The most rational approach to a rational drug policy is rational prescription

The flood of new drugs in recent years has provided many dramatic improvements in therapy, but it has also created a number of problems of equal magnitude. Not the least of these is the "therapeutic jungle", the term used to refer to the combination of the overwhelming number of drugs, the confusion over nomenclature and the associated uncertainty of the status of many of these drugs."
- Goodman and Gillman, 7th Ed. 1985

Drugs play an useful role in treatment of disease and alleviation of symptoms. Optimal and rational use of drugs is an obvious but imprecisely defined pre-requisite of good medical practice.

An understanding of the pressures operating at the levels of Policy, People and Practitioner could clarify present irrationalities.

Policies: Policies determine the availability of medicines in terms of production patterns, distribution, marketing; pricing and ultimately, drug usage. To be rational, availability should match the need - but does it? See box 1 for some realities in our context.

People: Peoples/Patient behavior in diseases is governed by numerous variables based on their culture, traditions, socio-economic status, and access to medical aid, life-styles and imperatives of their daily existence. The bottom-line is a lack of awareness of factors affecting health and disease.

This leads to self-medication in an empirical manner, based on: experience, peer group advice, high pressure, advertisements, etc., with the attendant hazards (NIN study-46% in Secunderabad and Hyderabad);

Box 1

- There are 20,000 pharmaceutical units producing over 60,000 formulations. The Hathi Committee in 1976 recommended 116 drugs as essential and the WHO says about 250 are necessary!
- Every 5th drug tested is sub-standard due to lack of good manufacturing practices. Also, the drug controlling and inspecting apparatus is grossly inadequate.
- Almost 50% of drugs are sold over-the-counter (O.T.C.) without proper prescription.
- The bulk of drugs produced and sold are tonics, cough syrups and pain-killers, while drugs for diseases like TB, Leprosy and Malaria are in short supply.
- The drug policy is formulated by the Ministry of Chemicals rather than the Ministry of Health and the Drug control policy is limited to a drug pricing policy.
disease processes differ at a fundamental level. This gives conflicting signals to the consumers, compounding their confusion and complicating the outcome. The prescription of allopathic medicines by unauthorised personnel and a faith in 'tonics' and other nutritional supplements add to the problems. These practices are based on the flawed belief that *There's A Pill For Every Ill*”

Practitioner: The Practitioner is considered to be in a position to understand rationality by virtue of training. The first fact faced is a training in pharmacology in 'generic' names of drugs, while practice means choosing from a plethora of 'brand' names. Not having learnt the economics of drug prescribing leads to easy manipulation by pharmaceutical producers as part of their promotional and marketing strategies. Continuing education from unbiased sources of information on rational therapy is not available to a majority of practitioners.

The pressures of practice and patient expectations leading to:
- emulating and competing with peer-groups and 'specialist' and consultant behavior in prescriptions, leads to:
- extravagant prescribing, over-prescribing, under prescribing and incorrect prescribing.
- accepting patient behavior patterns listed earlier, or condemning them without rational discussion.
- erosion of clinical skills instead of honing them, while high-tech diagnostics of limited utility are relied upon more and more.
- not appreciating the high incidence of 'iatrogenic disease, adverse drug reactions and the limited role of drugs in treatment.
- succumbing to marketing strategies, inducements and biased information provided by pharmaceutical companies.

It means substituting *'medicine'* for *'caring and acquiring of 'experience'* which *'justifies!* Is this *'rationalisation,* rational?

What does all this mean?
1. We do not have a Rational Drug Policy at the National Level (see box 1). The Hathi Committee” Report (1976) universally considered as the most authentic and exhaustive study of Indian Pharmaceutical industry, is largely ignored.
2. The plethora of drugs available in our country do not match our health needs.
3. Drugs banned elsewhere in the world are freely available in our country (e.g., Analgin, Clioquinols, Oxyphenbutazone etc.)
4. Irrational combinations of drugs are in plenty, while very few combinations are considered rational (see Table 1).
5. Tonics (multiple combination), Cough syrups (containing sedatives and expectorants) and Nutritional supplements, flood the market. These are sold at exorbitant costs, and cannot be considered rational in our socio-economic milieu
6. The practitioner has a greater responsibility in questioning the present trends and consciously promoting rationality.
| **Table 1** |
|-----------------|---------------------------------|
| **Ferrous sulphate** | + folic acid (anti anaemic) |
| **Isoniazid** | + B6 (anti tuberculosis) |
| **Sulphamethoxazole** | + Trimethoprim (anti infective) |
| **Ethinylestradiol** | + Levonorgestral (contraceptives) |
| **Ethinylestradiol** | + Norethisterone (contraceptives) |
| **L Dopa** | Methyl Dopa (Anti parkinsonism) |
| **Neomycin** | Bacitracin (anti Infective dermatological ointment) |

**Attempts at rationalization**

The World Health Organisation and Health Action International have been drawing attention to rationality at the international level. At the national level, the Indian Academy of Paediatrics and Indian Medical Associations at some regional levels have started activity in this direction.

The Voluntary sector has been particularly active

- promoting rationalisation at hospital levels in developing Hospital formularies (CHAI-CMAI and Holy Family Hospital formularies);
- starting ADR (Adverse Drug Reaction) reporting cells to monitor drug reactions;
- promoting quality drug manufacture and distribution at low cost through agencies like LOCOST, etc.;
- sensitising professional groups and lobbying with the Government through bodies like the m.f.C. (medico friends circle) AIDAN (All India Drug Action Network) and DAF-K (Drug Action Forum - Karnataka) and JAF-WB (Drug Action Forum - West Bengal);
- creating awareness among professionals and the public through publications like Drug-Disease-Doctor and 'Health Action'; and,
- reaching the consumer to create awareness through many of the above, including the KSSP (Kerala Shastra Sahitya Parishad), AIPSM (All India Peoples Science Movement), DSF (Delhi Science Forum) and other such fora.

The practitioner can contribute towards rational therapeutics by being aware and supporting attempts at rationality.

- 'auditing' his/her own prescriptions and practices. Actively looking out for iatrogenic problems. Updating knowledge from unbiased sources. - believing that the patient's right to information and a firm adherence to medical ethics is the basis or rationality.
- deciding that if drugs are the appropriate therapeutic option. GIVE THOUGHT TO THE IMPLICATIONS OF THIS DECISION.

**References/suggested reading**

1. The use of essential drugs, W.H.O. TRS-nO, 1988
7. Research and Development for Production of Essential Drugs in India - N 1ST ADS, 1984

LM.A. Rohtak