ROLE OF PHARMACIST IN HEALTH CARE AND EDUCATION

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• ABSTRACT
Pharmacists for starters want to expand their dispensing services they want to give patients better and more frequent advice on how to use prescribed medications. Patients will benefit from the development of domiciliary services, particularly in terms of collecting and delivering prescriptions for the elderly, mentally ill, and physically disabled. Health is a word very known but it carries a lot of complications and troubles. According to the WHO, health is a state of complete physical, mental and social well-being and not merely absence of any illness. Health care system depends upon a health care team. A health care team is the group of community who contribute to a common health goal and common objectives determined by community needs. India with the greatest cultural diversity, health though an important issue is being neglected due to many hindrances. The condition is more worsened due to inappropriate drug use problems. It is in the hands of the pharmacist particularly the community pharmacist, to take up the challenge for providing better health care and better outcomes reasonably.

INTRODUCTION.
The community pharmacist can take part in health promotion campaigns, locally and nationally, on a wide range of drug related and health related topics. A community pharmacist involvement could play an important role in the following areas of health care. Pharmacists are dynamic, patient-oriented professionals committed to fulfilling the health care needs of their patients. Pharmacy is a profession that is expanding in new directions to meet the health care needs. There is a movement amongst pharmacists beyond the traditional compounding and dispensing of medication, towards a more professional advisory and primary health care role. Pharmacists can apply their knowledge and skill to become directly involved in the healing and education of patients. Pharmacists form an integral part of the community and serve as an important source of knowledge.

A modern-day pharmacist should be trained in providing the knowledge concerning:
1. Optimal drug therapy for patients with a focus on drug interactions and potential side effects
2. Counseling on various disease conditions
3. Education and promotion of the general health of the public
4. Information on immunization.
World over pharmacist is one of the important member of the health-team including clinical research. If Indian pharmacist is not fulfilling this role, then he should be appropriately trained and be oriented as a health-care provider to the vast rural population. He can be used intelligently as an alternative manpower towards the sacred goals of:

1. as a communicator
2. as a quality drug supplier
3. as a health promoter
4. as a collaborator
5. as a trainer and Supervisor

The remark of the standing committee that “Pharmacist is the main hurdle in easy accessibility of medicines” is certainly unfounded. With the kind of political, administrative and social structure in our country. The WHO report on “The role of the pharmacist in the health care system” states that the competence of the pharmacist is already proven and evident:

1. In the direction and administrative of pharmaceutical services
2. In drug regulation and control
3. In the formulation and quality control of pharmaceutical products
4. In the inspection and assessment of drug manufacturing facilities
5. In the assurance of product quality through the distribution chain
6. In drug procurement agencies and
7. In National and institutional formulary committees.

THE NOVEL ROLE OF COMMUNITY PHARMACIST

The main role of community pharmacist is studied under the following category with and without club with health care team.
A. AS PHARMACIST AND HEALTH PROMOTER

(a) **Prescription Handling**: While receiving a prescription pharmacist verify whether received prescription complies with legal requirements, correctness of prescription, Dosage, medication, interaction between currently prescribed medication, over dosage in the prescription, Pharmacokinetic and pharmacodynamic interaction, contraindication before dispensing any prescribed medication to the patient. Community pharmacist play major role in prescription handling.

(b) **Immunization**: Community pharmacists can play different roles in immunization, namely that of distributors (providing and distributing vaccines and immunization products), educators (improving knowledge about vaccines), administrators (practicing vaccination directly)

(c) **Wound Care**: Some pharmacies now offer a wound care service within the pharmacy and a person seeking treatment for a wound at a pharmacy will most likely be first examined and questioned on how the wound occurred before it is washed and cleaned to ensure there are no foreign bodies like dirt, glass, stones etc in the wound. If the pharmacist is unsure that the wound has been cleared of all foreign matter they may refer you to a doctor or hospital emergency department. The next step is that the pharmacist will try to stop any bleeding and then dress the wound. Wounds however need ongoing treatment and the patient is also likely to be counseled on how to clean and redress the wounds and also how to look for any signs of infection or if and when to seek further medical advice.

(d) **Preventing tropical diseases**: The pharmacist has several functions during prevention and treatment of Tropical diseases, as follows. As a member of the health-care team, the pharmacist must participate in following programmes like Draining wetlands to reduce populations of insects and other vectors, the application of insecticides and insect repellents to strategic surfaces such as: clothing, skin, buildings, insect habitats, and bed nets, use of a mosquito net over a bed to reduce nighttime transmission, since certain species of tropical mosquitoes feed mainly at night, Use of water wells, or water filtration, water filters, or water treatment with water tablets to produce drinking water free of parasites, sanitation to prevent transmission through human waste, development and use of vaccines to promote disease immunity, Pharmacologic pre-exposure prophylaxis, Pharmacologic post-exposure prophylaxis, Pharmacological treatment etc.

(d) **Providing drug-information**: Pharmacist is the bridge between doctors and patients who counsels and advice the patient to maximize the desired effect of the drugs and minimize the untoward/adverse effects of the drug. The basic duty of a pharmacist is to check prescriptions from physicians before dispensing the medication to the patients to ensure that the patients don't receive the wrong drugs or take an incorrect dose of medicine. Dispensing the wrong drugs or giving incorrect usage instructions can have serious consequences for patients, including death. Pharmacists also offer guidance on the side effects; medication can have and warn against actions that could be dangerous while the patient is using the medicine, such as consuming alcohol or operating heavy machinery.

(e) **Monitoring adverse drug reactions**: These roles include taking drug histories, on newly admitted patients, reviewing drug orders for drug incompatibilities, maintaining patient record and participating in evaluation of drug therapy.

(f) **Monitoring and minimizing adverse drug interactions**: Pharmacist medication review, patient counseling, and telephone follow-up were associated with a lower rate of preventable ADEs 30 days after hospital discharge. Medication discrepancies before and after discharge were common targets of intervention.

(g) **Preventing misuse of drugs**: Pharmacist play a crucial role in the reduction and prevention of substances abuse, since they are able to advise patient about illicit drugs, psychotropic medicines and alcohol abuse.

(h) **Preventing medication errors**: MEs in hospitalized patients can be prevented if patient’s medical history is taken properly and patients are properly followed. A
Clinical Pharmacist can play an important role by conducting awareness and education programs for nursing staff and other health care professionals regarding detection and reporting of ME’s can minimize the frequency of the same. A Clinical Pharmacist can also conduct Drug Utilization Evaluation studies in order to prevent the irrational prescribing of drugs. Appropriate team work from all HCPs can certainly reduce occurrence of MEs in hospitalized patients.

B. HEALTH EDUCATOR:

1. Nutrition Counseling
2. Individualization of Drug Therapy
3. Family Planning
4. Alcohols, Drug Abuse and Smoking Cessation
5. Sexually Transmitted Diseases – AIDS
6. Rational Use of Drugs

1. Nutrition Counseling

Community pharmacist can play significant role in assuring adequate nutrition by advising his patients about basic food needs, keeping to correct improper food habits in children, advising on special requirements, suggesting special diet instructions for diabetic patients and people with food allergy and participating in school lunch programs and schemes like mid-day meals etc., in rural areas. There are certain facts such as women who often eat fish or omega-3-fatty acids are less likely to suffer stroke, symptoms of hyper vitaminosis result in irregular menstrual cycle and excessive intake during pregnancy may cause birth defects, products and their standardization.

2. Women Welfare – Pregnancy and Infant Care

Women health care is the first priority in India. Women are the corner stone for effective public health and investing in women translate into investing in family, community and the Nation. The pharmacist who understands the normal course of pregnancy and infancy is at a distinct advantage as he or she can guide the mother in simple matters of hygiene and management. The community pharmacist can encourage breast feeding and can play a major role by guiding the mother for the protection of the child by following proper immunization schedule. Efforts are definitely underway in this area.

3. Rational Use of Drugs

A community pharmacist can also discuss with administration on the medication, provide information on the storage of the medication and wherever necessary he can counsel the patient. Drug information system should be set up and access to adverse drug reaction ‘system should be made. A community pharmacist should do therapeutic drug monitoring and he should have a sound knowledge of genotype reporting i.e. predictive pharmacology.

How many amongst the common people know that drugs such as Action 500, Coldarin can increase blood pressure in patients having hypertension. Even pain shows difference between men and women. Where women respond better to the opioids such as morphine, pentazocine and pethidine men respond better to the non-steroidal anti-inflammatory drug, ibuprofen.

In a nut shell there should be rational use of drug i.e., right drug in right patient in right dose at right time. A community pharmacist is one of the inevitable members of the health care team who can help to achieve the goal of rational use of drugs.

4. Sexually Transmitted Diseases – AIDS

India has 3.5 million HIV positive cases, which is about 10% of the global HIV cases and barely second to South Africa. HIV drugs are expensive and beyond the reach of common man.
Huge resource of community pharmacist can educate people in the prevention and information of HIV/AIDS. A sensitive issue is the increasing number of women patients suffering from AIDS.

The number rose from 7% in 1985 to 18% in 1995. Explaining to what HIV is, its transmission, risk reduction, patient counseling are the components of the counseling that a community pharmacist can provide.

5. Alcohol, Drug Abuse and Smoking Cessation
The pharmacist has a play an important role to help individuals who become dependent upon alcohol. Drug abuse is similar to alcoholism yet different because it has been gaining more acceptances among young people. Annual mortality from tobacco use exceeds that from all other causes combined. Smoking is the greatest single preventable cause of morbidity and mortality in India. The pharmacist can advise on the products available to assist the patient in giving up smoking. Counseling sessions can be made by the community pharmacist to stop smoking.

6. Family Planning
Currently, India’s annual population growth rate is 1.74%. India is the second most populous country in the world, contributing about 20% of births worldwide.

In 1952, the Indian Government was one of the first in the world to formulate a national family planning programme, which was later expanded to encompass maternal and child health, family welfare, and nutrition.

All problems are associated tremendously increasing population in India. The community pharmacist plays a very important role in this case to educate the people and advise various methods available in the market helpful in family planning.

7. Individualization of Drug Therapy
Today the latest concept in medicine is towards individualization of drug therapy. Where judicious patient care is needed individualization of drug therapy becomes a need, and a pharmacist can play a vital role in this.

A physician who is preoccupied with patient diagnosis and treatment may not spare time for patient counseling regarding pharma- economics, drug information, alternative therapy, moral supporting etc. A pharmacist can set up a separate consultation room and provide counseling to the patient.

CONCLUSION:
Pharmacist are identified as being an active participant in the preparation & dispensing of medication. Pharmacist play a vital role in providing appropriate medication counseling during discharge. Pharmacist is the first person of health care system by playing various role like academic pharmacist, clinical pharmacist, Hospital pharmacist, veterinary pharmacist etc. All pharmacist working in different field of profession are directly or indirectly related to nations health. Finally community pharmacist job would be all about educating and helping to the public, assessing their disease condition & making decision which medicine they should take & he is responsible of Right drug to right patient at right time in the right dose through right route in the right way.

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