Editorial

RATIONAL PRESCRIBING

Mahmud Ahmad Akhtar MD, FCPS, FRCP

Rational Prescribing implies using the right drug for the right patient at the right time in the right dose and manner of administration, at affordable cost and with right information. A prescription has to be tailor-made for an individual patient. It should take into account the diagnosis, age, sex, weight, drug and food interactions, vital functions as well as socio-economic, spiritual beliefs and background of the individual patient. The underlying principles or criteria include safety, accessibility and efficacy / effectiveness.

Rhazes stated that the best state of health is the medication-free state. He remarked that "when you can cure by a regimen, avoid having recourse to medicine and when you can effect a cure by means of a simple medicine, avoid a compound one". He also advised treatment of an incipient malady with remedies which will not prostrate the strength. This forms the basis of modern life-style therapies. "Cured yesterday of any disease, I died last night of my physician' said Methew Prior' in 17th century.[1] William Pens echoed the same feelings, when he said, 'remedy often times proves worse than the disease'.[2] These are the two physicians of the 17th century, who were vocal about the misuse and the adverse effects of the drugs. There is more than one reason to believe that the physicians of Cardoba were equally alive to the significance of drugs and their rational use. Voltaire (15th century) lamented that "doctors pour drugs about which they know little, for diseases about which they know even less, into the patients about whom they know nothing."

In older days the horse and buggy, though very slow, seldom caused fatal accidents, whereas the present day automobile which is very fast is a lethal means of locomotion. Similarly the old fashioned bottle elaborately prescribed, meticulously bottled, although often ineffective was fairly innocuous, whereas the modern drug like atomic energy is powerful for evil as well as for good.[3]

Dr. Friebel commented on the magnitude of the present day problem by saying "the imbalance between the accessibility to potent drugs on the one hand and the lack of professional training in the use of these drugs on the other hand is one of the major problems of today. No doubt the physician of today is in a very difficult position but the patient probably is for the worse under the weight of the drug explosion. Of the drugs available at present time in the market, a large percentage were either unknown or unavailable even fifteen years ago, when more than half of the percentage practicing physicians were receiving their medical training. Thus the physicians are forced to constantly absorb new information on drugs throughout their career in order to measure up to the standards of their responsibilities.

In order to tackle the situation, there is dire need of continued medical education (CMF) in Clinical Pharmacology and Clinical Therapeutics as a discipline of Internal Medicine like Cardiology, Oncology, etc. It needs to be known that in the developed countries these units have been created not only in the teaching hospitals but also in the General Hospitals. In Pakistan at the time of Independence there was such a position at the King Edward Medi-

Corresspondence:

Prof. Mahmud Ahmad Akhtar, LT. Gen (Retd.)
43-Race Course Road,
Rawalpindi. Pakistan

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cal College Lahore occupied by a famous Professor of Medicine and Clinical Therapeutics by the name of Col Illahi Bakhsh but now there is not a single medical institution with a unit in this discipline. The Armed Forces Medical College did establish a unit in this discipline but this no longer exists. Basic Pharmacology is still taught at undergraduate level in isolation of clinical application and at postgraduate level there are no programmes of education/training in Clinical Pharmacology and Clinical Therapeutics and nor is there any continued medical education for the practicing doctors. Furthermore due to the non existence of these units there are no training programmes for Clinical Pharmacy with the result that there is a lack of Clinical Pharmacists to man pharmacies in the hospitals.

In this issue, there is an article by Akoria OA and Isah AO,[5] on "An evaluation of doctors prescribing performance in Nigeria". It is nice to note that in Nigeria though the medical institutions have very short history in comparison with Pakistan where King Edward Medical College (KEMC) is completing 150 years of its existence, they have units of Clinical Pharmacology and Clinical Therapeutics actively doing and engaged in quality work in this discipline. I and my wife have worked in Nigeria on deputation in sixties for over five years and were greatly impressed by their progressive outlook.

In Pakistan the situation with regards to drugs is precarious. Many of the "Essential Drugs" which form the back-bone of rational prescribing are not available, while the market is flooded with irrational drugs including herbs and many chemicals which are not included in the Pharmacopoeias of the scientific system of Medicine and are not registered in the scientifically advanced countries of the world. There are about fifty thousand formulations registered in Pakistan, a record numbers indeed. This poor debt-ridden country is robbed of not only the Nation's meager resources but also of its health due to the toxic effect of these irrational medications. The situation is compounded by the free availability of spurious and date-expired drugs in the market. Studies carried out by the author of this editorial on the prescribing trends showed very high misuse/irrational use of drugs/medicines by the doctors both in the public and the private sector in Pakistan.[6-8] It is noteworthy that the study reported from Nigeria shows a much lower prevalence of irrational prescribing as compared to Pakistan. This could be due to the existence of units of Clinical Pharmacology and Clinical Therapeutics, better registration of drugs by the Regulatory Authorities and availability of "Essential Drugs" in that country. Even way back in the sixties when I was in Nigeria the situation regarding the rational use of medication was much better and medicines were not available in the market without prescription unlike the free availability of drugs in Pakistan without control on prescription. In order to ameliorate the pathetic drug situation in Pakistan, there is a need to adopt emergent measures.

In the undergraduate and postgraduate medical institutions, department of Clinical Therapeutics should be established chaired by Physicians with special interest in this discipline as recommended by the WHO expert committee.[9] There should be emphasis on bed-side teaching of Clinical Therapeutics and Clinical Pharmacology. There should be active collaboration between the Basic Pharmacology Dept and clinical units. Continued Medical Education must become an integral part of the system with courses for the doctors and pharmacists being compulsory. The registration of drugs should be rationalized. Any drug which is not registered in countries with strict control on drug registration like the UK, USA, Canada, Australia, the Scandinavians countries, should not be registered in Pakistan. The Drug Regulatory Boards should be manned by Pharmacologists and Physicians with special interest in Clinical Pharmacology and Clinical Therapeutics and Pharmacists with special interest in Clinical Pharma.

WHO's recommended Essential Drugs should be made available everywhere and at all times. The government should make every

endeavour to promote the use of Essential Drugs in both the public and the private sectors. The public should be made aware about the virtues of the uses of Essential Drugs through the media and other means.

Developing countries have limited financial resources to cater to the health needs of their people in order to provide even minimal health care facilities. In such countries vigorous economic approach is needed in which drug therapy should be viewed from the standpoint of cost-effectiveness.[10]

Economic aspects of therapeutics should be included in all medical educational programmes. Only cost-effective drugs should be registered. In this respect the situation in Pakistan is very grave, as for example Clopidogrel 75mg is granted Rs. Seven and half price while another company has been given Rs. One hundred for the same drug and so on and so forth. In the same group, expensive drugs with less efficacy and more toxicity are registered; one such example is the 3rd generation fluoroquinolones.

For registration of drugs only data validated by regulatory authorities like FDA USA, British Medicines Commission and European Medicines Commission should be accepted. Claims based on un-ethical and unscientific practices adopted by firms and health care professionals should not be accepted.

The Ministry of Health should see to it that pharmaceutical industry promotes drugs on the basis of proved indications which are based on scientific knowledge and should be forbidden to indulge in unethical and illegitimate promotion of drugs, which is rampant and unchecked. This needs a political will on the part of the Government. Pakistan which was envisaged to be a welfare state by Quaid-e-Azam and as per constitution and the international conventions, the Government is duty bound to protect the fundamental rights of the people.

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