

Newsletter of Drug Information Centre, KSPC

Official Desk



Development of drug information centers and drug information specialists was the beginning of the clinical pharmacy concept. It laid the groundwork for pharmacists to demonstrate their ability to assume more responsibility in providing input on drug therapy for patients.

Among deficiencies in the health care system, one is the unavailability of adequate information for those who consume, prescribe, dispense and administer drugs. This deficiency has resulted in inappropriate drug use and an unacceptable frequency of drug induced diseases.

Pharmacists are seen as health professionals who could make an important contribution to the health care system of the future by providing information about drugs to consumers and health professionals.

Education and training of pharmacists now and in the future must be developed to meet these important responsibilities. The education of pharmacists continues to evolve in scope and depth.

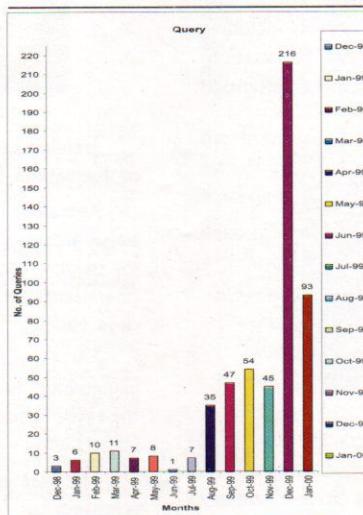
The need exists for the practitioner to have support from drug information centers to meet special information needs, and to serve as a resource on effective drug use.

Information is not knowledge. Knowledge comes from the interpretation of information. While we are constantly bombarded with data and information, what we want is knowledge and wisdom. i.e. the ability to understand and apply the facts. We are striving towards the same.

The DIC is being run by the KSPC with its high set objectives and its commitment to unbiased drug information. The mission of DIC is to promote the drug information for rational use of medication in order to optimise the usefulness of drugs.

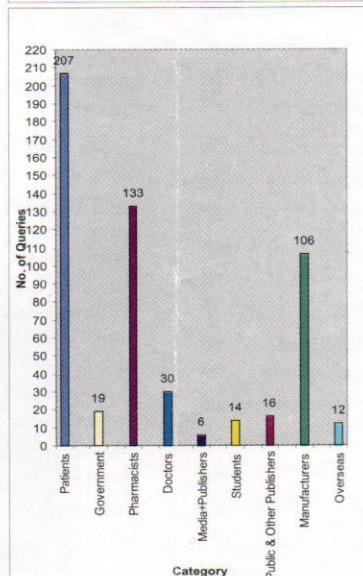
We urge the doctors to utilise the resources of DIC to the maximum extent.

Graphical Representation

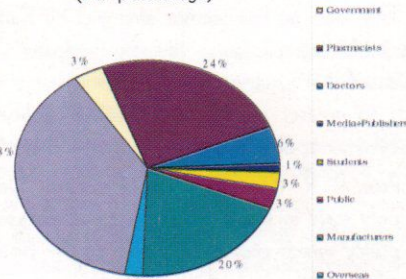


Monthwise Query Chart from December 1999 to 15th January 2000

Months	No. of Queries
Dec-98	3
Jan-99	6
Feb-99	10
Mar-99	11
Apr-99	7
May-99	8
Jun-99	1
Jul-99	7
Aug-99	35
Sep-99	47
Oct-99	54
Nov-99	45
Dec-99	216
Jan-00	93
Total	543



Query Chart (As percentage)



The category of people requested services from Drug Information Centre

Category - Query	No. of Queries
Patients	207
Government	19
Pharmacists	133
Doctors	30
Media+Publishers	6
Students	14
Public	16
Manufacturers	106
Overseas	12
Total	543

Place : Bangalore
Jan. 2000

Prof. B.G. Shivananda
Vice - President

QUERY OF THE MONTH



Patients suffering from asthma often send in queries regarding the proper use of inhalers & treatment of thrush-fungal infection caused by Candida albicans affecting the oral tissues. Following the right instructions can help avoid thrush.

Patient Instructions

Aerosol (inhaler): Your doctor will tell you how much medicine to use and how often. Shake the inhaler well just before each use.

Remove the cap and look at the mouthpiece to make sure it is clean. Test spray in the air before using for the first time or if the inhaler has not been used for a while. Breathe out fully, trying to get as much air out of the lungs as possible. Put the mouthpiece just in front of your mouth with the canister upright. Open your mouth and breathe in slowly and deeply (like yawning), and at the same time firmly press down on the top of the canister once. Hold your breath for about 5 to 10 seconds, then breathe out slowly. Wait 1 to 2 minutes between treatments for more than one inhalation. Repeat these steps for the next puff starting with shaking the inhaler. **After using the inhaler, rinse your mouth to avoid oral fungal infections specially with steroid drugs.** Remove the metal canister and wash the plastic case with warm water at least once a day. Do not store or expose the canister to open fire or temperatures above 120 degrees F. Do not poke holes in the canister. If you miss a dose, take as soon as possible. Skip the missed dose if it is almost time for your next dose. Do not take two doses at the same time.

GUEST LECTURE

"Rational Use of Drugs"

- by Prof. Ranjit Roy Chaudhury

KARNATAKA STATE PHARMACY COUNCIL organized a guest lecture on "Rational Use of Drugs" by Prof. Ranjit Roy Chaudhury, President, Delhi Society For Promotion of Rational Use of Drugs on 20th October 1999. More than 40 doctors including Dr. B. S. Ramesh, President Elect - Indian Medical Association, Karnataka State Branch and doctors from various disciplines attended the lecture.

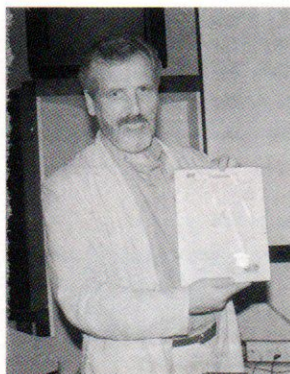


Prof. Ranjit Roy Chaudhury felicitated by Mr. D. A. Gundu Rao, President, Karnataka State Pharmacy Council

This was the first lecture arranged by Karnataka State Pharmacy Council for the doctors. Delivering the lecture, Prof. R.R. Chaudhury explained that a national or state programme in rational use of drugs leads to greater availability of good quality medicines, improved prescribing, optimal use of resources and better therapeutics.

Prof. R. R. Chaudhury explained how Delhi can boast of being the only state in India to have a comprehensive rational drug policy - a policy which provides succour to the poor. This is also the first time that WHO is working in tandem with a state government (i.e. Delhi) and the Delhi Society for Promotion of Rational Use of Drugs, a non-governmental organisation. Thanks to the collective efforts of doctors, ministers and drug controllers, this far-reaching policy has injected a new lease of life into a health system earlier crippled with inadequate planning and lack of foresight. This was the right medicine used for the right period of time in the right doses.

The best brains in the Delhi Government, the WHO and the Delhi Society for Promotion of Rational Use of Drugs saw the genesis of the Rational Drug Policy. Hailed by WHO as a major breakthrough, this policy is now being emulated by other state governments such as



First issue of newsletter being released by Mr. Frank May

Maharashtra, Rajasthan, Himachal Pradesh, Punjab, Tamil Nadu and West Bengal. Bihar and Madhya Pradesh have now joined the programme. It is hoped that the success of the programme in these states will induce others to follow suit. In the same occasion the first issue of DIC Newsletter was released by Mr. Frank May, Chief Pharmacist, Repatriation General Hospital, Australia.

CONTINUING EDUCATION PROGRAMME



In service hospital pharmacists attending the course.

Training programme of pharmacists of district and taluk hospitals of Karnataka Health System Development Project.

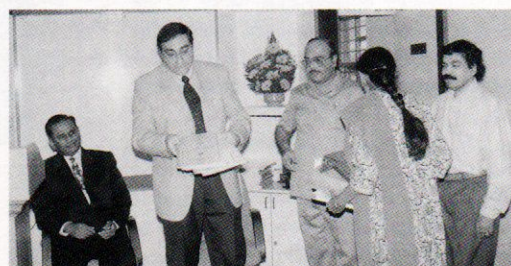
Karnataka State Pharmacy Council has been identified as the training center by the Karnataka Health System Development Project for training hospital pharmacists. Two Hundred and Fifty in service pharmacists are being trained in batches of twenty five each, for five days each.

Mr. Anand Rajashekar, Drugs Controller for the State of Karnataka inaugurated the programme on 14th December 1999 and delivered the keynote address to the participants from the district & taluk hospitals spread across the state.

The Training Manual prepared by KSPC for the Pharmacists was released by Mr. Irfan Razack, Honorary Secretary, Al-Ameen Education Society, Bangalore.

Resource persons have been selected from reputed colleges, government departments and professionals from the Drug Information Center.

A wide range of topics are being covered in the training programme, which includes Ethics for pharmacists, Clinical Pharmacy, Drug Information, Novel Drug Delivery System, Application of Computers in Hospital Pharmacy, Drugs and Cosmetics Act and other relevant topics. A course manual has also been prepared by Karnataka State Pharmacy Council and distributed to the candidates.



From left: Mr. Anand Rajashekar, Drugs Controller, Karnataka. The course manual released by Mr. Irfan Razack, Hon. Secretary, Al-Ameen Education Society. Mr D. A. Gundu Rao, President, KSPC., Mr. B.G. Shivananda, Vice President, KSPC

KSPC NEWS

The poster presentation for "Awareness Program on Tuberculosis For The Community Pharmacists To Improve Patient Compliance" was prepared by Ms P.K. Lakshmi and C. Sunitha Srinivas -Deputy Directors, Drug Information Center, KSPC & Dr. Shyamala Bhaskaran, Assistant Professor in Department of Pharmaceutics, Al-Ameen College of Pharmacy, Bangalore.

The paper was presented by Ms. P.K. Lakshmi at the IPC held in Indore in 1999. The paper won the "Best paper presentation

award" under hospital and clinical pharmacy category.

WHO India sponsored the training course for Ms. C. Sunitha Srinivas, Deputy Director, DIC, KSPC for the two week course on 'Drug Policy Issues for developing countries in Mumbai, Organised by Boston School of Public Health & KEM Hospital. As a follow up of these courses of events, KSPC is in the process of forming the Rational Use of Drugs Committee.

FACTS ABOUT ANTIBIOTICS



When antibiotics were first developed, they were seen as "magic bullets" that would radically change the treatment of infectious disease. Now, however, experts are worried that the golden age of antibiotics is over.

The global antibiotics market was put at \$15.5 billion in 1991, and estimates suggest it will increase to a possible \$40 billion by the year 2000.

According to an international task force studying antibiotic resistance, although antibiotics have saved and improved more lives than any other class of medicines, their use "has set in motion the biggest intervention in population genetics seen to date on this planet". The effects of that intervention are seen in the distributions of antibiotic-resistance genes throughout the world's bacterial populations. This change, although invisible to the naked eye, has had as profound an effect on human health as the antibiotics themselves. One researcher notes that "resistance to antimicrobial agents has become a global problem with a major impact on health care in developed and developing countries".

Antibiotics are often wrongly prescribed for minor infections or to treat the common cold, which is caused by a virus. Numerous studies of examples of reports of antibiotic resistance confirms the indiscriminate and often unjustified use of antibiotic therapy for the treatment of frequently benign infections.

The misuse of antibiotics also increases the dangers of side effects. These may be specific (for example, Chloramphenicol can damage the bone marrow; Neomycin may damage the kidneys), or due to hypersensitivity or allergic reactions. Furthermore, a disturbance in the balance of the body's microorganisms by antibiotics can lead to superinfections or overgrowth of yeast, fungi and bacteria. These are usually minor but may become serious or even fatal. They are difficult to treat and are more likely to occur with broad-spectrum antibiotics (those effective against a wide variety of bacteria), in children under three years of age, or in the elderly.

The threat of infection in the Third World through poverty, malnutrition, poor sanitation and poor housing conditions means that antibiotics have a potentially important role to play in improving health care. In underdeveloped countries, a large proportion of the drug budget is spent on antibiotics and antiparasitic drugs. Frequently, more money is spent on antibiotics than on any other class of drugs.

Most use of antibiotics in developing countries is inappropriate; medication that are available without prescription are used for too short a period, at too low a dose, or without proper indication.

In Australia, a small booklet, Antibiotic Guidelines, was published in 1978, and has been regularly updated since, to provide a set of peer-consensus guidelines on antibiotic use.

Antibiotics given concurrently can be useful in very specific circumstances (for example, as part of a combined treatment in tuberculosis), even though the use of two or more antibiotics at the

same time increases the risk of side effects.

In the early 1960s, combination antibiotics abounded; however, regulatory authorities such as the US FDA began eliminating them because of insufficient evidence about their efficacy and safety.

It is commonly believed that the only way to combat growing resistance to antibiotics is to produce new, more effective drugs. This race for a "wonder drug" to beat the "super bug" is misleading. The real solution is to eliminate misuse. As one study concluded, "rather than attempt to overcome or pre-empt resistance by prescribing yet another agent, the objective should be to prevent resistance by limiting the amount of antibiotic prescriptions".

A WHO expert committee has suggested that in addition to the Essential Drugs List which included 16 antibiotics, a "reserve list" of antibiotics should be set up which could include some of the third-generation cephalosporins, quinolones and vancomycin.

Recommendations for action

1. Antibiotics with a potential for serious risk, such as Chloramphenicol or systemic Neomycin, yet with one or two useful indication, should be placed under severe restriction. Whenever possible, they should be withdrawn from the general market and be prescribed by specialists who are familiar with their potential risks.
2. Antibiotic combinations (except those such as co-trimoxazole or those with chemicals such as clavulanate or sulbactam) should be banned.
3. Government in all countries should develop strict antibiotic policies as part of a national antibiotic policy as part of a national drug policy. These should include:
 - a) a limited list of antibiotics, with some kept in reserve for use against micro-organisms resistant to first-line drugs.
 - b) a regularly revised set of therapeutic guidelines.
 - c) drug utilisation studies to monitor the use of antibiotics and where necessary, the introduction of education programmes to encourage the rational use of antibiotics.
4. Product information should carry a clear warning about the problems of resistance and the need for careful diagnosis and selective use.
5. Governments may wish to consider introducing bans, or other controls, on the advertising of antibiotics, as the information contained in manufacturer's promotional materials has been implicated in poor prescribing habits.
6. Health authorities should introduce regular refresher courses and other independent exchanges of information on antibiotics for health workers. One of the most important messages to communicate is that new antibiotics should be used cautiously and often kept in reserve for the treatment of serious infections that prove to be resistant to other antibiotics.

Sources :- Chetley, A. Problem Drugs, Amsterdam, HAI, 1993.



DRUG INFORMATION



Since 1960s there has been a continuing expansion in the range and complexity of pharmaceuticals available for therapeutic use. During this period the volume of published information regarding drugs has increased substantially and in response, drug information services have been established, particularly in the USA, UK, Europe and Australia. On a population basis, India has very limited access to independent drug information services and the establishment of the KSPC Drug Information Centre is a welcome initiative.

Drug information centres in most countries are associated with major teaching hospitals. In some cases, centres have expanded their range of services to community practice. In Australia, most drug information services are funded by regional governments either directly or through hospital budgets. Regardless of location or focus it is important for the service to offer clinically relevant responses with recommendations for individual patients. In Australia there is a strong association between clinical pharmacy practice and drug information services. This provides the necessary foundation to build a drug information service. Additional skills required by the drug information pharmacist include database management, literature retrieval and interpretation, and communications.

One of the challenges for hospital-based services is to expand their expertise to community medicine. In Australia, the National Prescribing Service has been established to promote quality use of medicines. The Service is planning to establish a therapeutics advice and information service for general practitioners and community pharmacists participating in their programs. This will be available nationally with drug information available via telephone for the cost of a local call.

Most drug information services are directed at health professionals. Ideally the first contact for a patient should be with a general medical practitioner, pharmacist or nurse. These professionals can then seek specialist assistance as required. However, there is a need for 'consumer' medicines advisory lines to supplement current primary care facilities. A telephone advisory line is appropriate in these cases. One such service is well established for the State of Queensland, Australia and a government funded service for psychiatric drugs operates in the State of Victoria. The National Prescribing Service is also considering a national service for the Australian public. Hospital-based services generally respond to calls from the public but they are not funded for this activity.

Drug information services provide an integrated approach to locating and interpreting information about pharmaceuticals and their application in clinical medicine. Drug information services use a range of information sources and experienced personnel to acquire the best possible information and offer recommendations for its implementation. Examples of questions requiring this approach are: drug selection for particular patients; adverse drug reactions; interactions between drugs; immunisation; drug use in pregnancy and lactation; drug use in neonates and children; other administration routes (e.g. parenteral, rectal, topical); identification and availability of drugs not available locally; stability and storage of pharmaceuticals.

In most countries, commercial interests rather than public health priorities dictate the range of pharmaceuticals that is available. There is also concern that globalisation of the pharmaceutical industry is exacerbating this problem and is contrary to the principal health requirements of developing countries. Drug information centres can

play a significant role in supporting practitioners with independent advice, which is consistent with essential drug programs thus promoting the rational use of drugs. These principles are not confined to developing countries. In Australia there is a national quality use of medicines program and a major impetus for the National Prescribing Service has been the escalating cost of government subsidised pharmaceuticals. The National Prescribing Service could be seen as an attempt by the national government to save large sums of money by spending a smaller amount on education and prescribing support. More importantly, quality use of medicine means more patients benefit from prescribed drugs and there is less morbidity and fewer hospital admissions for drug related illness.

Drug information services and clinical pharmacy programs in India face enormous challenges and will require continuing support and funding to make substantial improvements. Australian hospital pharmacists have offered training and experience in these areas and it is hoped this level of cooperation can continue and expand. This process is of mutual benefit. Working or visiting India can be an exceptionally rewarding experience for Australian pharmacists. It provides many professional challenges and a wide range of social and cultural perspectives.

The scope and nature of the Indian pharmaceutical system means that fundamental change would be required to make significant overall improvements. In this context drug information centres are a small but critical component of a larger movement towards an improved health system.

Graeme Vernon is in-charge of the drug information centre in a major teaching hospital in Melbourne. He is also a member of the Committee of Specialty Practice in Drug Information for the Society of Hospital Pharmacists of Australia and an Associate Editor for the *Australian Journal of Hospital Pharmacy*. In recent years he has been promoting communication and cooperation between drug information services on a global basis.

Graeme Vernon - Drug Information Pharmacist
Austin & Repatriation Medical Centre (Melbourne)
Heidelberg, Victoria 3084, Australia

BOOK-POST



Additional Information on any articles is available on request
Contact : KARNATAKA STATE PHARMACY COUNCIL
Drug Information Centre

514/E, I Main, II Stage, Vijayanagar Club Road, Bangalore - 40.

Ph.: 3383142, 3404000. E-Mail : kspcdic@blr.vsnl.net.in Visit us at : www.kspcdic.org

President : D.A. Gundu Rao, Vice President : B.G. Shivananda, Registrar : S.B. Gore

Editor : Sunitha Srinivas, Co-Editor : P. K. Lakshmi

Editorial Committee : Dr. G. Jagadeesh, Mr. P.S. Bhagavan

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