

RATIONAL DRUG THERAPY— Rational Prescriber a Priority!

The performance of health services everywhere critically depends upon availability and use of drugs. Physicians cannot effectively treat many patients without drugs(1). There is no doubt that pharmaceutical industries have immensely contributed to the welfare of humans through research and production of modern drugs. However, large proportion of health care budget at all levels is spent on drugs, much of it due to unnecessary and inappropriate prescription of drugs by doctors. Although rational drug therapy is a joint responsibility of policy-makers, drug manufacturers, health care professionals as well as patients, doctors provide final decision on use of drugs. Hence, a rational prescriber is a priority to success of 'Rational Drug Therapy'.

Rationality—Not a Fixed Point but a Range

Rational use of drugs requires that patients receive medicines appropriate to their individual clinical needs, in doses that meet individual requirements and for adequate duration. It implies assessment of individual situation, proper management of drugs *vis-a-vis* the patient and balancing benefit against the cost and risk. Hence, rationality cannot be considered as fixed or rigid end-point of drug therapy applicable

to all situations; but it has to be a range-based on individual needs and variations. In fact irrationality can be clearly defined beyond the limit of this range. Therefore, practical considerations demand that Rational Drug Therapy is one that is broadly acceptable to all in a given situation but within small limits, harmless modifications may be tailored to individual needs by treating physician. Thus, individual prescriber may vary in his choice of a drug on logical reasoning and even if such a choice is not in conformity with the most standard protocol, it still can be very rational. It is well known to all of us that cotrimoxazole is considered today the drug of choice in treatment of acute respiratory infections in the community; however, in an individual setting, this may not be the best drug and depending on probability or proof of bacterial infection, one may consider Penicillin to be the most rational prescription. This is just one example of how rationality is variable within limits and cannot be fixed or rigid. The World Health Organization (WHO) action programme publication in its recent issue(1) mentions Kaolin and Pectin as an adsorbent capable of inducing slight change in stool consistency; however, there is no scientific proof of its benefit nor its harm in the treatment of diarrhea. In such a situation rationality may be extended over harmless limits. There may not be total agreement on rationality of drug therapy and genuine differences in opinion may exist amongst scientists. For practical application, therefore, rationality should ensure safety at all costs and should try to confine to the limits of acceptable standards.

Rationality—Scientifically a Changing Concept

In accordance with scientific research, rationality may have to be re-defined in certain situations. Paracetamol hitherto has been accepted to be the best drug to treat fever in children. However, there are growing reports to suggest that Ibuprofen may be more effective and offer therapeutic advantage over paracetamol(2,3). Presently, to a dogmatic rational prescriber, use of Ibuprofen is irrational. Soon he may have to change. Similar examples exist in recent literature to justify change in the concept of rationality. Aspirin once blamed for Reye's syndrome is now cleared by the International Study group in USA. With advance in understanding the pathogenesis of Asthma, steroids are considered today the drug of choice, especially in inhaled forms(4). Debate over universal ORS is not over and the best word is yet to be said, though limits of rationality can be defined(5,6). In fact most recently, a revolutionary concept has been put forth considering lower sodium content in ORS to be most optimal(7).

Dual Responsibility of Rational Prescriber

We need to be aware that the primary responsibility of a treating physician is to offer relief to the patient and the other responsibility is towards scientific commitment of rational use of drugs. Both the factors are complimentary to each other and neither can be sacrificed in rational drug therapy. Though patient's relief can be gauged as a specific and objective end-point in rationale of any drug therapy, optimum use of drugs within limits may be a debatable issue. It is a common observation that physician in an academic institu-

tion gives more weightage to the pursuit of scientific commitment, relegating patient's relief to a second position; on the other hand a practicing physician sways in favour of patient's satisfaction and needs, some times even at the cost of scientific standards. Both the extremes are irrational and should be decried and an optimal balance between these two responsibilities must be maintained. This brings out a fact that research in Rational Drug Therapy should not be restricted to academic 'Ivory Tower'. It should seek to involve people at all levels thereby gaining the commitment to positive change.

What Can We Do?

It is a common belief—more so wishful though—that general practitioners and semitrained or untrained prescribers indulge in irrational drug therapy. However, it is a fact that pediatricians are no different(8). As individual pediatricians we should submit ourselves to medical audit—either a self-audit or a group-audit. Rational Drug Therapy can be achieved through such audit with emphasis on peer responsibilities. Open discussions on pooled as well as individuals anonymous records will prove to be effective(9). With such an exercise, even rational prescriber learns about his irrationality, because none of us can claim to be totally rational. Further, collectively as members of IAP we should try to standardize drug therapy for common diseases, educate lay people through various media and work for Rational National Drug Policy(10). It is most important that we educate ourselves to be rational prescribers. To begin with, it is enough to avoid irrationality. Dogma of rigid end-point or rationality may be better left alone, simply because scientific lacunae

continue to exist to define such a strategy. However, let us pledge to use drugs within safe limits of rationality and then only the dream of Rational Drug Therapy will come true.

Y.K. Amdekar,

*Honorary Pediatrician,
J.J. Hospital and Jaslok Hospital,
Bombay.*

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