

RATIONAL USE

Teaching rational drug use: an experience in India

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THE term 'essential drugs' was first used in India by the 'Hathi Committee' in connection with price control of 117 drugs used for common disorders¹. Today, although a definition of essential drugs is available, people have widely varying perceptions of what exactly is meant by the term.

Our early studies in the 70s on irrational drug combinations, such as penicillin V and sulfonamide, amidopyrin and phenacetin with various drugs, and cloquinol and phanquone with oxyphenonium, which sold for millions of rupees, generated much interest among the scientific community and the public. Some of these combinations were banned and others were designated prescription only drugs.

Targeting public education

At that time we found the irrational use of drugs to be widespread, and our studies made patients inquisitive about their diseases and drugs prescribed. Since there was no available published drug information for the general public, we decided to write a book providing information on commonly used drugs, including socioeconomic aspects and irrational drug combinations. The first edition was published in 1978 under the title "Medicines and their Correct Use", a name later changed to "The Complete Family Medicine Book". By 1990 the publication was in its fifth edition which shows that it meets a real need².

The introduction of the essential drugs concept by the WHO in 1977³ was a major step towards overcoming the problem of irrational prescribing. We perceived it to be a very scientific concept based on sound principles of selection, procurement and rational use of drugs, and wanted to introduce these principles into our medical teaching.

Teaching better prescribing

So in 1985 we decided to test a draft curriculum on essential drugs developed by WHO⁴. As a first step we selected medical interns since there was evidence that they were self-analyzing⁵, receptive

and free from pressure of university examinations. The programme was conducted during an eight week period for 2 hours on 4 days of the week in 1986. Interns from various departments attended the introductory lectures, which were followed by discussions with a faculty member from a clinical department once a week on an appointed day. The topics covered were: the essential drugs concept, drug combinations, irrational and rational prescribing, drug interactions, drug utilization studies, and patient education in effective drug use. After about three weeks, attendance had dwindled. Participants had found the course to be too theoretical and called for a more practically oriented and interactive approach in the form of a workshop during the first two days of internship or incorporated into the undergraduate curriculum. So we thus learned an early and valuable lesson. The course also helped us to identify motivated clinical faculty members⁶.

In the following year, the programme was transformed into a practically oriented two day workshop which received very positive feedback from participants. A year later, departments conducting laboratory investigations, such as pathology, microbiology, and biochemistry, were invited to join the programme to discuss the cost effectiveness of the hospital tests. And during the last two years the radiology and forensic medicine departments have also participated to discuss the issues related to radiological investigations and medicolegal aspects.

A 'treat' for interns

The duration of the programme has increased from two to three days and it is now called "Integrated Orientation Programme for Interns". This year's feedback indicates that it should be extended to four days. So from a small activity conducted by our department, this activity has now become a regular programme of the institute to which 12 departments, namely pharmacology, surgery, medicine, paediatrics, obstetrics and gynaecology, biochemistry, pathology, microbiology, radiology, forensic medicine, community medicine and medical education, contribute. Interns enjoy participating in it and call it a 'treat'.

Based on experience with the course, in 1988 we produced a manual for training interns on the essential drugs concept and rational drug use⁷. This was subsequently modified at WHO's suggestion to focus on high morbidity areas, and to include feedback from the participants⁸.



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National and international expansion

In order to build on and expand the success of the programme, we approached the Ministry of Health and Family Welfare to support a workshop for teachers from other institutions to train interns in this subject. The result was a three day workshop in 1989 which brought together 21 teachers from 7 medical colleges. We selected a core group of 3 participants from each college - a pharmacologist and representatives of two other clinical disciplines - to form a multidisciplinary team to organize similar programmes on their return. Previous training in educational sciences at the national teachers training centre was an important criterion for selection as we expected these graduates to be more motivated. Four of the participating institutions are now organizing such programmes regularly and others are planning to do so in the near future. Two other colleges are organizing programmes for prescribers and pharmacy graduates through the training imparted by us⁹.

The training received by faculty members during meetings and courses at organizations such as National Institute of Mental Health, Washington DC; Mario Negri Institute, Milan; Karolinska Institute, Stockholm; International Organizations of Consumers Unions, Manila and Penang, and the Institute of Clinical Pharmacology, Tokyo, has greatly motivated the development of our work. Among these the multidisciplinary course on Medicine and Society: A Challenge in Health Development, organized by the Department of International Health Care Research, Karolinska Institute, Stockholm in 1987 was of particular significance. As an outcome of this, three projects, namely patients' attitude to health care, drug utilization at primary health centres, and antimicrobial utilization during caesarean section, broadened our horizon of thinking concerning the essential drugs concept. We are now planning epidemiological studies on antibiotic use and intervention studies to evaluate the long-term impact of the educational programmes.

Our activities in rational drug use continued to expand, even beyond national borders. In December 1989, participants from Nepal, Bangladesh, Pakistan, Afghanistan, Sri Lanka, Malaysia, Indonesia and India met for an international workshop on essential drugs and rational drug use in developing countries (see EDM-9.90).

As part of our continuing commitment to improving the use of drugs, a one-day workshop for 22 practitioners working in urban and rural health centres was held in 1990. Various components of the drug chain such as patient, drug, disease and prescriber related factors were discussed in relation to the local cultural and socioeconomic conditions. Participants were very enthusiastic and called for a follow-up workshop of longer duration. We also provide consultancy services to various other groups involved in drug action programmes.

We believe that these activities - which range from curriculum development, the organization of workshops, publication of training materials, research and the provision of advice and information - all have a valuable role to play in the promotion of rational drug therapy and to sensitizing the many different contributors to the chain of pharmaceutical supply and demand to the issues involved.

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Participants at the International Workshop on the Rational Use of Drugs, Pondicherry.