

ETHICAL PRACTICES AND PHARMACEUTICAL DEVELOPMENT

BY

OGAH C. O. and OGBECHÉ A.

Department of Pharmaceutical Chemistry, College of Medicine,
University of Lagos, Nigeria.

ABSTRACT

Pharmacy as a profession has gone through a number of developmental changes requiring a change in the focus of practice from products and biological systems to patients' well-being. To bring about this change in practice focus, reprofessionalisation will be necessary and professional ethics will play a big role in achieving this.

A general review of developments in pharmacy practice from the early years to the present day practice is presented. The subject of professional ethics is discussed in relation to pharmacy practice, with particular reference to the Nigerian situation. There is also a peep at what the future holds in store for pharmacy and suggestions are made for improving on the present situation. It is concluded that pharmacy practice has evolved a great deal and that professional ethics are a significant aspect of pharmacy practice. It is also concluded that the pharmacist must acquire knowledge of drugs and update himself continuously in order to play his role of ensuring safe and effective use of drugs.

INTRODUCTION

Pharmacy is a science that endeavours to discover medicinal agents that cure diseases (1). This science has developed from the days of "magic potions" and herbal concoctions to the present day patient-oriented practice. The professional image of the pharmacist, who is the specialist in production, storage and dispensing of medicines, has also

changed in line with developments in the practice of pharmacy. The pharmacist is no longer limited to the preparation and dispensing of medicinal products, as products are no longer the cornerstone of his practice. He has instead grown into taking responsibility for the safe and effective use of drugs in the individual patient.

The importance of medicine as a profession in the fabric of society is based on the fact that everybody experiences illness and recovery at some time or the other in life. But the Physician can do virtually nothing without the use of drugs. Hence pharmacy practice is not only an integral part of the healthcare system but also plays a significant role in our everyday life.

Professional ethics go hand in hand with pharmaceutical developments as they provide the voluntary self-discipline that enhances the pharmacist's commitment to the profession. This commitment in turn enhances the professional image and social status of the pharmacist and hence brightens the future of pharmacy.

ETHICS IN PHARMACY

Definition: The word 'ethic' has been defined as a system of moral principles or rules of conduct.(2). Professional ethics are therefore a set of moral rules observed by members of a particular profession. These principles are usually perceived and established by the professionals themselves. They are different from the legislative control of the profession by government. In pharmacy practice, ethics are a

set of principles of professional conduct established to guide the pharmacist in his relationship with patients, colleagues, other health professionals, government agencies and the public(3).

The Need For Professional Ethics

Ethics control both moral and professional conduct of the practitioners and are essential for the following reasons: Ethics make the process of decision making easier and more efficient for the professional, especially in areas of practice not covered by legislative control. They establish the standard by which a professional's behaviour is judged to be right or wrong. Ethics establish a pattern of behaviour which clients and members of the public come to recognize and associate with members of that profession. This pattern of behaviour, if consistent, builds respect for the practitioner. Ethical practices enhance quality service to the society by encouraging high level performance of professional role. Ethical principles therefore help to establish a relationship of trust between the professional and his client.

Obstacles to Ethical Practices - Although professional ethics are so vital in building a relationship of trust and respect between the professional and his client, in pharmacy certain factors exist which are inimical to ethical practices.

Drug Distribution Channel - The pharmacist is the professional solely charged with the manufacture, storage,

distribution, and sale and dispensing of drugs. It is only when the drug reaches the patient/consumer that the pharmacist's extended role of monitoring drug use and counseling patients comes into play. Ideally, drug distribution should flow from the manufacturer/importer through the distributor, wholesaler and retailer to the patient or end user (4).

However, the current situation (especially in developing countries like Nigeria) is that of chaotic drug distribution in which any member of the distribution chain may be by-passed. For example, some manufacturers/importers may sell directly to retailers through agents while wholesalers may retail drugs to patients at wholesale prices which the retailer cannot compete with. These abnormal transactions are done often with little or no proper records and therefore make withdrawal of defective products difficult, if not impossible.

There is also the problem of non-professional drug sellers who invade the drug distribution process and strive to put the pharmacist out of business with his unreasonably low pricing system. These non-professional drug sellers include the following: Non-pharmacist owner of registered and unregistered pharmacies. Owners of registered and unregistered patent medicine stores, Itinerant street hawkers and Market place traders. Private medical doctors also come into the drug distribution picture, stocking all their drug needs and dispensing directly to the patients. These patients should ideally fill their prescriptions in nearby

pharmacies.

All these factors add up to reduce the pharmacist's income as well as professional satisfaction. Under such circumstances, the pharmacist cannot practice according to his code of ethics.

General economic downturn, the global economic recession and the peculiar Nigerian situation have a negative impact on pharmacy practice. Most pharmacists are unable to go into pharmaceutical business due to shortage of funds. This leaves the stage cleared for non-professional moneybags who then dictate the rules, some of which may be unethical. There is also the problem of increased unemployment occasioned by the poor economy. In Nigeria this scenario resulted in high incidence of the 'register-and-go' syndrome.

The Practitioner- Lack of adequate knowledge on the part of the pharmacist about the importance of ethical principles, and concentration on short-term gains, are likely to compromise professional ethics. Non-compliance with the code of ethics is further encouraged when members of the profession fail to expose unethical conducts and non-application of appropriate sanctions.

PHARMACEUTICAL DEVELOPMENT

The Early Years: The science of pharmacy is as old as man himself because even in the earliest days man has had to seek medicinal agents that could cure or relieve his ailments. However, pharmacy was practiced together with medicine in the early times by people known as apothecaries (5). The apothecaries would diagnose the patient's disease, prepare and administer the medicine.

Later pharmacy gradually became the art of drug making and eventually became a separate profession in the 13th century. From then on, preparation and dispensing of medicines were done by individual pharmacists while practitioners of medicine diagnosed and treated the patients' ailments. The pharmacist's main role then was to ensure that the drugs he sold were pure, unadulterated and prepared to meet set standards.

In the 1940s, after World War II, there was a boom in industrial development and medicines were discovered and mass-produced by pharmaceutical companies. The pharmacist's role of preparing and compounding drugs was thus lost to the industry leaving him with the stocking and dispensing functions only. Meanwhile the scope and duration of pharmacy training was being extended. Hence the pharmacist gradually became an overeducated and underutilized health professional (6). It therefore became obvious to pharmacy leaders that the pharmacist's role in health care had to be extended to improve his contribution and enhance his public image. Also the increased number of drugs pushed into the market without adequate information resulted in drug use problems which required professional intervention. This thinking gave rise to a number of new developments in pharmacy practice.

Major Developments: The following are the major developments that have aided the pharmacist in his bid to realise full professional potential.

Clinical Pharmacy- This practice came into being in the mid 1960s (6).

Although it has been given various definitions (5, 6, 7), clinical pharmacy can be said to be a practice in which a pharmacist uses his professional knowledge of drugs to ensure safe and appropriate use of drugs in the individual patient. Clinical pharmacy seeks to develop a patient-oriented attitude and brings the pharmacist closer to the patient in order to totally monitor and control drug use by patients and other health professionals. To be able to guarantee safe and effective use of drugs, the clinical pharmacist must perform the following functions:

* **Monitoring Drug Therapy-** He must actively monitor individual patient's response to drug therapy using medication profiles, laboratory data, nurses' and physicians' notes and results of drug-sensitive diagnostic tests. This is to ascertain effectiveness of therapy, detect adverse drug reactions and toxicity and advise the physician appropriately.

* **Developing Medication records-** The clinical pharmacist must develop and maintain comprehensive patient drug use records known as patient medication profiles. This enables the pharmacist to assess the appropriateness of drug therapy, check for drug sensitivities and interactions and other patient data that can affect drug therapy.

* **Provide Drug Information and Medication Counseling to Patients-** This will improve patients' compliance with prescribed directions for taking their medications and also improve drug usage and storage patterns. All these will ultimately lead to better treatment outcomes.

* **Provide Drug Information to**

other Health Professionals- The clinical pharmacist has the duty to provide accurate and up to date drug information to other health professionals to guide and assist them in making appropriate therapeutic decisions.

* **Sanitize Drug Distribution and Delivery Systems-** The pharmacist must initiate and implement improved drug distribution and delivery systems capable of minimizing wastage and avoiding dosage errors. e.g. use of UDDS.

Provision of other Clinical Services- Such services include screening, monitoring and maintenance care for patients with chronic diseases like hypertension, diabetes, asthma and others. He should also participate in the management of emergency medical cases by providing needed drugs and drug information.

Pharmaceutical Care: This is a philosophy of pharmacy practice in which the pharmacist takes total responsibility for the pharmaceutical health care needs of the patient and the community with the goal of improving the patient's health and quality of life. This means that the pharmacist as a drug 'expert' is responsible for the outcome of drug therapy. Pharmaceutical care involves more than clinical pharmacy practice. In the former the pharmacist is concerned not merely with the act of providing service but also with the effects of their services on the patient's quality of life (7). The word "care" as used in pharmaceutical care implies greater attention to safety and well-being rather than just functions and activities as implied in other pharmacy

"services". Pharmaceutical care can be practiced in both hospital and community settings.

Drugs are usually administered to achieve definite outcomes, which include one or more of the following: Cure of a disease, reduction or elimination of symptoms, arresting or slowing of a disease process, preventing a disease or symptoms. Achieving these optimum outcomes may however be interfered with if there are drug-related problems that lead to drug-related morbidity such as treatment failure or production of new medical problems or even mortality. Studies have in fact shown that pharmaceutical care can reduce incidence of negative therapeutic outcomes by 20%(8) Thus enhanced care produces increased effectiveness of drug therapy, avoidance of adverse effects and improved outcome and reduction in cost of treatment.

Studies have also found that 20-50% of clinically important adverse drug events experienced by hospitalized patients is drug-related and preventable (8). These studies also found the stages of medication use at which error occurred to be a stated below:

Prescription Stage 56%,
Administration Stage 34%,
Transcription Stage 6%,
Dispensing Stage 4%.

It is noteworthy that the stage (dispensing) at which the pharmacist is most involved contributed the least to errors. It follows therefore that if the pharmacist becomes more actively involved at the other stages of medication use, there will be a drastic reduction in the incidence of adverse events resulting from medication errors.

Managed Care: Managed care is a

healthcare delivery concept packaged and managed to enable the patient get quick and affordable healthcare services. It is usually paid for by employers in public and private sector, individuals and groups. It is managed by organised bodies like insurance or corporate bodies under pre-determined conditions like the type and range of services to be rendered and the cost of such services. The main focus in this concept is affordability which allows for wider coverage. Affordability is achieved by pooling of resources for better healthcare services for all while risk is spread between those with high need and those with low need for health services. This is especially beneficial in developing countries like Nigeria where the cost of healthcare services has gone beyond the reach of the average family. Managed care therefore enhances quality and cost-effectiveness of healthcare.

Continuing Education – The wide and multidisciplinary nature of pharmacy as a profession has put a huge demand for knowledge and its application on the pharmacist. The modern pharmacist therefore has to continuously update himself to keep pace with the rapid developments in pharmacy and to avoid being obsolete in practice.

Continuing education in pharmacy has been by choice and usually organized by institutions and associations within the profession in form of lectures, seminars and workshops. Recently, plans have been initiated to make continuing education mandatory for practice. This is a positive development. There is also need to get connected to the global network of information.

THE FUTURE

Pharmacy is a rapidly evolving profession and the number of drugs in use will continue to grow. Even with emerging breakthroughs in gene therapy, drugs will continue to play a central role in the promotion and maintenance of health. There is therefore a huge body of knowledge to be acquired by the practitioner. Therefore the challenges for the future are enormous.

Professional Practice: A variety of practice settings are open to the pharmacist: hospital, private community pharmacy, industry, education and research, drug information and consultancy, civil service and administration. Among these practice settings, hospital, community and consultancy practice hold the key to a positive professional image for the pharmacist as his competence and skill are directly tested in these settings. Also, among the many factors affecting the practice and development of pharmacy, inter-professional relationship is an important factor (10). It follows therefore that the pharmacist must exhibit a high level of competence. Competence can only be attained through the acquisition of knowledge that is appropriate, adequate, accurate and current. From competence, confidence, responsibility and professional autonomy will flow naturally. For example, the pharmacist cannot effectively provide pharmaceutical care without adequate knowledge of drugs, disease conditions and communication skills. Even though all three areas may be essential in dealing directly with the patient, only the first (knowledge of drugs) will promote the pharmacist in his

relationship with other professionals in the health team, especially the doctor who himself has enough knowledge of disease conditions and communicates a great deal with the patient and other health professionals. Yet both the patient's impression and health professional's acceptance of the pharmacist's role are important in building a positive image for the pharmacist. It is therefore important that the pharmacist emphasizes an area that can be seen to be exclusive to him even as he maintains his interest in the clinical aspect of pharmacy.

The pharmacist's competence in answering drug-related questions goes a long way in enhancing his professional image and promoting his role and acceptance as an indispensable member of the health care team. This competence is required in hospital, community or general practice as well as in other practice settings.

Specialization = There would be a need in the future for the pharmacist to specialize in the different classes of drugs to improve competence. This is due to the enormous volume of information required and the huge number of drugs available. Specialization means that each pharmacist would pick a class (or group of classes) of interest and acquire as much knowledge as there is on the drugs. He becomes known in that field and is better equipped to provide accurate, up to date drug information in his chosen area. He will also be able to contribute to original research in his field. There could then be an exchange of information between pharmacists in different fields whenever necessary, while each pharmacist retains a broad

knowledge of the different classes of drugs. The present practice of specializing only in different settings of practice like hospital, industry, etc is not enough as each practitioner must strive for competence in handling information on every class of drugs. This reduces true expertise.

Information – The world has become a global village due to the impact of information technology (IT). Patients and clients now have a lot of information available to them, even on drugs and disease conditions. They have also become more health and rights conscious. This situation will develop further in the twenty-first century, pointing to a future in which the pharmacist may find

himself facing litigations if problems arise due to neglect of his role in patient counselling and drug monitoring. Hence the need for the pharmacist to acquire knowledge, skill and integrity cannot be over-emphasised. Specialization as suggested above will help the pharmacist a great deal in meeting the expectations of patients and other health professionals.

As mentioned earlier, the pharmacist must be aware of all available sources of drug information and get on the Internet for regular update.

CONCLUSION

From the foregoing discussion, it is clear that pharmacy as a profession has come a long way from a drug-

producing era to a service providing practice. As we enter into the 21st century, there is need for the pharmacist to be more alert to his role of protecting public health through the application of his knowledge of drugs. He should uphold professional ethics as a significant aspect of pharmacy practice.

The future of pharmacy is bright but the challenges are great. There is a lot of knowledge to be acquired by the pharmacist and updated on a continuous basis. Continuing postgraduate education and specialization will be of great help to the pharmacist in his efforts to ensure safe and effective use of drugs.

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