacist verifies the legality, safety and appropriateness of the prescription order, checks the patient medication record before dispensing the prescription (when such records are kept in the pharmacy), ensures that the quantities of medication are dispensed accurately, and decides whether the medication should be handed over to the patient, with appropriate counselling, by a pharmacist. In many countries, the community pharmacist is in a unique position to be fully aware of the patient's past and current drug history and, consequently, can provide essential advice to the prescriber.⁹

17.0 Patients Care

The pharmacist seeks to collect and integrate information about the patient's drug history, clarifies the patient's understanding of the intended dosage regimen and method of administration, and advises the patient of drug related precautions, and in some countries, monitors and evaluates the therapeutic response.

18.0 Health Promotion

The pharmacist can take part in health promotion campaigns, locally and nationally, on a wide range of health-related topics, and particularly on drug-related topics (e.g., rational use of drugs, alcohol abuse, tobacco use, discouragement of drug use during pregnancy, organic solvent abuse, poison prevention) or topics concerned with other health problems (diarrhoeal diseases, tuberculosis, leprosy, AIDS) and family planning.

They may also take part in the education of local community groups in health promotion, and in campaigns on disease prevention, such as the Expanded Programme on Immunization, malaria and blindness programme

19.0 Regulatory and Enforcement Agencies

Pharmacists are employed by regulatory agencies concerned with the approval, registration and quality control of drugs, cosmetics and medical devices, and with enforcement agencies, including customs departments that control the distribution of drugs through licit and illicit channels, and as inspectors of the manufacture, importation, distribution and sale of drugs.

20.0 Administration and Professional Bodies

Pharmacists employed in these bodies perform a variety of technical and administrative functions in professional bodies and in drug- and health-related agencies, e.g., World Health Organization, International Narcotics Control Board, United Nations Division of Narcotic Drugs, United Nations Commission on Narcotic Drugs, United Nations Fund for Drug Abuse Control, Interpol, National pharmacopoeia committees, and pharmaceutical societies.¹⁰

21.0 Conclusion:

It may be concluded that the profession of pharmacy would have enormous placement opportunities in different conventional & new emerging areas. The pharmacist as well should be more proactive to be able to identify their talents, match them with various possibilities & discover their future in non conventional areas apart from the existing placement possibilities in the profession.

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