Tamilnadu Pharmaceutical
Sciences Welfare Trust

Pharma Web

Newsletter of Tamilnadu Pharmaceutical Sciences Welfare Trust

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TAMILNADU PHARMACEUTICAL SCIENCES WELFARE TRUST
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EDITORIAL

Dear Readers,

I wish you all a very Happy and prosperous "Vijaya Varusha" Tamil New Year.

We are happy to release 17th issue of Pharma Web for the period of Jan - March 2013. In this issue we are publishing the lectures delivered by eminent professionals during 64th IPC, held at Chennai as articles.

Articles on the topic of "Challenges and issues on drug Regulatory System" by Dr. G.N. Singh, Drugs Controller General of India, New Delhi, & "Conducting Clinical Trials in India: Ethics and Challenges" by Prof. S.S. Agarwal, Pro-Vice Chancellor of Amity University are published for the benefit of our readers.

Further we also published the Essay Competition on the subject "Global Pharma Challenges Are We Ready? By Ms. V. Sandhya, Vels University, Chennai as an articles which secured first prize from our Trust.

Important Final Notifications such as, Compensation to Volunteers participating in Clinical Trial and permission for conducting Clinical Trial are published. Further a Draft Notification containing various items like Definition of Loan Licence, Permission made mandatory for import of Non Medicinal items etc., is also published for our reader's suggestion to DCGI, New Delhi.

Various Events such as Pharmacy Week Celebration conducted by IPA, TN and Workshop conducted by IPA, TN and TANIPA for the benefit of Pharmacy student in Coimbatore region at PSG College, Coimbatore

We have also published important Question and Answers of Rajya Sabha pertaining to Ministry of Health & Ministry of Chemical and Fertiliser for the benefit of our professionals.

We also thank various Pharmaceutical Manufacturers and Dealers for giving Advertisements

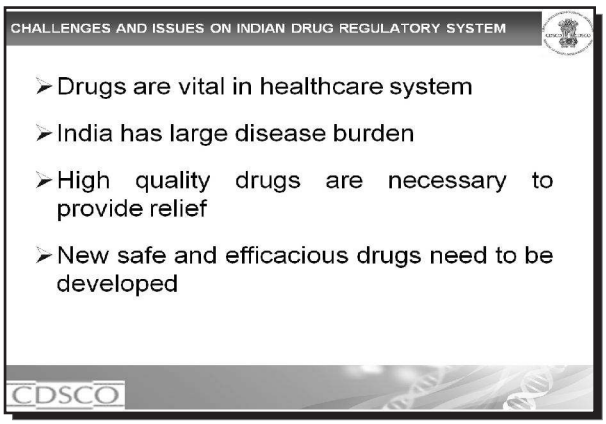
We request our readers to express their views and comments about the contents and usefulness of **Pharma Web**. Your Suggestions will help us to improve the Quality & Contents of our future issues.

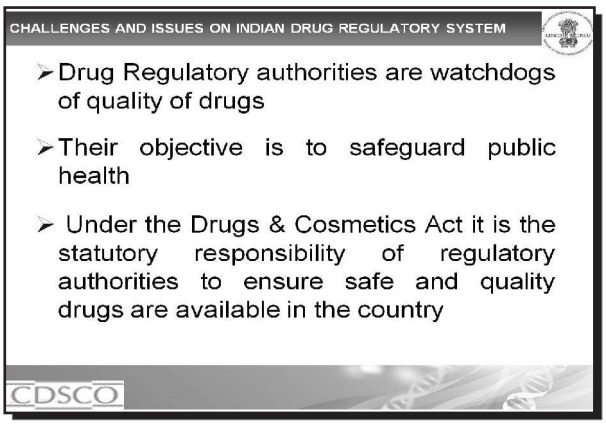
With Best Regards
R. Narayanaswamy
Chief Editor

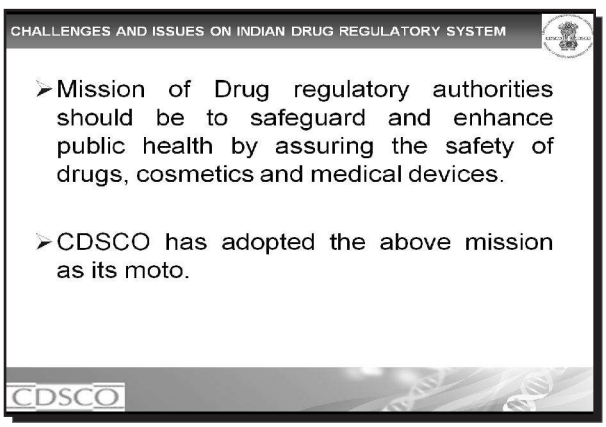
ARTICLES

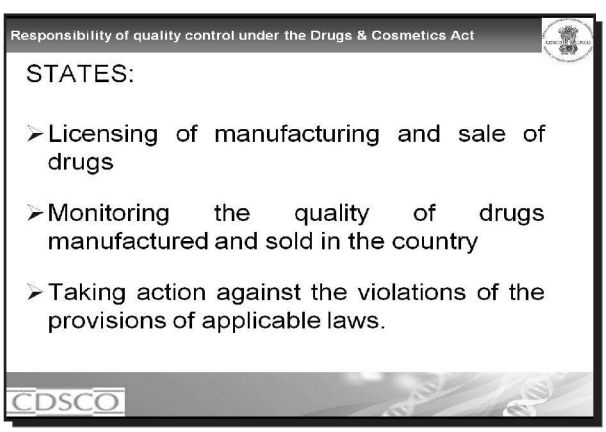
CHALLENGES AND ISSUES ON INDIAN DRUG REGULATORY SYSTEM

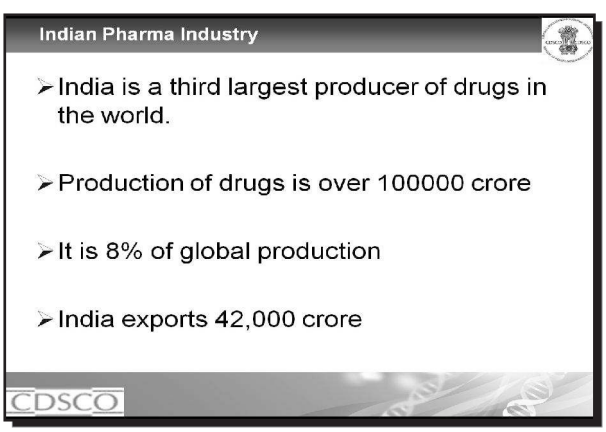
By
Dr. G. N. Singh – Drugs Controller General of India, New Delhi
Lecture delivered at 64th IPC, Chennai on 7th December 2012











Weaknesses in the Regulatory system

- Weak and inadequate infrastructure
- Inadequate testing facilities
- Shortage of manpower
- Non uniformity of enforcement
- Non existence of data bank and coordination with other States.

CDSCO

Challenges before drug regulatory system

- Reports of presence of spurious drugs in the country
- Shortage of testing facilities in State
- Non compliance of Good Manufacturing Practices and Good Laboratory Practices
- Lack of surveillance of manufacturing as well as sale premises

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Challenges before drug regulatory system

- Speedy investigation in the cases violation for launch of prosecution
- Good Storage Practices
- Public awareness and coordination from other stakeholder like Pharma industry, NGOs etc
- Robust system of clinical trials with the objective of generation of authentic data and safeguard of the trial subject

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Road Ahead

- Strengthening of infrastructure both in terms of manpower and equipment
- Establishment/upgradation of testing facilities
- Better inter-state coordination between the regulatory authority
- Adoption of e-administration for transparency and efficiency

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Contd.....

- Increase in surprise inspection to instill ma sense of compiling of statutory provisions both by manufacturer and seller of drugs
- Training programme for officers to sharpen their skills
- Making public and NGOs aware of drug regulatory system and enlisting their cooperation

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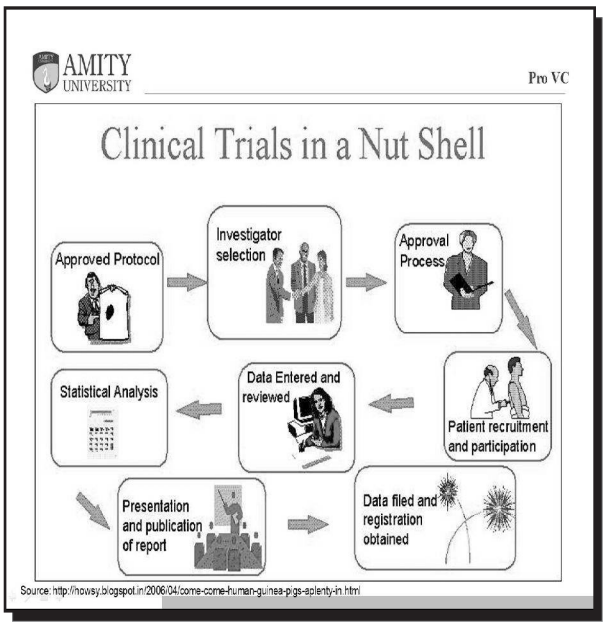
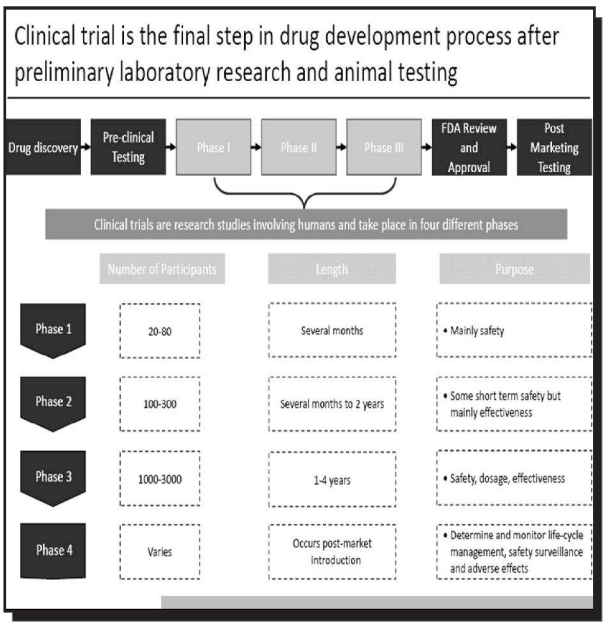
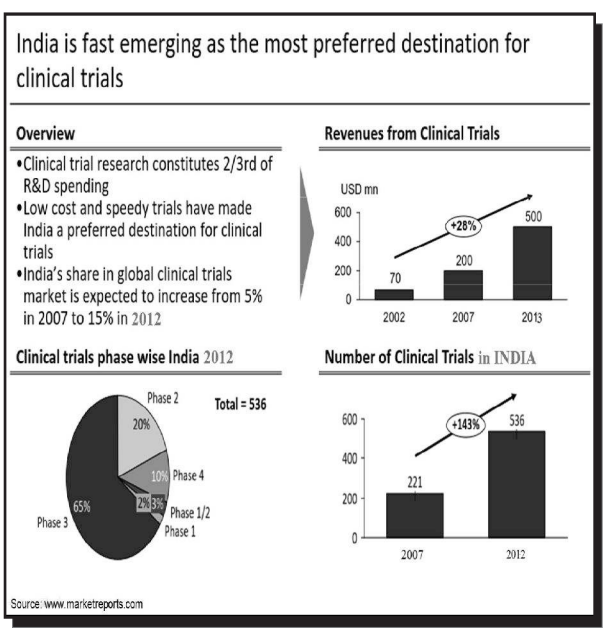
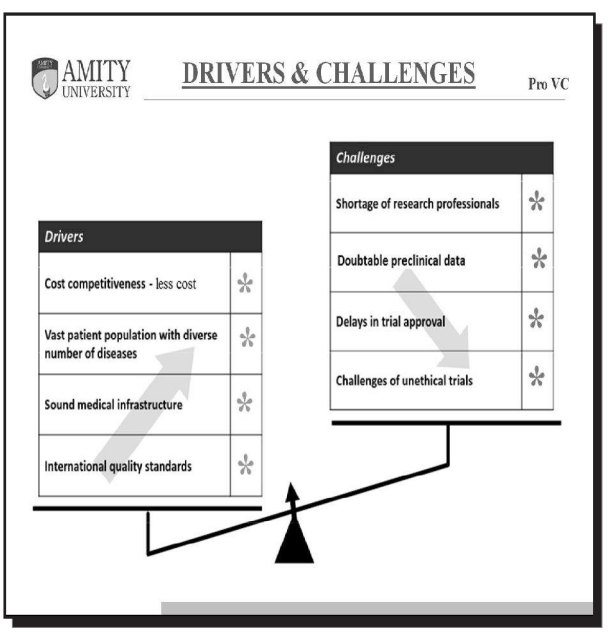
CONDUCTING CLINICAL TRIALS IN INDIA: ETHICS AND CHALLENGES

By
Professor S.S. Agrawal - Professor of Pharmacology
Pro Vice Chancellor, Amity University Uttar Pradesh
Director General - Medical & Allied Sciences Domain
Lecture delivered at 64th IPC, Chennai on 9th December 2012









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Cost competitiveness

- Multinational pharma companies are achieving cost saving of around 30 – 50 % when outsourcing clinical trial projects to India.

Phase	US Costs	Indian Costs
Phase I	USD 20 mn	<USD 10 mn
Phase II	USD 50 mn	<USD 30 mn
Phase III	USD 100 mn	<USD 60 mn

Time competitiveness

- Patient recruitment time is about 30 – 40 % lower in India compared to US.
- In US, it take nearly three years to get around 100 patients to conduct trials on them. In India the same number could be gathered in about 6 months.

Source: www.marketreports.com

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WIDE SPECTRUM OF DISEASES

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- India with second highest population has a broad spectrum of diseases.
- Diseases like multi-drug resistant pneumonia, hepatitis B, diabetes and some cancers are far more prevalent in India than in the West.
- Recent global guidelines make it mandatory to test new drugs across a variety of new gene pools, making India ideal for clinical trials

Disease	Number of patients
Asthma	40 mn
Cardiovascular Diseases	35 mn
Diabetes	34 mn
HIV/AIDS	4.2mn
Cancer	3 mn
Alzheimer's	1.5 mn
Epileptic	8 mn
Hypertension	15% of total population
Schizophrenia	1% of total population
HIV AIDS Adult prevalence rate	0.36% of total population

Source: www.marketreports.com

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SOUND MEDICAL INFRASTRUCTURE

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- India has over a million English speaking, internationally qualified doctors, nurses, and support staff.
- India has established world-class expertise in complex medical practices such as Cardiac care, Cosmetic surgery, Joint replacements, Neurosurgery etc
- Medical investigations are conducted using latest diagnostic equipment meeting the stringent requirements of FDA

Indian Healthcare Infrastructure - 2006	
Public Hospitals	4,049
Private Hospitals	11,334
Hospital Beds	875,000
Doctors	1,000,000
Medical Colleges	221
New Doctors every Year	18,000
Retails chemist Outlets	350,000
Dental Colleges	100
Pharma Colleges	150

Source: www.marketreports.com

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SHORTAGE OF TRAINED RESEARCH PROFESSIONALS

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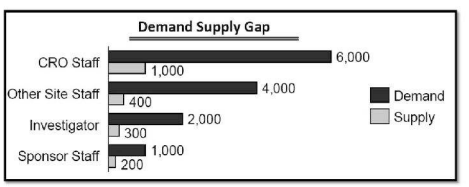
- India is facing a shortage of Good Clinical Practice (GCP) certified sites and investigators
- Over the next five years about 1,500-2,000 good clinical practices (GCP) trained investigators
- 50,000 clinical research professionals would be required in India



Source: www.marketreports.com

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DELAYS IN TRIAL APPROVAL

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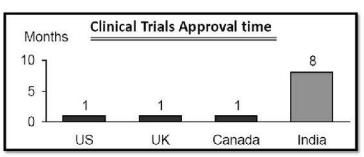
- Delays in granting approvals is affecting pharmaceutical companies and CROs in India
- Delays happens as the Drugs Controller's office depends on external experts and agencies such as Indian Council of Medical Research for advice and additional permissions required for import of trial samples and export of blood samples to foreign laboratories.



Source: www.marketreports.com

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CHALLENGES OF UNETHICAL TRIALS

- Supreme Court of India had hauled up two top biotech companies **Shanta Biotech & Biocon** for openly conducting illegal clinical trials of new drugs on unsuspecting patients after a litigation filed by Aadar Destitute and Old People's Home (an NGO)
- NGO alleged that the two companies had conducted improper clinical trials of Streptokinase - a new clot-busting drug used in heart attacks without requisite permissions, as a consequence eight people lost their lives
- **Few incidents of illegal clinical trials has fueled immense concerns of a huge public outcry over clinical trials.**

Indore - According to documents submitted in the apex court, the psychiatrists had enrolled 233 mentally ill patients in clinical trials without informed consent.

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Examples of unethical trials

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Location	Year	Sponsors	Drug/ treatment	DOH Norms violated
Zimbabwe	2006	Glaxosmithkline	Anti-retroviral therapy	17,22
Cameroon, Thailand, nigeria	2005	Gilead, Bill & Melinda gates foundation	Tenofovir	8,22
Kathmandu, Nepal	2003	Walter reed army institute of research	Hepatitis E Vaccine	8, 19 22
Uganda	2003	Us national institutes of health	Nevirapine	13,22
Miami, US	2005	Pfizer, Astrazeneca	Various	8, 13, 20, 22
Various countries	2000	Glaxo smithkline	Alosetrol HCL	17,22
Peru	2005	Ventria bioscience	ORS	11,22
South korea	2001	Novartis	Imatinib	22,30
Nigeria	1996	Pfizer	Trovafloxacin	13,20,22,31

DoH §8: Vulnerable subjects may not have received the required special protection.
DoH §11: Required animal experiments had not yet been completed.
DoH §13: Serious adverse events were not reported.
DoH §17: Investigations were not ceased after the risks were found to outweigh the potential benefits.
DoH §19: The population where the research was carried out is unlikely to benefit from the study.
DoH §20: Subjects were not informed they were participating in a trial.
DoH §22: Participants had not been adequately informed.
DoH §30: Post-trial access arrangements were insufficient.
DoH §31: It was not explained that the care provided was linked to a research.

Source: http://somo.nl/publications-en/Publication_2534

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Examples of unethical trials in India

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Location	Year	Sponsors	Drug/ treatment	DOH Norms violated
India	2003	Sun pharma	Letrozole	20,22
Hyderabad, India	2003	Shanta biotech, Biocon	Streptokinase and insulin	13,20,22
Peru	2005	Ventria bioscience	ORS	11,22
Gujrat, India	2003	Johnson & Johnson	Risperidone	20,22,29,31
52 countries including India	2002	Novo Nordisk	Ragaglitazar	11,22
India	2000	Pfizer	Zoniporide	11,22
India	1999	Otsuka	Cilostazol	13,22
India	2000	Johns Hopkins Hospital	Nordihydroguaiaretic acid	11,20,22

DoH §8: Vulnerable subjects may not have received the required special protection.
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Research Done The Wrong Way – I

The Tuskeegee Syphilis Study

Pro VC

- Clinical study conducted by the U.S. Public Health Service to study the natural progression of untreated syphilis in rural black men who thought they were receiving free health care from the U.S. government.
- **Longest non-therapeutic experiment** on human beings in medical history: The progress of untreated syphilis (1932-72)
- 399 poor African-American sharecroppers in rural Macon County, Alabama, USA.
- Presidential apology, May 1997

** Tuskegee Syphilis Study Legacy Committee Final Report of May 20, 1996*


The New York Times

Syphilis Victims in U.S. Study Went Untreated for 40 Years

By JEAN HELLER

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Research Done The Wrong Way – II

Nazi Prisoner Research During World War II

Pro VC

- Objectives of various trials:
  - Effect of cold, heat, chemicals on men, women and children
  - "Time to death" testing in response to stressors in healthy "volunteers"
  - Organ transplant experiments on healthy "volunteers"
- Prisoners were forced to participate
- Outcome:
  - 23 German scientists taken to court, 7 acquitted, 9 imprisoned, 7 given death sentence
  - Nuremberg Code of 1947

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Biomedical Research in Humans

Guidelines

Pro VC

- The Nuremberg Code, 1947
- The Declaration of Helsinki, 1964 *(2000)*
- The Belmont Report, 1979
- ICH GCP, 1997
- ICMR Guidelines, 2000

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The Nuremberg Code

What is it?

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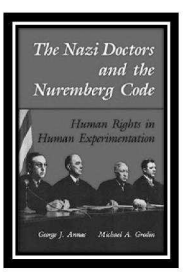
- A set of 10 principles on research involving humans
- Developed after the horrors of Nazi experiments on humans became public
- Published in 1947



THE TEN POINTS OF THE NUREMBERG CODE

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Pro VC

- The **voluntary consent** of the human subject is **absolutely essential**.
- The **experiment** should be such as to **yield fruitful results** for the **good of society**.
- The experiment should be so designed and **based on the results of animal experimentation** and a knowledge of the natural history of the disease.
- The experiment should be so conducted as to **avoid all unnecessary physical and mental suffering and injury.**
- No experiment should be conducted where there is a prior reason to believe that death or disabling injury will occur; except, perhaps, in those experiments where the experimental physicians also serve as subjects.
- The **degree of risk** to be taken should never exceed that determined by the humanitarian importance of the problem to be solved by the experiment.
- Proper preparations should be made and adequate facilities provided to protect the experimental subject **against even remote possibilities of injury, disability, or death**.
- The **experiment should be** conducted only by scientifically qualified persons.
- During the course of the experiment the **human subject** should be at liberty to **bring the experiment to an end.**
- During the course of the experiment the scientist in charge must be prepared to terminate the experiment at any stage.

The Declaration of Helsinki
What is it?

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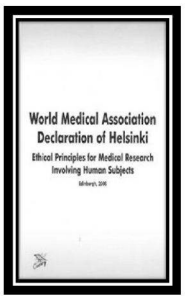
- A statement of ethical principles on research involving humans
- Published by the World Medical Association
- Developed from the Nuremberg Code
- First adopted at Helsinki in 1964



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BASIC PRINCIPLES

- The fundamental principle is **respect for the individual**, their right to self determination and the right to make **informed decisions** regarding participation in research, **both initially and during the course of the research.**
- The **investigator's duty is solely to the patient** or volunteer, and while there is always a need for research, the subject's welfare must always take precedence over the interests of science and society, and **ethical considerations must always take precedence over laws and regulations.**
- It is recognized that when the research participant is incompetent, physically or mentally incapable of giving consent, or is a minor, then allowance should be considered for surrogate consent by an individual acting in the subject's best interest.
- **In which case their consent should still be obtained if at all possible.**

The Belmont Report
What is it?

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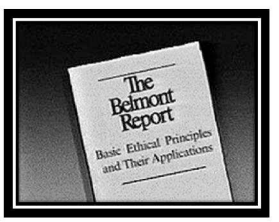
- Ethical principles and guidelines for protecting humans in clinical research
- Developed by a commission set up in the US in the aftermath of the Tuskeegee Study becoming public
- Published in 1979



THE THREE FUNDAMENTAL ETHICAL PRINCIPLES FOR USING ANY HUMAN SUBJECTS FOR RESEARCH ARE

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- Respect for persons:
  - protecting the autonomy of all people and treating them with courtesy and respect and allowing for informed consent. Researchers must be truthful and conduct no deception;
- Beneficence:

  The philosophy of "Do no harm" while maximizing benefits for the research project and minimizing risks to the research subjects; and
- Justice:
  - ensuring reasonable, non-exploitative, and well-considered procedures are administered fairly — the fair distribution of costs and benefits to *potential* research participants — and equally.

Source: http://ohsr.od.nih.gov/guidelines/belmont.html

ICMR Guidelines
What are they?

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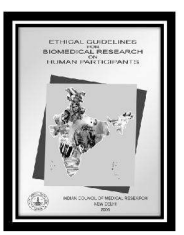
- Ethical guidelines for research involving humans
  - "Ethical Guidelines for Biomedical Research on Human Subjects"
- Published by the Indian Council of Medical Research in 2000



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Indian Council for Medical Research (ICMR) Guidelines for clinical trials

Drug trials	• The proposed trial should be carried out, only after approval of the DCGI • Informed consent is necessary • First three of the four phases of clinical trials of drug require ethical clearance • The duration of time lapsing between two trials in the same volunteer should be a minimum of 3 months
Vaccine trials	• The first phase should involve low risk subjects • Prophylactic vaccines are supposed to be given to normal subjects • Therapeutic or curative vaccines may be given to patients suffering from particular diseases
Surgical procedures/ medical devices	• Safety data of the medical device in animals should be obtained • Phase I of drug trials is not necessary for trial on devices • Safety procedures to introduce a medical device in the patient should be followed
Diagnostic agents	• In human beings, for investigation and treatment, different radiations - X-ray, gamma rays etc can be used • Radiation limits for the use of such materials and X-rays should be in accordance with the limits set forth by the regulatory authority (BARC) for such materials • Safety measures should be taken to protect research subjects and others who may be exposed to radiation
Herbal remedies	• For herbal remedies and medicinal plants that are to be clinically evaluated for use in the Allopathic System procedures laid down by DGCI for allopathic drugs should be followed • This is not applicable for Ayurveda, Siddha or Unani drugs for use in their own system or hospitals

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Essentiality, Consent, Non-Exploitation

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- Essentiality
  - Test on human beings only **if absolutely essential**
  - Does all current research certify that the **drug is safe?**
- Informed Consent
  - **Subjects should** consent to participate in the study
  - **Subjects should** be fully informed about the objectives of the study
  - **Subjects have the right** to withdraw at any point during study
    - No refund of remuneration should be demanded on early withdrawal
- Non-exploitation
  - **Provide remuneration** to test subjects
  - **Inform subjects** about all potential side effects and risks
  - **Ensure ample compensation** for accidental injury
    - Insurance, Rehabilitation, Life-long support

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Privacy, Confidentiality, Precaution

Pro VC

- Privacy and Confidentiality
  - **Inform subjects** about the extent to which personal info would be disclosed
  - **Do not divulge** identity and records of test subjects as far as possible
  - Ensure that the subject does not have to undergo any discrimination due to disclosure
- Precaution
  - Design the study such that **risks to the subjects is minimized**
  - Try to ensure there are **no adverse side effects**

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Competence, Transparency, Accountability

Pro VC

- Professional Competence
  - All personnel involved in trials should be **trained and qualified**
  - A strong **sense of ethics** essential for personnel
- Transparency and Accountability
  - **No aspect** of the study should **be hidden ,** except for privacy reasons
  - **Prior disclosure** of all conflicts of interest
  - **Maintain permanent records** of all research data and notes
  - **Fix responsibility** for the study and its outcomes (Researchers, sponsors and funding agencies, institutions where research is conducted)

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DISTRIBUTIVE JUSTICE

Pro VC

- Benefits of research should be equally distributed
  - Research on genetics **should not lead to racial inequalities**
  - **Do not conduct research on economically weak sections** to create advantage for those that are better off
- Avoid
- Do not enroll people at a disadvantage in the study
  - Prisoners
  - Students
  - Subordinates/Employees

Ensure complete freedom of choice when they are enrolled

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SPECIAL GROUPS

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- Pregnant/Nursing Women
  - Only for research to better the health of pregnant/nursing women, foetus or infants
  - **Ensure** that there is no risk to foetus or infant

- Children
  - Only trials for drugs to improve child health
  - Only conduct trials on children after phase 3 clinical trials on adults
    - **Exception: drugs for diseases only affecting children**
  - **Consent from parents** and/or legal guardians
  - **Consent from child** in the case of mature minors and adolescents
    - Except where parents have given consent and there is no other medical alternative to the tested therapy

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ETHICS GUIDELINES IN INDIA

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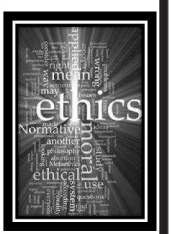
- India has strong Ethics guidelines for clinical research.
- Every clinical trial program should be reviewed by an ethics committee
  - Initial review of proposed research protocols
  - Regular monitoring of compliance to ethics guidelines
  - Can be constituted by the institute where research is done
    - Independent
    - multi-disciplinary



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What is informed consent?

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- Involves
  - Providing all relevant information to the volunteer/ patient
  - The patient/ volunteer understanding the information provided
  - Voluntarily agreeing to participate
  - Bilingual
- A basic right
- Informed consent is a communication process :
  - **between the researcher and the participant**
  - **starts before the research is initiated**
  - **continues throughout the duration of the study**

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Informed Consent

Pro VC

- The voluntary consent of the human subject is absolutely essential. --- Nuremberg Code - 1947
- For all research involving human subjects, the investigator must obtain the informed consent of the prospective subject…or authorized representative. --- CIOMS guidelines-1993 (Council for International Organizations of Medical Sciences)
- "To the degree subjects are capable, they should be given the opportunity to choose what shall or shall not happen to them". --- The Belmont Report - 1979

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- The biggest threat to a participant's rights is the researcher.
- The most powerful protector of a participants right is also the researcher
- Vigilance at every level will ensure that the researcher does not turn from a protector to violator.

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CONCLUSIONS

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- Audio visual informed consent form should be introduced.
- Vigilance at every level will ensure that the researcher does not turn from a protector to violator.
- Unbiased counseling by chief investigator.

GLOBAL PHARMA CHALLENGES – ARE WE READY?

By
Ms.V.Sandhiya, Vels University, Chennai

Note: This article was awarded, First Prize in the Essay Competition Conducted by our Trust.

INTRODUCTION

As the pharmaceutical industry matures and enters a stage of slower growth, companies need to fundamentally reconsider their approach to drug commercialization. Faced with economic pressures, fewer new therapeutic categories to exploit and aggressive generic competitors, drug manufacturers will need to become more proactive in addressing both the economic and clinical value of each product across its lifecycle. Companies require a different strategy to evaluate and maximize the economic value of their assets, a strategy that encompasses a clear understanding of what various constituents (payors, providers, patients) value most and an ability to communicate the benefits of their offerings in the terms that resonate with each decision-maker.

CHALLENGES FACED BY PHARMA INDUSTRY

The main challenges facing the sector are the following.

- ♦Growth in the domestic formulations market is slowing down.
- ♦Domestic bulk drugs industry is facing intense competition due to cheap imports.
- ♦Price wars between regional and local Pharma companies are driving down prices, exerting pressure on margins.
- ♦MNC Pharma companies are getting more aggressive at protecting their patents and defending their market share after patent expiry.
- ♦There has been considerable confusion in the grant of EMR, (Exclusive Marketing Rights) due to lack of transparency in the process.

These challenges can be opposed or overcome by the following measure:

1. To develop and utilize scientific knowledge to derive new drugs
2. To do it at an affordable cost.

A new approach to understanding and delivering economic value, which we call Comparative Clinical and Economic Value (CCEV), is a response to several structural problems in the existing commercialization model. Pharmaceutical companies have tended to assign a lower priority to understanding the economic value of the products they develop. Pricing models are typically driven by benchmarks around payors' willingness to pay. Until recently, pharmaceutical companies focused less on meeting the needs of the economic buyer, instead relying on the skills of field sales teams to secure use of the product. Companies routinely have spent approximately 15 percent of their gross sales in rebates to payors, driven by promotions designed to achieve sales targets. Increasingly, regulators are limiting the use of certain promotional tactics. The strong move toward evidence-based medicine has also lessened the impact that promotional teams can have.

IMPROVING CLINCIAL AND ECONOMIC VALUE

As health care financing tightens, payors(regional authorities, insurers and employers) will continue to increase their influence on price setting and access to markets adding new gate-keepers on top of traditional government drug approvers like the European Medicines Agency and the U.S. Food and Drug Administration. Some payors are even

performing their own comparative effectiveness studies to determine the value of medications instead of relying on reports from government agencies or prices set by drug makers.

A FIVE-STEP PATH FOR OVERCOMING VARIOUS CHALLENGES

When a traditional pharmaceutical supply chain evolves into a flexible, cost-efficient, and functional system, an entirely new set of capabilities is needed. Formerly, pharmaceutical companies needed to focus their skills on research and development and on sales and marketing. For the most part, managing costs and operational excellence did'nt matter as much. But as the competitive landscape has shifted, so have the required operational capabilities. Today, operational capabilities are critical, and these five strategic steps provide a path for developing them.

1. Adopt tailored business streams: Big pharmaceutical companies today tend to embrace a one-size-fits-all approach to the supply chain, maintaining high levels of inventory and high service levels for virtually all their drugs, no matter what the demand patterns (or volatility in consumer demand) may be. This can be an acceptable model for high-margin products in a homogeneous market, but it will not suffice in today's lower-margin segments and disparate environments.

2. Add Flexibility to product design and packaging: Pharmaceutical companies should manage product demand volatility in low-margin drugs by implementing pack-to-order strategies. Greater flexibility minimizes inventory write-offs and working capital required for production.

3. Reconfigure the supply chain footprint: Typically, pharmaceutical production networks are characterized by large-scale factories and low productivity. Indeed, average industry asset utilization levels are below 40 percent. Possible footprint designs include the following: product life-cycle model, technological model, geographic model, complexity model, product and therapeutic area model.

4. Create a network of third-party suppliers: To be prepared for market dips, a thoughtful make-versus-buy strategy is essential. If they outsource production of specific products, companies can better deal with slowdowns in demand by simply reducing procurement from a supplier rather than curtailing factory capacity utilization and taking on the expense of idle fixed assets.

5. Significantly improve planning capabilities: Large-scale shifts in the competitive landscape have escalated the importance of successful product launches and have increased demand volatility and SKU proliferation. All of these conditions require strong planning capabilities to properly navigate these shifts.

Conclusion

To meet these challenges, pharmaceutical companies must deploy a disciplined business planning process that supports the company's portfolio management strategy and product transition plans. Input from marketing, sales and finance departments is combined with the latest marketplace intelligence and historical demand data to create a consensus forecast for individual drugs and families of drugs. This process allows senior management to evaluate various financial scenarios and business trade-offs. Companies with well-run planning processes experience substantial reductions in inventory levels, supply chain volatility, and manufacturing costs and also see improved supply chain resilience.

NOTIFICATIONS

MINISTRY OF HEALTH AND FAMILY WELFARE

(Directorate General of Health Services)

NOTIFICATION

New Delhi, the 8th November, 2012

G.S.R. 816(E). - In exercise of the powers conferred under rule 122L of the Drugs and Cosmetics Rules, 1945, the Central Licensing Approving Authority in the Directorate General of Health Services, with the approval of the Central Government, delegates its power relating to renewal of licences (excluding the licence for manufacture of blood products, including the signing of certificate for such renewal for the operation of Blood Banks for processing of whole Human Blood for components) to the persons mentioned in column (1) of the Table below in respect of the areas mentioned in column (2) of the said Table, namely:-

Sl.No.	Name and Designation of the Person	Area of Operation
1	Dr. K. Bangarurajan Dy. Drugs Controller (India), CDSCO, North Zone, C.G.O. Building-I, Kamla Nehru Nagar, Ghaziabad - 201002 or Shri Satyapal Shani, Dy. Drugs Controller (India), CDSCO, HQ, Kotla Road, New Delhi	States of Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, and Union Territory of Chandigarh and National Capital Territory of Delhi.
2.	Shri Samant Rai, Assistant Drugs Controller (I), CDSCO Sub-zone office, J&K Patoli Mangotrian, P.O. Janipur, Jammu - 180007	Jammu & Kashmir
3.	Dr. V.G. Somani, Dy. Drugs Controller (India), CDSCO, West Zone, Central FDA Bhawan, GMSD Compound, Mumbai Central, Mumbai - 400 008.	State of Maharashtra, Madhya Pradesh Chhattisgarh and Goa
4.	Dr. A. Ramkishan Dy. Drugs Controller (I) I/C, CDSCO, Zonal office, Ahmedabad, Air Cargo Complex, Old Terminal Building, Airport Ahmedabad - 380016	State of Gujarat, Union Territories of Dadra and Nagar Haveli and Union Territories of Daman and Diu.

Sl.No.	Name and Designation of the Person	Area of Operation
5	Sh. Souman Makhopadhyay, Dy. Drugs Controller (I) I/C, CDSCO, East Zone, C.G.O. Building (Nizam Place), West, 234/4, Lower Circular Road, Kolkata - 700 020.	States of Arunachal Pradesh, Assam, Bihar, Tripura, Mizoram, Orissa, West Bengal, Nagland, Manipur, Meghalaya, Sikkim, Jharkand and Union Territory of Andaman and Nicobar Islands.
6	Mr. P. B. N. Prasad, Dy. Drugs Controller (I), CDSCO, South Zone, 2nd Floor, Shastri Bhawan, Annexe-26, Haddows Road, Chennai - 600 006.	Tamil Nadu, Kerala, Puducherry and Union Territory of Lakshadweep
7	Sh. ACS Rao, Dy. Drugs Controller (I), CDSCO, Zonal Office, CDSCO Bhavan, Hyderabad.	State of Andhra Pradesh.
8	Sh. S. Manivannan, Dy. Drugs Controller (I), CDSCO, Sub Zonal Office, 2nd Floor, Office for the State Drugs Controller of Karnataka, Palace Road, Bangalore - 560001.	States of Karnataka

1. The licences may be renewed by the persons mentioned in Table to paragraph 1 only if such licences have been granted by the Central Licence Approving Authority or renewed at an earlier stage by the said Authority.
2. This order of delegation of powers shall remain in force upto 30th September, 2013, unless revoked earlier.

[F.No. Z-28025/02/2012-Drugs]
Dr. G.N.SINGH, Central Licensing Approving Authority

ORANGE BOOK

USFDA, Published an Orange Book containing the Drug Formulations approved by them for marketing in their country. The website linkage his given below for viewing the names of the product along with manufacturer name and other details

www.fda.gov/cder/orange/obannual.pdf

MINISTRY OF HEALTH AND FAMILY WELFARE

(Department of Health)

NOTIFICATION

New Delhi, the 24th January, 2013

G.S.R. 43(E). - The following draft rules further to amend the Drugs and Cosmetics Rules, 1945, which the Central Government proposes to make, in exercise of the powers conferred by section 12 and section 33 of the Drugs and Cosmetics Act, 1940 (23 of 1940), after consultation with the Drugs Technical Advisory Board, is hereby published for the information of all persons likely to be affected thereby, and the notice is hereby given that the said draft rules shall be taken into consideration on or after the expiry of a period of forty five days from the date on which the copies of the Gazette of India containing these draft rules are made available to the public;

Any person interested in making any obejection or suggestion on the proposed draft rules may do so in writing for consideration of the Central Government within the period so specified through post to the Secretary, Ministry of Health and Family Welfare, Government of India, Nirman Bhawan, New Delhi - 110108.

DRAFT RULES

1. (1) These rules may be called the Drugs and Cosmetics (1st Amendment) Rules, 2013
(2) They shall come into force on the date of their final publication in the Official Gazette.

2. In the Drugs and Cosmetics Rules, 1945;
(a) in rule 69A, in sub-rule (1), after the proviso, for the 'Explanation', the following 'Explanation' shal be substituted, namely:-

"Explanation. - For the purpose of this rule a loan licence means a licence which a licensing authority may issue to an applicant who intends to avail the manufacturing facilities owned by a licensee in Form 25.",

(b) in rule 75A, in sub-rule (1), after the proviso, for the 'Explanation', the following 'Explanation' shall be substituted, namely:-

"Explanation. - For the purpose of this rule a loan licence means a licence which a licensing authority may issue to an applicant who intends to avail the manufacturing facilities owned by a licensee in Form 28.",

(c) in rule 122 E, after clause (c), in the "Explanation", in item (ii), the words "or its inclusion in the Indian Pharmacopoeia, whichever is earlier" shall be omitted;

(d) in Schedule D, against serial number 1, under the column heading 'Extent and conditions of exemption', after the words "or is of commercial quality.", the words, "Further, permission from licensing authority as defined in clause (b) of rule 21 has been obtained for import of the substance for non-medicinal use without registration and import licence." shall be inserted;

(e) in Schedule H, the entry "269. Ketamine Hydrochloride' shall be omitted;

(f) in Schedule S, after serial number 29 and the entries relating thereto, the following serial number and entry shall be inserted, namely:-

"30. Sindoor IS:14649:1999";

(g) in Schedule X, after the item 'Glutethimide', the following item shall be inserted, namely:-

"Ketamine hydrochloride".

[F.No. X-11014/10/2011-DFQC]
ARUN K. PANDA, Jt. Secy.

Foot Note: - The principal rules were published in the Official Gazette vide notification No. F.28-10/45-H (1) dated 21st December 1945 and last amended vide notification number G.S.R.844(E), dated the 26th November, 2012.

MINISTRY OF HEALTH AND FAMILY WELFARE

(Department of Health)

NOTIFICATION

New Delhi, the 30th January, 2013

G.S.R. 53(E). - Whereas a draft of certain rules further to amend the Drugs and Cosmetics Rules, 1945, was published, as required by section 12 read with section 33 of the Drugs and Cosmetics Act, 1940 (23 of 1940), vide notification of the Government of India, Ministry of health and Family Welfare (Department of Health), number G.S.R.821(E), dated the 18th November, 2011 in the Gazette of India, Extraordinary, Part II, section 3, sub-section (I)dated the 18th November 2011, inviting objections and suggestions from all persons likely to be affeceted thereby before the expiry of a period of forty five days from the date on which the copies of the Official Gazette of the said notification were made available to the public;

And whereas copies of the Gazette were made available to the public on the 24th November, 2011;

And whereas, objections and suggestions received from the public on the said rules have been considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sections 12 and 33 of the Drugs and Cosmetics Act, 1940 (23 of 1940), the Central Government after consultation with the Drugs Technical Advisory Board, hereby makes the following rules further to amend the Drugs and Cosmetics Rules , 1945, namely:-

1. (1) These rules may be called the Drugs and Cosmetics (First Amendment) Rules, 2013.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Drugs and Cosmetics Rules, 1945, (hereinafter referred to as the said rules):-

(i) after rules 122DAA, the following rules shall be inserted, namely:-

"122-DAB - Compensation in case of injury or death during clinical trial.-

(1) In the case of an injury occurring to the clinical trial subject, he or she shall be given free medical management as long as required

(2) In case the injury occurring to the trial subject is related to the clinical trial, such subject shall also be entitled for financial compensation as per order of the Licensing Authority defined under clause (b) of rule 21, and the financial compensation will be over and above any expenses incurred on the medical management of the subject.

(3) In the case of clinical trial related death of the subject, his/her nominee(s) would be entitled for financial compensation, as per the order of the Licensing Authority defined under clause (b) of rule 21, and the financial compensation will be over and above any expenses incurred on the medical management of such subject.

(4) The expenses on medical management and financial compensation in the case of clinical trial injury or death of the trial subject shall be borne by the sponsor of the clinical trial.

(5) Any injury or death of the subject occurring in clinical trial due to following reasons shall be considered as clinical trial related injury or death and the subject or his/her nominee(s), as the case may be, are entitled for financial compensation for such injury or death.

(a) adverse effect of investigational product(s)
(b) violation of the approved protocol, scientific misconduct or negligence by the Sponsor or his representative or the investigator;
(c) failure of investigational product to provide intended therapeutic effect;
(d) use of placebo in a placebo-controlled trial;
(e) adverse effects due to concomitant medication excluding standard care, necessitated as part of approved protocol;
(f) for injury to a child in-utero because of the participation of parent in clinical trial;
(g) any clinical trial procedures involved in the study.

(6) The Sponsor, whether a pharmaceutical company or an institution shall give an undertaking along with the application for clinical trial permission to the Licensing Authority defined in clause (b) or Rule 21, to provide compensation in the case of clinical trial related injury or death for which subjects are entitled to compensation.

(7) In case the Sponsor fails to provide medical management for the injury to the subject and / or financial compensation to the trial subject for clinical trial related injury or financial compensation to the subjects nominee(s) in case of clinical trial related death of the subject, the Licensing Authority may after giving an opportunity to show cause why such an order should not be passed, by an order in writing stating the reasons thereof, suspend or cancel the clinical trial and / or restrict Sponsor including his representative(s) to conduct any further clinical trials in the country or take any other action deemed it under the rules.

(ii) in the said rules, in Schedule Y, in paragraph 2 relating to clinical Trial,

(a) In sub paragraph (2) relating to Responsibilities of Sponsor,-
(i) clause (iv) shall be substituted with the following namely:-

"(iv) Any report of serious adverse event of death occurring in clinical trial, after due analysis shall be forwarded by the Sponsor to Chairman of the Ethics Committee and Chairman of the Expert Committee consitituted by the Licensing Authority as defined under rule 21(b) under Appendix XII with a copy of the report to the Licensing Authority and the head of the institution where the trial has been conducted within ten calendar days of occurrence of the serious adverse event of death. The report of the serious adverse event other than death, after due analysis, shall be forwarded by the Sponsor to the Licensing Authority, Chairman of the Ethics Committee and the head of the Institution where the trial has been conducted within ten calendar days of occurrence of the serious adverse event.",

(b) after clause (iv), the following shall be inserted, namely:-

"(v) in case of injury or death occurring to the clinical trial subject, the Sponsor (whether a pharmaceutical company or an institution) or his representative, whosoever had obtained permission from the Licensing Authority for conduct of the clinical trial, shall make payment for medical management of the subject and also provide financial compensation for the clinical trial related injury or death in the manner as prescribed in Appendix XII;

(vi) the Sponsor (whether a pharmaceutical company or an Institution) or his representative, whosoever had obtained permission from the Licensing Authority for conduct of the clinical trial, shall submit details of compensation provided or paid for clinical trial related injury or death, to the Licensing Authority within thirty days of the receipt of the order of the Licensing Authority".

(c) in sub paragraph (3) relating to Responsibilities of the Investigator(s),-

(i) the sub paragraph "(3)" shall be numbered as "(3)(I)";

(ii) in the so numbered, clause (i), the words and figures "Sponsor with 24 hours and to the Ethics Committee that accorded approval to the study protocol within 7 working days of their occurrence" shall be substituted with the words, figures and brackets "Licensing Authority defined under clause (b) of rule 21, the Sponsor or his representative, whosoever had obtained permission from the Licensing Authority for conduct of the clinical trial, and the Ethics Committee that accorded approval to the study protocol, within twenty four hours of their occurrence. The report of the serious adverse event of death, after due analysis shall be forwarded by the investigator to Chairman of the Ethics Committee and Chairman of the Expert Committee constituted by the Licensing Authority under Appendix XII with a copy of the report to the Licensing Authority and the head of the institution where the trial has been conducted within ten calendar days of occurrence of the serious adverse event other than death after due analysis shall be forwarded to the Licensing Authority, Chairman of the Ethics Committee and the head of the Institution where the trial has been conducted within ten calendar days of occurrence of the serious adverse event.",

(iii) after the so numbered clause(i), the following clause shall be inserted, namely:-

"(ii) The Investigator shall provide information to the clinical trial subject through informed consent process as provided in Appendix V about the essential elements of the clinical trial and the subjects right to claim compensation in case of trial related injury or death. He shall also inform the subject or his/her nominee(s) of their rights to contact the Sponsor or his representative whosoever had obtained permission from the Licensing Authority for conduct of the clinical trial for the purpose of making claims in the case of trial related injury or death.",

(d) in clause (5) relating to Responsibilities of the Ethics Committee, after sub-clause (iii), the following sub-clause shall be inserted, namely:-

"(iv) In case of serious adverse event of death accurring to the clinical trial subject, the Ethics Committee shall forward it's report on the serious adverse event of death, after due analysis, along with its opinion on the financial compensation, if any, to be paid by the Sponsor or his representative, shosoever had obtained permission from the Licensing Authority as defined under rule 21(b) for conducting the clinical trial, to the Chairman of the Expert Committee constituted by the licensing Authority under Appendix XII with a copy of the report to the Licensing Authority within twenty one calender days of the occurrence of the serious adverse event of death. In case of serious adverse event, other than death occurring to the clinical trial subject, the Ethics Committee shall forward its report on the serious adverse event after due analysis along with its opinion on the financial compensation, if any, to be paid by the Sponsor or his representative, whosoever had obtained permission from the Licensing Authority for conducting the clinical trial, to the Licensing Authority within twenty one calendar days of the occurrence of the serious adverse event."

(e) after sub paragraph (5), the following shall be inserted namely:-
"5(A). Serious Adverse Events

(1) A serious adverse event is an untoward medical occurrence during clinical trial that is associated with death, in patient hospitalisation (in case the study was being conducted on out-patient), prolongation of hospitalisation (in case the study was being conducted on in-patient), pesistent or significant disbility or incapacity, a congenital anomaly or birth defect or is otherwise life threatening.

(2) The Investigator shall report all serious and unexpected adverse events to the Licensing Authority as defined under clause (b) of rule 21, the Sponsor or his representative, whosoever had obtained permission from the Licensing Authority for conduct of the clinical trial, and the Ethics Committee that accorded approval to the study protocol, within twenty four hours of their occurrence as per Appendix XI, and the said Licensing Authority shall determine the cause of injury or death as per the procedure prescribed under Appendix XII and pass orders as deemed necessary."

(iii) in APPENDIX V,
(A) in serial number 1, in sub serial number 1.1, the entries against item number 9 shall be substituted with the following, namely:-
"9. Statement describing the financial compensation and medical management as under;

(a) In the event of an injury occurring to the clinical trial subject, such subject shall be provided free medical management as long as required.

(b) In the event of a trial related injury or death, the Sponsor or his representative, whosoever has obtained permission from the Licensing Authority for conduct of the clinical trial, shall provide financial compensation for the injury or death."

(B) in serial number 2, after the line "Date of Birth / Age ..... the following shall be inserted, namely:-
"Address of the Subject .....
Qualification .....
Occupation: Student / Self-Employed / Service / Housewife / Others (Please tick as appropriate)
Annual Income of the subject .....
Name and address of the nominee(s) and his relation to the subject ..... (for the purpose of compensation in case of trial related death)"

(C) after the words, "Name of the witness ....." occurring at the end, the following shall be inserted, namely:-
"(Copy of the Patient Information Sheet and duly filled Informed Consent Form shall be handed over to the subject or his / her attendant)."

(iv) after APPENDIX XI, the following shall be inserted, namely:-

"APPENDIX XII

Compensation in case of injury or death during clinical trial

(1) In the case of an injury occurring to the clinical trial subject, he or she shall be given free medical management as long as required.

(2) In case the injury occurring to the trial subject is related to the clinical trial, such subject shall also be entitled for financial compensation as per order of the Licensing Authority defined under clause (b) of rule 21, and the financial compensation will be over and above any expenses incurred on the medical management of the subject.

(3) In the case of clinical trial related death of the subject, his/her nominee(s) would be entitled for financial compensation, as per the order of the Licensing Authority defined under clause (b) of rule 21, and the financial compensation will be over and above any expenses incurred on the medical management of the subject.

(4) The financial compensation for clinical trial related injury or death could be in the form of:-

(a) payment for medical management
(b) financial compensation for trial related injury;
(c) financial compensation to nominee(s) of the trial subject in case of death;
(d) financial compensation for the child injured in-utero because of the participation of parent in clinical trial.

(5) The Sponsor or his representative, whosoever had obtained permission from the Licensing Authority for conduct of the clinical trial, shall provide financial compensation, if the injury or death has occurred because of any of the following reasons, namely

(a) adverse effect of investigational product(s);
(b) any clinical trial procedures involved in the study;
(c) violation of the approved protocol, scientific misconduct or negligence by the Sponsor or his representative or the Investigator;
(d) failure of investigational product to provide intended therapeutic effect;
(e) use of placebo in a placebo-controlled trial;
(f) adverse effects due to concomitant medication excluding standard care, necessitated as part of approved protocol;
(g) injury to the child in-utero because of the participation of parent in clinical trial.

(6) Procedure for payment of financial compensation

(a) The Investigator shall report all serious and unexpected adverse events to the Licensing Authority as defined under clause (b) of rule 21, the Sponsor or his representative whosoever had obtained permission from the Licensing Authority for conduct of the clinical trial and the Ethics Committee that accorded approval to the study protocol, within twenty four hours of their occurrence as per Appendix XI.

(b) (i) The cases of serious adverse events of death shall be examined as under.

(A) An independent Expert Committee shall be constituted by the Licensing Authority as defined under rule 21(b) to examine the cases and recommend to the Licensing Authority for the purpose of arriving at the cause of death and quantum of compensation in case of clinical trial related death.

(B) The Sponsor or his representative, whosoever had obtained permission from the Licensing Authority for conducting the clinical trial, and the Investigator shall forward their reports on serious adverse event of death after due analysis to Chairman of the Ethics Committee and Chairman of the Expert Committee with a copy of the report to the Licensing Authority as defined under rule 21(b) and the head of the Institution where the trial has been conducted, within ten calendar days of occurrence of the serious adverse event of death.

(C) The Ethics Committee shall forward its report on serious adverse event of death after due analysis along with its opinion on the financial compensation, if any, to be paid by the Sponsor or his representative, whosoever had obtained permission from the Licensing Authority as defined under rule 21(b) for conducting the clinical trial, to the Chairman of the Expert Committee with a copy of the report to the Licensing Authority within twenty one calendar days of the occurrence of the serious adverse event of death.

(D) The Expert Committee shall examine the report of serious adverse event of death and give its recommendations to the Licensing Authority for the purpose of arriving at the cause of the adverse event within thirty days of receiving the report from the Ethics Committee, and the Expert Committee while examining the event, may take into consideration, the reports of the Investigator, Sponsor or his representative whosoever had obtained permission from the Licensing Authority for conducting the clinical trial and the Ethics Committee.

(E) In the case of clinical trial related death, the Expert Committee shall also recommend the quantum of compensation to be paid by the Sponsor or his representative, whosoever had obtained permission from the Licensing Authority as defined under rule 21(b) for conducting the clinical trial.

(F) The Licensing Authority shall consider the recommendations of the Expert Committee and shall determine the cause of death and pass orders as deemed necessary.

(G) In case of clinical trial related death, the Licensing Authority, after considering the recommendations of the Expert Committee shall decide the quantum of compensation to be paid by the Sponsor or his representative, whosoever had obtained permission from the Licensing Authority for conducting the clinical trial and shall pass orders as deemed necessary within three months of receiving the report of the serious adverse event.

(ii) Cases of serious adverse events, other than deaths, shall be examined as under:

(A) The Sponsor or his representative, whosoever had obtained permission from the Licensing Authority for conducting the clinical trial, and the Investigator shall forward their reports on serious adverse event, after due analysis, to the Licensing Authority as defined under rule 21(b), Chairman of the Ethics Committee and the head of the Institution where the trial has been conducted within ten calendar days of occurrence of the serious adverse event.

(B) The Ethics Committee shall forward its report on the serious adverse event, after due analysis, along with its opinion regarding the financial compensation, if any, to be paid by the Sponsor of his representative, whosoever had obtained permission from the Licensing Authority as defined under rule 21(b) for conducting the clinical trial to the Licensing Authority within twenty on calendar days of occurrence of the serious adverse event.

(C) The Licensing Authority shall determine the cause of injury and pass order as deemed necessary. The Licensing Authority shall have the option to constitute and independent Expert Committee, wherever considered necessary, to examine such serious adverse events of injury, which will recommend to the Licensing Authority for arriving at the cause of the injury and also the quantum of compensation in case of clinical trial related injury, to be paid by the Sponsor or his representative whosoever had obtained permission from the Licensing Authority as defined under rule 21(b) for conducting the clinical trial.

(D) In case of clinical trial related injury, the Licensing Authority, shall decide the quantum of compensation to be paid by the Sponsor or his representative whosoever had obtained permission from the Licensing Authority for conducting the clinical trial and shall pass orders as deemed necessary within three months of receiving the report of the serious adverse event.

(c) The Sponsor or his representative, whosoever had obtained permission from the Licensing Authority for conducting the clinical trial, shall pay the compensation in case of clinical trial related injury or death as per the order of the Licensing Authority as defined under rule 21(b) within thirty days of the receipt of such order.

[F.No.X-11014/6/2011-DFQC]
ARUN K. PANDA, Jt. Secy.

Foot Note: The principal rule were published in the Gazette of India vide notification No. F.28-10/45-H (1) dated the 21st December, 1945 and last amended vide notification number G.S.R. 844(E), dated the 26th November, 2012.

MINISTRY OF HEALTH AND FAMILY WELFARE

(Department of Health)

NOTIFICATION

New Delhi, the 1st February, 2013

G.S.R. 63(E). - Whereas a draft of certain rules further to amend the Drugs and Cosmetics Rules, 1945, was published, as required by section 12 read with section 33 of the Drugs and Cosmetics Act, 1940 (23 of 1940), vide notification of the Government of India, Ministry of Health and Family Welfare (Department of Health), number G.S.R.572(E), dated the 17th July, 2012, in the Gazette of India, Extraodinary, Part II, section 3, sub-section (i), dated the 17th July, 2012, inviting objections and suggestions from all persons likely to be affected thereby before the expiry of a period of forty-five days from the date on which the copies of the Official Gazette of the said notification were made available to the public;

And whereas copies of the said Gazette notification were made available to the public on the 23rd July, 2012;

And whereas, objections and suggestions received from the public on the said rule have been considered by the Central Government;

Now, therefore, in exercise of the powers conferred by section 12 read with section 33 of the Drugs and Cosmetics Act, 1940 (23 of 1940), the Central Government, after consultation with the Drugs Technical Advisory Board, hereby makes the following rules further to amend the Drugs and Cosmetics Rules, 1945, namely:-

1. (1) These rules may be called the Drugs and Cosmetics (Second Amendment) Rules, 2013.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Drugs and Cosmetics Rules, 1945, in Part X-A, after rule 122 DAB, the following rule shall be inserted namely:-

"122 DAC. (1) Permission to conduct clinical trial. - The Licensing Authority as defined in clause (b) of rule 21, on being satisfied that the data submitted along with the application in support of the proposed clinical trial is adequate in all respects, issue permission for conduct of clinical trial, subject to the following conditions, namely:-

(a) Clinical trial shall be conducted in compliance with the approved protocols, requirements of Schedule Y annexed to these rules, Good Clinical Practice Guidelines for conduct of clinical trials in India and other applicable regulations;

(b) Approval of the Ethics Committee shall be obtained before initiation of the study;

(c) Clinical trial shall be registered at Clinical Trials Registry of India before enrolling the First Patient for the study;

(d) Annual status report of each clinical trial, as to whether it is ongoing completed or terminated,

shall be submitted to the Licensing Authority, and in case of termination of any clinical trial the detailed reasons for the same shall be communicated to the said Licensing Authority;

(e) Any report of serious adverse event occurring during clinical trial to the subject, after due analysis, shall be forwarded within ten days of its occurrence as per Appendix XI and in compliance with the procedures prescribed in Schedule Y;

(f) In case of an injury or death during the clinical trial to the subject of the clinical trial, the applicant shall provide complete medical management and compensation in the case of trial related injury or death in accordance with rule 122 DAB and the procedures prescribed under Schedule Y, and the details of compensation provided in such cases shall be intimated to the Licensing Authority within thirty days of the receipt of the order of the said authority;

(g) The premises of Sponsor including their employees, subsidiaries and branches, their agents contractors and sub-contractors and clinical trial sites shall be open to inspection by the officers authorised by the Central Drugs Standard Control Organisation, who may be accompanied by an officer of the State Drug Control Authority concerned, to verify compliance to the requirements of Schedule Y. Good Clinical Practices guidelines for conduct of clinical trials in India and other applicable regulations;

(h) The Sponsor including their employees, subsidiaries and branches, their agents, contractors and sub-contractors and clinical trial sites and the Investigator shall allow officers authorised by the Central Drugs Standard Control Organisation, who may be accompanied by an officer of the State Drug Control Authority concerned, to enter with or without prior notice, any premises of Sponsor including their employees, subsidiaries and branches, their agents, contractors and sub-contractors and clinical trial sites to inspect, search and seize any record, data, document, books, investigational drugs, etc. related to clinical trials and provide adequate replies to any queries raised by the inspection authority in relation to the conduct of clinical trial.

(2) Notwithstanding the conditions specified in sub-rule (1), The Licensing Authority, on being satisfied that the data submitted along with the application in support of the proposed clinical trial is adequate in all respect, may also impose such additional conditions for issuance of permission in respect of specific clinical trials, if considered necessary, regarding the objective, design, subject population, subject eligibility, assessments, conduct and treatment of such clinical trial.

(3) If any Sponsor including their employees, subsidiaries and branches, their agents, contractors and sub-contractors, Investigators conducting clinical trial and clinical trial sites fail to comply with any of the above conditions, the Licensing Authority may after giving an opportunity to show cause why such an order should not be passed, by an order in writing stating the reasons thereof

(a) issue warning later giving details of deficiency found during the inspection, which might affect the right or well-being of the clinical trial subject or the validity of the study conducted at that site;
(b) recommend that study may be rejected or discontinued;
(c) suspend or cancel the clinical trial permission;

(d) debar the Investigator(s), Sponsor including their employees subsidiaries and branches, their agents, contractors and sub-contractors to conduct any clinical trial in future.

(4) The Sponsor including their employees, subsidiaries and branches, their agent, contractors and sub-contractors and clinical trial Investigators, against whom action as mentioned in sub-rule (3) has been taken by the Licensing Authority, may, within ninety days of the receipt of the copy of the order of the Licensing Authority prefer an appeal to the Central Government, and the Central Government may, after giving such appellant an opportunity of being heard, confirm, reverse or modify such order.'

[F.No. X-11014/9/2011-DFQC]
ARUN K. PANDA, Jt. Secy.

Foot Note: The principal rule were published in the Official Gazette vide notification No. F.28-10/45-H (1) dated the 21st December 1945and last amended vide notification number GSR 53(E) dated the 30th January, 2013.

Editorial Policy and Disclaimer

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This issue of Pharma Web is also available online at the Trust website www.pictrust.com

NEW REFERENCE BOOK

The New USP 36 NF 31 (2013) Book have been added to the our Trust Library for Reference

INFORMATION

M.Pharm Scholarship 2012 - 13 awarded by TNPSWT

Profile of 2nd Rank Projects

PHARMACEUTICS

Name: Ms. Swapna Pelleti

Project Title: "Plga Nanoparticles Containing Galantamine Hydrobromide for Improved Treatment Against Neurodegenerative Disorders.

College: Vels University, Chennai

Guide's Name: Dr. S. Sathesh Kumar

PHARMACEUTICAL CHEMISTRY

Name: Ms. B. Hemalatha

Project Title: "Design, Synthesis, Characterisation, Biological Screening of Dihydrodipicolinate Reductase (DAPPB) Inhibitors for Anti-tubercular Activity "

College: Madras Medical College, Chennai

Guide's Name: Dr. A. Jerald Suresh,

PHARMACEUTICAL ANALYSIS

Name: Mr. Y. Karthik

Project Title: "Development of Forced Degradation Profile of Alosetron Hcl by RP-HPLC and Characterization of the Identified Impurities."

College: J.S.S. College of Pharmacy, Ooty

Guide's Name: Mr. B. Babu

PHARMACOLOGY

Name: Mr. A. Sudheer

Project Title: "Evaluation of Neuroprotective Effect of Telmisartan & Nimodipine in Middle Cerebral Artery Occlusion (MCAo) Induced Focal Ischemia in Rats.

College: P.S.G. College of Pharmacy, Coimbatore

Guide's Name: Mr. A. Justin

PHARMACOGNOSY

Name: Ms. R. Rajeswari

Project Title: "Pharmacognostical, Phytochemical and Hepatoprotective Activity of Aerial Parts of Acalypha fruticosa Forssk."

College: Madras Medical College, Chennai

Guide's Name: Dr. R. Radha

PHARMACY PRACTICE

Name: Ms. Elizabeth Kurian Modayil

Project Title: "Study on Effectiveness of Laxatives and the Influencing Factors Associated with Constipation of Hospitalised Geriatrics"

College: Sri Ramakrishna Institute of Paramedical Sciences, Coimbatore

Guide's Name: Dr. B. Rajalingam

EVENTS

Workshop on Industry Student Interaction

(Sponsored by TANIPA and organized by PSG College of Pharmacy)

The Indian Pharmaceutical Association Tamil Nadu branch (TN IPA), in conjunction with PSG College of Pharmacy (PSGCP) conducted a one day workshop on Industry - Student Interaction held at PSGCP on the 2nd of March 2013, which was sponsored by Tamilnadu Indian Pharmaceutical Association Trust (TANIPA)

The objective of this workshop was to create a platform where the students of the various pharmacy colleges could directly interact with experts from the pharmaceutical industry and get a Knowledge regarding the requirements for their career. At the same time, the industry too would get an opportunity to feel the current pulse of the students and explore for potential manpower for its future requirements.

Ninety five delegates from seven pharmacy colleges, situated in around Coimbatore & Salem participated in this workshop.

Dr. M. Ramanathan, Principal PSGCP, welcomed the gathering. He spoke about the need for the pharmacy educational institutions to shape the students and inculcate professional competence in the rapidly growing industry. He also spoke for the necessity of good interaction between the Industry and the Institutions.

Mr. M. M. Yousuf, President, IPA TN and Secretary TANIPA, presided the function.

Mr. N. Sreenivasan, Hon. Gen. Secretary, TNPSWT gave a talk about the basic requirements and development of pharma industry.

Mr. A. Sivasankaran, Consultant, Pharma Industries, Chennai, spoke on the history of the Indian pharmaceutical Industry as well as technical issues in current manufacturing processes and novel developments in the area of pharmaceutical dosage forms.

Mr. P. R. Abdul Hameed, Executive Director - Technical, Medopharm Pvt Ltd, Chennai delivered a talk on GMP in pharmaceutical dosage forms. He covered topics that ranged from product

quality, elements of GMP like facilities (premises, equipments, and services), people (organization, training, and practices), and systems (quality design, control, & assurance). Mr. G. Selvaraj, Director of Drugs Control, TN, spoke on current legislation in Regulatory system under Drugs and Cosmetic Act and Rules. Mr. J. Jayaseelan, Secretary, IPA, TN shared information regarding opportunities in various areas of Pharma Industry with emphasis on Pharma Marketing and different ports.

Mr. A. Arunachalam, Joint Director of Drugs Control TN (Rtd), explained about Schedule-M requirements under Drugs and Cosmetic Act & Rules.

Mr. C. V. Ramiah, Director of Drugs Control (Retd), chaired the Question & Answers session and also identified the winners for the best interactive students.

At the conclusion of this workshop, Prof. K. Chinnaswamy, President, Tamil Nadu Pharmacy Council made a declaration of starting a new branch of IPA in Coimbatore. Dr. T. K. Ravi, Principal, SRIPMS, gave the valedictory note at the conclusion of this workshop.

Faculty of Pharmacy, Sri Ramachandra University, Chennai

The International conference on Medicinal Chemistry India 2013 was organized by Sri Ramachandra University (Central Research Facility, Faculty of Pharmacy, & Dept of Medicinal Chemistry) & Sri Ramachandra Innovis (unit of Sri Ramachandra Medical Center) on 11th Feb - 14th Feb 2013. This programme was sponsored by Department of Science & Technology, New Delhi, American Chemical Society (ACS), The International Union of Pure and Applied Chemistry (IUPAC), USA. The programme consisted of plenary sessions, Invited Talks and case Presentations. Dr. S. P. Thyagarajan welcomed the gathering. The programme was inaugurated by Dr. T. Ramasami, Secretary, Dept. of Science & Technology. Our Chancellor Shri. V. R. Venkataachalam felicitated the Chief Guests, Dr. T. Ramasami, K. Raghavendra Rao, Chairman

& Managing Director, Orchid Chemicals & Pharmaceuticals Ltd, Dr. Balu N. Balasubramaniam Pharma Innovation Sourcing Center, LLC Wrightstown, USA. The highlight of the conference was the signing of MoU between Orchid Chemicals & Pharmaceuticals Ltd with Faculty of Pharmacy. The release of Scientific Proceedings was done by Dr K. V. Somasundaram, Dean of Faculties. More than 100 delegates from Pharmaceutical Industries and Academic institutions participated. The global level experts from US who are the resource persons for the course were Dr. Balasubramanian, Prof. William Greenlee, Prof. David Triggle, Prof. J. Phillip. Bowen, Prof. Swamy Yeleswaram, Prof. Nick Meanwell, Prof. Joel Barrish, Prof. Vincent Stoll, Prof. Craig Lindsley and Prof. Mukul Jain. The primary focus was on training the participants in the nich-areas of medicinal chemistry, drug discovery bringing industry scientists and the academics on a level playing field of understanding and application.

The conference concluded with the valedictory function on 14th Feb 2013. The chief guest was Dr. Dial Singh, Vice – Consul and Trade Commissioner, Consulate of Canada, Chennai.

NEWS

Drug Prices Remain Out of Control

The proposed drug-pricing policy suffers from a host of anomalies. Extending price control to all "essential" medicines implies massive regulatory overreach, especially given the widespread problem of substandard and spurious drugs in the over. 1-lakh-crore Indian pharmaceuticals sector (40% of which is exported). Now, as per the last Drugs (Price Control) Order, 1995, the prices of 74 select bulk drugs are to be regulated, but only 47 of them were actually under production as of last year. Evidently, the rigid cost-based approach in the present drug-pricing regime has discouraged output, and the new policy seeks changeover to market-determined prices. And the ceiling price envisaged is the simple average of all brands having market share of 1% and above of the total turnover in any particular medicine. But such an approach would also be prone to misuse; it makes sense to work out weighted average prices at the very least. Also, the plan to hike drug prices annually in step with the wholesale price index (WPI) would defeat the very purpose of price control. Regulated prices surely need to take into account a sector-specific efficiency factor X, so that prices rise by no more than WPI minus X. The new policy has no pricing provision for patented drugs. The policy paper simply says a separate committee is looking into it! This is ridiculous. Price control, rather than frequent resort to compulsory licensing, is the way to make key drugs affordable.

A major reason why the market for drugs is unlike other markets is structural information asymmetry between the consumer and the doctor who determines what the consumer should demand. Modern information technology and telecom must be deployed to remedy this to a large extent, using mobile phone apps and text messaging service.

Source: *The Economic Times, 25th March 2013*

Essential Drug Makers Can Inform & Quit Govt May Direct Cos To Carry On Output For Another Year In Public Interest

Pharma firms can no longer quit making essential drugs citing non-viability, without informing the government. Drugmakers would have to issue a public notice and alert the government about their decision at least six months in advance, according to an upcoming drug pricing policy. More importantly, the government may ask the drugmakers to continue producing an essential drug at a certain level for another year in public interest. The government can do this for any of the 348 drugs that are part of the National List of Essential Medicine, or NLEM.

"Government may, in public interest, direct the manufacturer of the scheduled formulation (essential drug) to continue with required level of production and/or import…for a period not exceeding one year, from the intended date of such discontinuation within 60 days of receipt of such intimation," said a latest new drug price control order, a copy of which has been reviewed by ET.

Drug makers would also have to disclose to the government on a quarterly basis the levels of essential drugs and bulk drugs they are producing.

This data would help the government monitor production and availability of essential drugs and the bulk drugs they are made up of at a national level in the 70,000 crore domestic drug market.

The need for such a move was felt in the upcoming pricing policy as many pharma firms had stopped making and investing in drugs that were put under regulation in the current price regime. Firms stopped producing 36% of the 74 bulk drugs and their formulations that fall under the price net today as per the Drug Prices Control Order 1995. Drug companies claim they have been forced to discontinue, as these bulk drugs are no longer economically viable. Many healthcare activists, however, argue that many of these drugs have gone out of the market as they have turned obsolete and are no longer used in clinical practice.

The government is currently in the process of expanding the span of drug regulation to 348 drugs listed in NLEM.

"With pharma companies filing quarterly returns of production levels, the government will be in a better position to assess the rising or falling aggregated share of each essential drug in the country," a government official, familiar with the matter, said. "This way, unlike under DPCO 1995, government can intervene in public interest much before production levels fall under critical levels and definitely pre-empt the prospect of an essential drug totally going out of the market," he added.
The department of pharma sent the Drug Price Control Order, 2013, last week to the law ministry for clearance and the policy is likely to be notified in April. To ensure availability of essential drugs, last year the government made it mandatory for pharma MNCs keen on acquiring domestic drug firms to promise at the outset they wouldn't slash production of essential drugs in the manufacturing facilities of the target company for the next five years.

Source: *The Economic Times, 25th March 2013*

80 Clinical Trial Deaths In 7 Yrs: Centre To SC

Even as the Drugs and Cosmetics Act awaits penal provisions, the Centre has informed the Supreme Court that at least 80 people have died due to illegal clinical trials in the last seven years.

In an affidavit submitted to the court as per its directive, the health ministry has said there were 2,644 "serious adverse events" of deaths during clinical trials during 2005-2012. Of these, 80 have been attributed to clinical trials, while the other deaths could be due to terminal illnesses or other life-threatening diseases. Compensation was paid to families of 44 victims till 2011.

According to the ministry, there were around 12,000 incidents of "other adverse effects" in this period, of which 506 directly pertained to clinical trials.

The existing Act does not have a single penal provision prescribing a jail term for illegal clinical trials. The Centre has said it is trying to correct the "deficiency" by replacing the old law with a 2013 amendment Bill.

The health ministry has said the Bill seeks to expand the responsibility of the sponsor (firm which conducts the trials), investigator and ethics committee.

The Bill also mandates complete adherence to the protocols and good clinical practice guidelines for conducting trials. In case of non-compliance, it seeks to authorise the Drugs Controller General of India (DCGI) to recommend rejection of the study as well as suspension and debarment of the sponsor.

Source: *The Indian Express, 21st March 2013*

Pharma Exports To Nigeria Surge To $307 Mn

The envoy attributed the rise which stands at 35 to 37 per cent, to the fact that Indian products remain the largest source of pharmaceutical supplies to Nigeria owing to demand from consumers.

The value of India's pharmaceutical products exported to oil-rich Nigeria surged to USD 307 million in the financial year that ended in March 2012, Indian High Commissioner to the African state, Mahesh Sachdev said during a pharma exhibition in the country.

The envoy attributed the rise which stands at 35 to 37 per cent, to the fact that Indian products remain the largest source of pharmaceutical supplies to Nigeria owing to demand from consumers.

Sachdev who spoke during the two-day Indian Pharma Exhibition and Buyer-Seller Meet organised by the Indian High Commission in Nigeria and Pharmaceutical Export Promotion Council (Pharmexcil) also noted that the high participation during the event which attracted not less than 70 companies was as a result of strong relationship between Nigeria and India.

"As we all know, India's status as Nigeria's first supplier of pharmaceuticals has been earned the hard way over past decades. This privilege symbolises the trust and the faith Nigerian consumers repose in quality and efficacy of Indian medicines," Sachdev said.

Also speaking at the occasion, Paul B Orhii, Director General of Nigeria's National Agency for Food and Drugs Administration and Control (NAFDAC) praised Indian pharmaceutical companies for their steadfastness in insuring that only genuine and superior pharmaceutical products are brought into Nigeria.

Over 700 pharma buyers had attended the previous Expo in Nigeria in March 2011.

This year more than 1,000 buyers attended the event. India is working with NAFDAC and other Nigerian agencies to protect promote and diversify Nigerian pharmaceutical market.

The two countries signed a Memorandum of Understanding on Cooperation in Pharmaceutical Sector in March 2011.

They have intensified collaboration to prevent counterfeiting of Indian pharmaceuticals

Source: *The Economic Times, 15th March 2013*

Soon, Drugs That May Help Humans 'Live Until 150'

Drugs that could combat ageing and help people to live up to 150 years may be available within the next five years, a new landmark research suggests. The study proves that a single anti-aging enzyme in the body can be targeted, with the potential to prevent age-related diseases and extend lifespans.

The research, published in the journal Science, shows all of the 117 drugs tested work on the single enzyme through a common mechanism. This means that a whole new class of anti-aging drugs is now viable, which could ultimately prevent cancer, Alzheimer's disease and type 2 diabetes.

"Ultimately, these drugs would treat one disease, but unlike drugs of today, they would prevent 20 others," says the lead author of the paper, Professor David Sinclair, from the University of New South Wales (UNSW) Medicine.

"In effect, they would slow aging," he said. The target enzyme, SIRT1, is switched on naturally by calorie restriction and exercise, but it can also be enhanced through activators.

The most common naturally-occurring activator is resveratrol, which is found in small quantities in red wine, but synthetic activators with much stronger activity are already being developed.

In animal models, overweight mice given synthetic resveratrol were able to run twice as far as slim mice and they lived 15 per cent longer. "Now we are looking at whether there are benefits for those who are already healthy. Things there are also looking promising," Sinclair said in a statement.

"We're finding that aging isn't the irreversible affliction that we thought it was. Some of us could live to 150, but we won't get there without more research," he said."In the history of pharmaceuticals, there has never been a drug that tweaks an enzyme to make it run faster," said Sinclair.

Source: *The Hindustan Times, 28th March 2013*

Pharma Units Seek Duty Re-Jig

Considering the fact that healthcare has been a focus area for the government, the pharmaceutical industry feels the Union Budget 2013-14 should address the issue of high taxes and duties on drugs to ensure affordable medicines for all.

In its pre-budget memorandum, the Organisation of Pharmaceutical Producers of India (OPPI) said it was imperative that critical life saving drugs were made available to the patients at reduced prices.

Hence, all life saving drugs (including medical devices) should be exempted from customs duty on import into India, it added.

Excise duty

The central excise duty on drugs is 6 per cent, and value added tax is 4-5 per cent. The customs duty on formulations is 10 per cent (other than specified drugs, life saving drugs, vaccines and bulk drugs where it is 5 per cent).

OPPI has recommended that the customs duty be rationalised to 5 per cent, and that customs duty for health supplements be reduced to 10 per cent from 30 per cent and the additional customs duty of 12 per cent be reduced to 10 per cent.

Manish Doshi, President, India Drug Manufacturers' Association (IDMA) and Managing Director, Umedica Labs, told The Hindu, that “the taxes and duties across the value chain must be brought down. The government has been working to keep medicine prices low and affordable but considering the demand, the rates must be rationalised.”

Some therapeutic categories such as anti-cancer or transplant drugs could cost several thousand rupees a month, and, according to Mr. Doshi, “the government must ensure that the patient gets the best at affordable rates."

R&D needs a boost

In the present form, the only tax benefit available for research and development (R&D) activities is in the form of weighted deduction for in-house R&D.

It is felt that R&D activity along with contract manufacturing could go a long way to help the Indian pharma sector grow. D. G. Shah, Secretary General, Indian Pharmaceutical Alliance (IPA), felt that pharma R&D was different from R&D in all other sectors. “It takes a minimum of 10-12 years to arrive at an outcome. It requires sustained effort and funding. Pharma R&D however, continues to be treated on a par with R&D in sectors such as automobiles or information technology. Pharma units engaged in R&D should get incentives to give a boost to this activity,” he said

Source: *The Hindu, 23rd February 2013*

Big Pharma In Nervous Wait For Verdict On Cancer Drug

March 27 (Reuters) - Global drugmakers, battered by recent intellectual property decisions in India, are girding for a landmark court ruling next week that could have broad consequences for their ability to sell lucrative patented medicines in the country.

India's Supreme Court is due to decide on April 1 whether or not an amended form of Swiss giant Novartis AG's cancer treatment Glivec deserves a patent in the country.

"Big Pharma is nervous because nothing has gone in their favour in the recent past," said Ajay Kumar Sharma, associate director of the pharmaceutical and biotech practice at business consultancy Frost & Sullivan.

"With this verdict, at least, things will get clearer about what is the definition of patented medicines."

Novartis has been fighting since 2006 to win a patent for an amended form of Glivec, which many oncologists view as a major advance in treating chronic myeloid leukemia, which kills 80-90 percent of sufferers, and some gastrointestinal cancers.

India has refused protection for Glivec on the grounds that it is not a new medicine but an amended version of a known compound - a decision consistent with domestic patent law which sets tight restrictions on multiple patents for a drug.

By contrast, in the United States, amended versions can be patented.

Novartis is seeking to overturn a clause in Indian Patents Law that restricts patent protection for newer forms of existing molecules, and next week's ruling could set a precedent for how other similar patent claims are treated.

"India is a formidable world power with international rights and obligations," Ranjit Shahani, vice chairman and managing director of Novartis India Ltd, the firm's India unit, said in an email to Reuters.

"Novartis understands and recognizes the contribution of generics once drug patents expire; our concern is with the non-recognition of intellectual property rights that ultimately help sustain and advance pharmaceutical research and development."

PROMISE AND PERIL

While Western firms see huge potential in India's rapidly growing $13 billion drugs market, 90 percent of which is made up of generics, they worry that India is failing to recognise valuable medical innovation.

Among Big Pharma's setbacks in the country, India last year allowed local drugmaker Natco Pharma to sell cheaper copies of Bayer AG's cancer drug Nexavar through the controversial mechanism of "compulsory licensing".

A global agreement, known as Trade-Related Aspects of Intellectual Property Rights or TRIPS, allows countries to issue compulsory licences for certain drugs that are deemed unaffordable to large sections of their populations.

Also last year, India revoked patents granted to Pfizer Inc's cancer drug Sutent, Roche Holding AG's hepatitis C drug Pegasys, and Merck & Co's asthma treatment aerosol suspension formulation. They were all revoked on grounds that included lack of innovation.

In another potential hit, Mumbai-based BDR Pharmaceutical International this month applied for a compulsory licence on a blood cancer drug, dasatinib, sold as Sprycel by U.S.-based Bristol

-Myers Squibb Co.

Last month, an Indian government panel proposed that prices of patented medicines be based on the country's per capita income, a move that would substantially reduce prices of costly drugs made by global pharmaceutical firms.

"In the minds of global drugmakers, the recent developments will definitely hamper India's image," said lawyer Dominic Alvares, of S. Majumdar & Co which represents Indian drugmakers.

But he said social justice and the public interest should come ahead of India's reputation as a future drugs market. "The developments would impact reputation but for the sake of reputation, do you sacrifice on public interest?"

PATENTS VS AFFORDABILITY

In almost every patent dispute, India has held affordability as a key reason to allow generic drugmakers to launch copycat versions of patented medicines in a country where nearly 40 percent of the population lives on less than $1.25 a day.

For example, Natco Pharma was told by the patents office in its compulsory licence ruling to offer generic Nexavar at 8,800 rupees ($162) for a month's dose - a fraction of Bayer's price of 280,000 rupees. Natco must pay a 7 percent royalty to Bayer.

BDR Pharma, in its application, has offered generic Sprycel at 8,100 rupees for a month's dose compared with Bristol-Myers' price of 165,000 rupees.

Generic versions of Glivec, which won its first patent in 1993, cost about $2,500 for a year's dosage in India, compared with nearly $70,000 in the United States where only the branded version is sold.

Source: *The Economic Times, 28th March 2013*

FDA Guidance Provides Framework For Testing And Labeling Scored Drug Tablets

The US Food and Drug Administration (FDA) has published a new final guidance document on the criteria that sponsors of new and abbreviated drug applications (NDA/ANDA) should use to evaluate tablet that have been scored to allow for the product to be split into two or more pieces.

Background

Many products have scoring marks to allow consumers or their healthcare practitioners to split a tablet, thereby allowing the consumption of the product at controlled, lower doses without requiring multiple drug applications for each dose. The markings themselves are seen as important enough to potentially hold up the approval of a generic product if its reference listed drug—the NDA it claims equivalence to—changes its scoring patterns. "Although there are no standards or regulatory requirements that specifically address scoring of tablets, the Agency recognizes the need for consistent scoring between a generic product and its RLD," FDA explained.

This allows for consumers to be switched between the original and generic versions of the product freely, FDA writes in the guidance. "In addition, consistent scoring ensures that neither the generic product nor the RLD has an advantage in the marketplace because one is scored and one is not."

That's the theory, anyway.

In practice, FDA has frequently raised concerns

that some manufacturers are arbitrarily changing their scoring practices for the purposes of delaying generic competition. In February 2012, for example, the agency rebuffed an attempt by Warner Chilcott to delay generic competition for its Doryx acne pill. The company had changed its single-scored tablet to a double-scored tablet, and subsequently filed a petition to forced generic pharmaceutical manufacturer Mylan to do the same.

FDA denied that citizen petition on 8 February 2012, saying that it does "not agree that approving an ANDA for a generic single-scored 150 mg doxycycline hyclate delayed-release product would raise any new public health concerns, especially if the single-scored Abbreviated New Drug Application ANDA product, like your single-scored tablet, will be marketed concurrently with the double-scored product only for a finite period of time."

"There is no statutory or regulatory requirement that generic drugs have the same scoring configurations as their RLDs," FDA added.

Final Guidance Reflects Safety Concerns

This isn't to say that FDA doesn't still have concerns that need to be evaluated. "In some cases, there are possible safety issues, especially when tablets are not scored or evaluated for splitting," FDA explained in its final guidance.

Tablets that are improperly evaluated could face issues with the tablet's contents, its weight, disintegration, stability and dissolution, all of which can affect patients.

To address these concerns, FDA said its guidance reflects "consistent and meaningful criteria by which scored tablets can be evaluated and labeled."

FDA's criteria are divided into three parts:

- a harmonized approach to chemistry, manufacturing and controls (CMS) review of scored tablets
- consistency of the terms used to describe and label scored tablets
- information contained on the product labeling for use by healthcare providers

The guidance reflects a number of points that manufacturers must take into account before scoring a product.

For example, the smallest unit of a scored tablet must not be less than the minimum therapeutic dose indicated on the approved labeling. The split tablet must also be safe to handle and should have the same release features and general stability qualities as the full product. FDA explained that a risk assessment should be provided to justify results and test criteria and on no fewer than 12 individual split tablet portions. The US Pharmacopoeia's <905> Uniformity of Dosage Units standard is useful for conducting some of these tests, FDA said.

RLD vs. Generic: Is Scoring Important?

One interesting part of the guidance: FDA recommends that the "scoring configuration of generic drug products should be the same as the RLD, noting that in its 1995 Manual of Policies and Procedures Scoring Configuration of Generic Drug Products (5223.2).

That MPP notes that, "If the scoring configuration of the exhibit batch does not match that of the listed drug, the generic firm will be requested to provide a commitment, prior to the application's approval, not to market the product until it is correctly scored."

This recommendation seems to run contrary to FDA's finding in the Warner Chilcott/Mylan petition.

Labeling Considerations

FDA's guidance also notes that new products meeting the criteria for scoring should be labeled as having "functional scoring," and labeling to that effect should appear in the "Dosage forms and strength" section of the highlights and full prescribing information sections of the labeling. In addition, the "How Supplied" section of the full prescribing information should also contain scoring information.

"In this way, the use of the term functional scoring in the labeling can communicate to healthcare providers that the product has been evaluated against the established criteria," FDA concluded.

Source: *www.raps.org dated 13th March 2013*

After 13 Years, FDA Finalizes Pediatric Trials Protection Rule

A new final regulation just released by the US Food and Drug Administration (FDA) amends an existing regulation to include minor additional safeguards for pediatric patients, including children, enrolled in clinical trials.

The long-anticipated rule has been in the works since 2001, when FDA released an interim rule meant to comply with the Children's Health Act of 2000, which mandates that all pediatric research in the US offer subject additional protections to ensure their safety.

These protections include requirements that institutional review boards review pediatric research and ensure that the research meets seven criteria:

1. Risks to children are minimized.
2. Risks to children are reasonable in relation to the perceived benefits.
3. Subjects are selected equitably.
4. Informed consent is obtained for all subjects and documented appropriately.
5. Research data is monitored to ensure patient safety.
6. Data is kept confidential.
7. Safeguards are in place to protect the most vulnerable patients.

Other Changes

Importantly, the rule also calls on all companies to conduct a pediatric assessment for new products, including active ingredients, indications, dosing regimens and dosage forms, unless those requirements were explicitly waived or deferred by FDA.

Sponsors who complete the difficult pediatric trials are eligible for additional incentives, including six months of marketing exclusivity also known as pediatric exclusivity, which applies to all other forms of marketing exclusivity and not just the pediatric application. Those incentives were made permanent in 2012 under the FDA Safety and Innovation Act (FDASIA).

FDA said it has made four significant changes to the final rule relative to its interim rule:

- The definition of guardian has been updated to exclude a phrase specifying that a guardian must have the ability to authorize medical care to account for the possibility that a guardian might not have this authority in some states.
- An instance requiring parental permission has been removed because FDA found it was already required in another section.
- A new paragraph requires institutional review boards to assess the level of risk to children participating in trials, which must determine if a trial represents "greater than minimal risk" to a patient, or just "minimal risk."

- The rule now explicitly says that emergency research exceptions apply to children as well as adults.

- The final rules come into effect 30 days after its publication in the Federal Register, scheduled for 26 February 2013. A similar rule was passed by FDA on 19 February 2013 pertaining to medical device submissions and pediatric data requirements.

Source: *www.raps.org dated 26th February 2013*

EMA Regulators Release ICH Guideline On Genotoxic, Carcinogenic Starting Materials

EU regulators have released for public consultation a guideline under development by the International Conference on Harmonisation (ICH) intended to establish the best practices for controlling carcinogenic risk in pharmaceutical products when those products are made using genotoxic or carcinogenic starting materials.

That guideline, M7 Guidelines on Assessment and Control of DNA Reactive (Mutagenic) Impurities in Pharmaceuticals to limit Potential Carcinogenic Risk first cleared the ICH's Step 2 in December 2012, and the European Medicines Agency's (EMA) 22 February 2013 release of the guideline marks the start of the third of a five-step process.

During step four, the various entities that make up the ICH—among them EMA, the US Food and Drug Administration (FDA) and Japan's Ministry of Health, Labour and Welfare (MHLW)—will formally adopt the ICH guideline. The final step, step five, sees it formally implemented across all three ICH regions.

EMA said it will be accepting comment through 23 April 2013, part of a six-month consultation process set to end in August 2013.

The Guideline

The guideline, unlike similar ones which deal with drugs that are themselves genotoxic or carcinogenic, pertains to products that are only manufactured with the assistance of genotoxic or carcinogenic starting materials, intermediates and reagents.

While the manufacturing process is not intended to leave any of these materials in the final drug product, low levels of impurities can nevertheless be present at the end of the manufacturing process. The larger question, explained Warren Ku, the ICH Rapporteur on the M7 guideline and the section head of integrative toxicology at Boehringer-Ingelheim Pharmaceuticals, is how regulators should best manage risk and quality at all stages of the product lifecycle.

The guideline follows a 2010 concept paper that called for its need, saying that while many ICH guidelines touched on the topic, none confronted its core premise: the need for acceptable levels of genotoxic impurities.

While some regional regulatory bodies have published guidance and guidelines on the specific topic, there are some inconsistencies and clashes between the EMA, FDA and ICH documents.

What are Acceptable Limits?

The draft M7 guideline established what Ku called a "Threshold of Toxicological Concern (TTC) concept as a basis for characterizing risk."

For all chemicals for which there is no "appreciable risk to human health," residue exposure should be capped at 1.5 ug/day.

For chemicals and substances known to cause

cancer, sponsors of products will need to justify acceptable limits, depending on a variety of factors including frequency of dosing and length of dosing. The guideline notes that for drugs intended to be taken for less than a month, regulators might accept a daily intake limit of 120 ug/day. For drugs intended to be taken for up to 10 years, that acceptable tolerance falls to just 1.5 ug/day for individual impurities. Total impurity acceptances are slightly higher (5 ug/day for a 10-year or lifetime pharmaceutical product).

These levels may be adjusted based on a number of considerations, such as whether humans are likely to encounter those impurities in the course of their normal lives (such as through food consumption), or if the chemical is extraordinarily toxic, requiring a vastly lower threshold for intake.

Source: *www.raps.org dated 25th February 2013*

மருந்துகளை வாங்கும் போது அவசரம் வேண்டாம்

பொதுவாக நாம் ஏதேனும் உடல்நிலை பாதிப்பு ஏற்படும் போதுதான் மருத்துவமனைக்குச் செல்கிறோம். உடல்நிலை பாதிக்கப்பட்டதும் நமது மனதில் ஒரு வித படபடப்பு ஏற்பட்டுவிடும் அதனால் அந்த சமயத்தில் நமது சிந்தனைத் திறன் சற்றுக் குறைந்துதான் காணப்படும் எனவே மருத்துவமனைக்குச் செல்லும் போதும், மருந்துகள் வாங்கி அதனை பயன்படுத்தும் போதும் கவனமாக இருக்க வேண்டியது அவசியம்.

முதலில் மருத்துவமனைக்குச் சென்று மருத்துவரை சந்திக்கும் போதும் அவர் எழுதித் தரும் மாத்திரைகள் எந்தெந்த மாத்திரைகள் எந்தெந்த நோய்காக போட வேண்டும் என்பதை கேட்டறிந்து கொள்ளுங்கள் அப்போதுதான் அவர் அளிக்கும் மாத்திரைகளைப் பற்றி உங்களால் தெரிந்து கொள்ள முடியும்.

பிறகு மருத்துவமனைக்கு அருகில் இருக்கும் மருந்தகத்தில் அந்த சீட்டினைக் காண்பித்து மருந்துகளை வாங்கிக் கொள்வோம் இது சாதாரண நோய்களுக்கு என்றால் பரவாயில்லை. இதே ஏதேனும் சிக்கலோ, விபத்தில் காயமோ ஏற்பட்டு மருத்துவமனைக்குச் செல்லும் போது அவர்கள் கொடுக்கும் மருந்துகளின் விலைகள் தாறுமாறாக இருக்கும். அப்போது ஒன்றுக்கு இரண்டு மருந்தகங்களில் விசாரித்து ஒரு மருந்தினை வாங்குவது நன்மை அளிக்கும். ஒரே மருந்து பல மருந்து நிறுவனங்களால் தயார் செய்யப்படுகிறது. அதிலும் சில மருந்து நிறுவனங்கள் அதிக விலை வைத்து விற்கின்றன.

அதிக விலை வைத்தால் எவ்வாறு விற்பனை செய்ய முடியும் என்று நினைக்காதீர்கள். தற்போது மருத்துவ உலகத்தில் சில மோசமான ஏமாற்று வழி பின்பற்றப்பட்டு வருகின்றன. அதாவது தங்களது நிறுவன மருந்துகளை எழுதிக் கொடுக்குமாறு மருத்துவர்களிடம் பரிந்துரை செய்வதோடு ஒரு மருந்து பரிந்துரையாளரின் பணி முடிவடைந்துவிட வில்லை. அந்த மருந்தினை அவர் எழுதிக் கொடுக்க மருத்துவருக்கோ, மருத்துவமனை நிர்வாகத்துக்கோ குறிப்பிட்ட தொகையும் அந்த மருத்தை அருகில் உள்ள மருந்தகங்களில் வாங்கி வைக்க குறிப்பிட்ட தொகையும் (இதை வாங்கி வைக்க ஏன் பணம் என்று கேட்டால் வேறு விலை குறைந்த மருந்து கம்பெனிகளின் மருந்துகளை வாங்கி வைக்காமல் அதிக விலையுள்ள இந்த மருந்தினை மட்டும் வாங்கி வைக்கத்தான் பணம் என்கிறது உண்மை நிலவரம்) அளிக்கப்படுகிறது.

இது யாரோ செய்த ஆய்வில் வெளியான தகவல்கள் இல்லை முன்னாள் மருந்து பரிந்துரையாளர்கள் தொலைக்காட்சி ஒன்றில் நேரடியாகத் தோன்றி அளித்த வாக்குமூலம்தான். இதற்கு என்ன காரணம் என்று அவர்களிடம் கேட்டதற்கு மருந்துத் துறையில் செலுத்தப்படும் அதிகப்படியான முதலீடும் அதன் காரணமாக ஏற்படும் போட்டிகளுமே என்கின்றனர்.

அவசரத்துக்கு மருந்தகங்களுக்குச் சென்று பல ஆயிரங்கள் கொடுத்து வாங்கும் சில மருந்துகள் மிகக் குறைவான விலையில் வேறு சில இடங்களில் விற்பனையாகும் வியம் தெரியும் போது நமது தவறு என்றுதான் பலரும் நினைத்திருப்பார்கள்.

ஆனால் அதற்குப் பின் மருந்துவ உலகின் மிகப்பெரிய ஏமாற்று வேலை இருப்பதை பலரும் அறிவதில்லை.

சில திரைப்படங்களில் மருத்துவ உலகம் செய்யும் மோசடிகளை படம்பிடித்து காட்டினாலும் அப்பாவி மக்கள் பலரும் தினம் தினம் இதுபோன்ற மோசடிகளால் ஏமாந்து கொண்டு தான் இருக்கின்றனர்.

ஒரு சில மருத்துவர்கள் நோயாளிகளின் நோயைத் தீர்க்கும் மருந்துகளை மட்டுமே அளிக்கின்றனர் நோயைத் தீர்ப்பதே தங்களது கடமை என்று வாழும் மருத்துவர்களும் இருக்கத்தான் செய்கிறார்கள்.

ஒரு சில மருத்துவமனைகளிலேயே இருக்கம் மருந்தகங்கள் அவ்வப்போது ஒரு கணக்கெடுப்பை நடத்துகின்றன அதாவது அந்த மருந்தகத்தில் உள்ள ஒரு சில மாதங்களில் முடிந்து போகும் மாத்திரைகளின் பட்டியலை தாயாரித்து அம்மருத்துவமனைகளில் பணியாற்றும் மருத்துவர்களிடம் அந்த பட்டியலின் நகல் அளிக்கப்படுகிறது அதில் உள்ள சத்து மாத்திரைகள் போன்றவற்றை அவர்களிடம் வரும் நோயாளிகளுக்கு 10, 20 என எழுதிக் கொடுத்து அந்த மாதத்துக்குள் அதனை விற்பனை செய்து முடித்துவிட வேண்டும் மேலும் உடலில் நோயும் மனதில் வலியுடனும் மருந்தகங்களுக்கு வரும் நோயாளிகள் ஒருவேளை கையில் காசில்லாமல் மருந்துகளை குறைந்த எண்ணிக்கையில் கேட்டால் இதுபோன்ற மாத்திரைகள் வேறு எங்கும் கிடைக்காது மிகவும் அரிதானது இருக்கும் போதே வாங்கி வைத்துக் கொள்ளுங்கள் என்று பரிந்துரை செய்ய மருந்தக ஊழியர்களுக்கும் குறிப்பு அனுப்பப்படுகிறது.

இவை எல்லாம் இதுவரை வெளிச்சத்துக்கு வந்த ஒரு சில மோசடி வியங்கள் இன்னும் வெளிச்சத்துக்கு வராத பல இருட்டடிப்புகள் தினம் தினம் நிகழ்ந்து கொண்டுதான் இருக்கின்றன.

நோய்க்காக மருத்துவமனைக்கு வரும் நோயாளிகள் இப்படி பல வழிகளில் ஏமாற்றப்பட்டு ஏமாளிகளாகவும் ஆக்கப்படுகின்றனர். எனவே, இனி மருந்து, மாத்திரைகளை வாங்கும் போது ஓரிரு கடைகளிலாவது விசாரித்து உங்களுக்கு ஏற்ற மருந்தினை வாங்கிப் பயன் பெறுங்கள்.

Source: தினமணி, *11th March 2013*

"50 சதவீதம் மாணவர்களே பார்மசியை தேர்வு செய்கின்றனர்" கருத்தரங்கில் தகவல்

கல்வித்துறையில் 50 சதவீதம் மாணவ, மாணவிகள் மட்டுமே பார்மசி துறையை தேர்வு செய்வதால் இது குறித்த விழிப்புணர்வு ஏற்படுத்த வேண்டும் என்று பார்மசி கல்லூரிகள் சங்கத் தலைவர் டாக்டர் சின்னசாமி கூறினார்,

ஊட்டி ஜெ.எஸ்.எஸ்., கல்லூரியில் மருந்தாக்கியல் பிரிவு மாணவர்களுக்கான, தேசிய கருத்தரங்கு நடந்தது.

இதில், பங்கேற்ற, இந்திய பார்மசி கல்லூரிகள் சங்க தலைவர் டாக்டர் சின்னசாமி கூறியதாவது:

உயிர் காக்கும் மருந்து உற்பத்தியில், இந்தியா சர்வதேச அளவில் வேகமாக வளர்ந்து வருகிறது. நாட்டில் பல மருந்து உற்பத்தி செய்யும் கம்பெனிகள், அமெரிக்காவின் இணைப்பு நிறுவனங்களாக உள்ளன. நம் நாட்டில் உற்பத்தி செய்யப்படும் மருந்துகள், 120 நாடுகளுக்கு ஏற்றுமதி செய்யப்படுகிறது.

நாட்டின் பொருளாதாரத்தில், மருந்து துறை முக்கியப் பங்பாற்றி வருகிறது. விலை உயர்ந்த, குறிப்பிட்ட ஒரு சில வகை மருந்துகள் மட்டுமே, வெளிநாடுகளில் இருந்து வாங்கப்படுகின்றன. அமெரிக்கா போன்ற வெளிநாடுகளில், புதிய மருந்து கண்டுபிடிப்பு தொடர்பான, ஆய்வுக்கு பெருமளவு தொகை செலவிடப்படுகிறது.

உதாரணமாக, ஒரு மருந்தை தயாரிக்க, 20 பில்லியன் வரை செலவிடப்படுகிறது. இந்தியாவில் ஆராய்ச்சிக்காக, இவ்வளவு பெரிய தொகையை

செலவிடுவதற்கான வாய்பு இல்லை. இதனால், புதிய மருந்து கண்டுப்பிடிப்பு தொடர்பான ஆராய்ச்சிகள் குறைவாக உள்ளன.

எனவே, ஆராய்ச்சிக்கு கூடுதல் நிதி ஒதுக்கப்பட வேண்டும். கிளினிக் நடத்தி வரும் மருத்துவர்கள், தங்களிடம் தொடர்ச்சியாக வரும் நோயாளிகளுக்கு, தங்கள் கிளினிக்கில் இருந்து மருந்து, மாத்திரைகளை வழங்க, அனுமதி வழங்கப் பட்டுள்ளது. மாறாக, அவர்கள் மருந்து, மாத்திரைகளை வெளி நோயாளிகளுக்கு விற்க முடயாது.

ஆண்டு தோறும், 50 சதவீத மாணவ, மாணவியர் மட்டுமே பார்மசி துறையை தேர்ந்தெடுக்கின்றனர். பார்மசி துறை குறித்த விழிப்புணர்வை அதிகம் ஏற்படுத்த வேண்டும். அந்த மருந்தின் வீரியம், அதை பயன்படுத்துவதால் ஏற்படும் மருத்துவ மாற்றங்கள் குறித்து, நோயாளிகளுக்கு விளக்கம் கூடிய அளவுக்கு விவரம் உள்ளவர்களாக இருக்க வேண்டும், இவ்வாறு, டாக்டர் சின்னசாமி கூறினார்.

Source: தினமலர், கோயம்புத்தூர், *14th March 2013*

Calling Big Pharma's Bluff

The lesson from the Supreme Court ruling on Gleevec is that pharmaceutical multinational corporations need to focus research on genuine innovations rather than on ways to evergreen their patents

The much awaited Supreme Court judgment on Gleevec has been delivered. Novartis has failed in reversing the rejection of its patent. And, predictably — like a scratched record — there have been suggestions that pharma investments in India will dry up and take flight to China. At each twist of this case, Novartis has produced such bluster. We need to pay attention to the judgment as it is a nuanced handling of difficult questions concerning a hastily drafted section — Section 3(d) of the Indian Patents Act, which allows new forms of existing drug formulations to be patented only if they result in increased efficacy. The judgment adopts a gentle caution in parsing out Section 3(d); yet, it is firm in reading 3(d) as a "second tier of qualifying standards" for patentability. Further, the judgment also stands out by reprimanding the "artful drafting" of patent applications adopted by big pharma.

Chronology

To begin, it is useful to draw out some of the chronology concerning Gleevec that the judgment reveals. The story of the patent begins with Jurg Zimmerman's invention of derivatives of N-phenyl-2- pyrimidine-amine, one of which in freebase form was called "Imatinib," and together constituted a U.S. patent application (no. 5,521,184) granted on May 28, 1996 (which, the judgment terms "the Zimmermann Patent"). Subsequently, a European patent was also acquired. Later, a patent application was filed for the beta crystalline form of Imatinib Mesylate (the subject in dispute) in January 2000. Initially rejected, the patent was awarded in May 2005 following Novartis's appeal to a U.S. appellate court. What is interesting is that the filings for new drug approval, submitted in April 1998, was for Gleevec, and a filing for original drug approval in February 2001 was for Imatinib Mesylate. Confusing as this may seem, the judgment highlights this to establish that Imatinib Mesylate was covered by the Zimmerman patent and that Gleevec was its market name. Any remaining doubt, the judgment notes, is extinguished by the application for patent term extension: "This application leaves no room for doubt that Imatinib Mesylate, marketed under the name Gleevec, was submitted for drug approval as covered by the Zimmermann patent."

Context

One of the useful aspects of the judgment is in distilling the significance of "context" in giving meaning to statute. Early on, it notes that to understand the import of the various amendments introduced in the third amendment to the Patent Act, 1970 — to come into full compliance with TRIPS — it is "necessary to find out the concerns of Parliament … What was the mischief Parliament wanted to check and what were the objects it intended to achieve through these amendments?" In this respect, the judgment recalls not only the heated Parliamentary debate, but also the concerns of public health practitioners the world over, and of public statements and petitions from U.N. agencies and civil society organisations. With India being the leading global supplier of bulk drugs, formulations and generic Antiretrovirals (ARV), the global concerns layered domestic worries about affordability of drugs.

Evidence in a widely cited study by the National Institute of Health Care Management, Changing Patterns of Pharmaceutical Innovation, is telling. Between 1989 and 2000, the U.S. Food and Drug Authority approved 1,035 new drug applications — of these, 65 per cent contained active ingredients that were already on the market (i.e. incrementally modified drugs), 11 per cent were identical and only 15 per cent were considered a "highly innovative drug." Mischief like this results in a patent thicket around a single molecule to delay generic entry which Section 3(d) seeks to avoid. Consequently, the Supreme Court heralds Section 3(d) as a "second tier of qualifying standards for chemical substances/pharmaceutical products in order to leave the door open for true and genuine inventions but, at the same time, to check any attempt at repetitive patenting or extension of the patent term on spurious grounds." The significance of this rendering of Section 3(d) is borne out in the Supreme Court's mix of caution in parsing out the section and firm pronouncements on patent drafting. Section 3(d) states, the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such process results in a new product or employs at least one new reactant.

And, has the following explanation appended: For the purposes of this clause, salts, esters, ethers, polymorphs, metabolites, pure form, particle size, isomers, mixtures of isomers, complexes, combinations and other derivatives of known substance shall be considered to be the same substance, unless they differ significantly in properties with regard to efficacy.

Madras HC Reading

Recall that the Madras High Court's reading that efficacy is a pharmacological idea associated with the ability of a drug to produce a desired therapeutic effect independent of potency, i.e. "healing of disease." And, the Intellectual Property Appellate Board (IPAB) had noted with respect to enhanced efficacy that "it is not possible to quantify this term by any general formula" and that an assessment would "vary from case to case." In revisiting these readings, the Supreme Court also had the views of Shamnad Basheer (as an intervenor-cum-amicus) and Anand Grover (Counsel for Cancer Patients Aid Association). The latter had argued for a strict reading of 3(d) which would see efficacy entirely in pharmacological terms. While Basheer agreed that all advantageous properties may not qualify under 3(d), he held that increased safety and reduced toxicity should be seen favourably. Even as the Supreme Court recalls the concerns that author 3(d) — thus, urging a "strict and narrow reading" for medicines — it prefers to delay definitive pronouncement and allow for jurisprudence to

develop on this matter. Yet, it is firm in noting that enhancements in the "physical properties" of a product would render a patent application foul of 3(d).

It is here that the evidence — either in the patent applications or submitted later through affidavits to Controller were found wanting in establishing enhanced efficacy. Take for instance the "Massimini" affidavit, filed before the Controller and directed at 3(d), where two points emanate. First, that the beta crystalline form of Imatinib Mesylate is highly soluble, and second that it demonstrates a number of improved physical properties (e.g. flow properties, thermodynamic stability). Yet, in probing, it becomes clear that the comparison is to Imatinib — and not Imatinib Mesylate, where the latter is the "known substance" in terms of 3(d). Which leaves the issue of increased bioavailability — and here the court finds "there is absolutely nothing on this score apart from the adroit submissions of the counsel" and dismisses the argument.

On drafting

A final aspect of the judgment that needs highlighting is the pronouncement concerning drafting. The careful interrogation of the sequence of events leading to the patent application for the beta crystalline form of Imatinib Mesylate opened up gaping holes in the claims made by Novartis. These included that Gleevec was "'disclosed" in the Zimmerman patent and this point is also implied by Novartis's legal notice to NATCO in the U.K. to stop production of its generic version, VEENAT. In response, Novartis argued that even while Gleevec could be claimed by the Zimmerman patent, it was not fully disclosed in an enabling manner. Thus, seeking to differentiate between claims and disclosure. This wonderful legalese was eloquently rejected by the Supreme Court; both, in terms of U.S. legal history that was cited and in terms of the argument's merits. And it's useful to quote at length: "We certainly do not wish the law of patent in this country to develop on lines where there may be a vast gap between the coverage and the disclosure under the patent; where the scope of the patent is determined not on the intrinsic worth of the invention but by the artful drafting of its claims by skilful lawyers, and where patents are traded as a commodity not for production and marketing of the patented products but to search for someone who may be sued for infringement of the patent."

Lapses

Looking back over the last several years, it is useful to recall the several lapses committed by Novartis. It failed to heed petitions by health groups and civil society to drop the case. For that matter it failed to also heed the wisdom of its own shareholders who urged it to withdraw the challenge. And at the Supreme Court along with losing the case, we also find that the Gleevec patent application "appears to be a loosely assembled, cut-and-paste job, drawing heavily upon the Zimmermann patent."

The judgment should be well noted and celebrated. It recalls the context of 3(d) and reminds us of the matters of concern that punctuated its crafting. While the section may have been hastily drafted and insufficiently specified, it has the elements to withstand ever-greening. Pharma companies will always be rewarded for their inventive work and effort — and by drawing in a secondary qualifier, they will have to focus their efforts on genuine inventions rather than overlapping patents.

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Source: *The Hindu, 3rd April, 2013*

PARLIAMENT QUESTION – ANSWERS

RAJYA SABHA

Session Number; 227

MINISTRY OF HEALTH & FAMILY WELFARE

Question No. 2689
Answered on 18.12.2012

BUSINESS OF SPURIOUS DRUGS

2689 SHRI MOTILAL VORA

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether it is a fact that the business of spurious drugs in the country is increasing rapidly in absence of stringent punishment;

(b) whether ASSOCHAM has also mentioned in its report that the business of spurious drugs has taken its roots in the country and 25 per cent of the drugs are spurious;

© whether the shortage of the drug inspectors and laboratories is also one of the reasons for the expansion of spurious drugs business; and

(d) if so, the steps being taken by Government to check the business of spurious drugs?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) to (d) No. The manufacture and sale of spurious drugs is a clandestine activity generally indulged in by anti-social elements and carried out by unlicensed or sometimes by the licensed manufacturers to exploit the confidence enjoyed by certain fast selling branded drugs by making their imitations. The media and some organisations have been projecting the problem of spurious drugs in the country in a manner which does not provide a balanced perspective and has, therefore, caused serious apprehensions. These are unsubstantiated reports. For example, on the basis of an alleged WHO report, the media frequently reports that 35% of fake drugs produced in the world come from India. However, when enquired, the WHO has denied its authenticity. A survey conducted by the Government in 2009 to assess the extent of spurious drugs revealed that the extent of drugs found spurious was 0.046% only. ASSOCHAM's report is not based on substantiated facts. The Government has taken a number of measures to check the problem of spurious and adulterated drugs in the country in the past in this regard and is also active in this direction, as follows:

(I) To specifically tackle the problem of spurious drugs, the Drugs & Cosmetics Act, 1940 was amended in 2008 by the Drugs & Cosmetics (Amendment) Act, 2008 for making the penal provisions under the Act more stringent so as to make it deterrent for the anti-social elements from indulging in these illegal practices. Certain offences have also been made cognizable and non-bailable. The Amendment also provided setting up of specially designated courts all over the country for speedy trial of offences under the Act. 14 States / UTs have already set up such courts.

(ii) The Central Government's drug regulatory mechanism, the Central Drugs Standard Control Organisation (CDSCO) has been strengthened with additional manpower by creation of 216 additional posts at various levels since 2008. As against the total number of sanctioned posts of 111 in 2008 and 64 officers in position then, there are 310 posts in CDSCO now and 121 officers in position, including 65 Drug Inspectors. The selection of 90 more Drug Inspectors has already been completed.

(iii) Two Sub-zones of CDSCO (Hyderabad and Ahmadabad) have been upgraded to full zones and three new sub-zones (Bangalore, Chandigarh and Jammu) have been created to effectively cover the entire country under the active supervision of the CDSCO.

(iv) The Central Drugs Testing Laboratories have been strengthened with new sophisticated testing equipments. A new laboratory at Hyderabad has been constructed.

(v) The scheme of regular overseas Inspection of manufacturing facilities situated abroad has been initiated to ensure proper compliance of Manufacturing facilities before registering them for Import of Drugs from overseas. Two such inspections in China have already been completed.

(vi) A Whistle Blower Scheme has been initiated by the Government to encourage vigilant public participation in the detection of movement of spurious drugs in the country. Under this scheme the informers would be suitably rewarded for providing concrete information in respect of movement of spurious drugs to the regulatory authorities.

(vii) The inspectorate staff have been regularly instructed to keep vigil and draw samples of drugs for test and analysis to monitor the quality of drugs moving in the country.

(viii) The Government has envisaged large scale capacity building of drug testing in the country during the 12th Plan including upgradation of existing labs, setting up of new labs, setting up of Mini labs at ports of entry, commissioning of Mobile Labs, special labs for medical devices and cosmetic, etc.

(ix) The Government has given special attention to strengthening and upgrading the infrastructure of States' drug regulatory system which plays major role in enforcement of provisions of the Drugs & Cosmetics Act and hence in checking the problem of spurious drugs. A new Centrally Sponsored Scheme to help them during the 12th Five Year Plan has already been envisaged. The scheme includes strengthening of both the physical infrastructure and human resources. A new budget line has been opened and an initial token provision of Rs. 2 crores has been made in 2012-13 budget.

Question No. 2690
Answered on 18.12.2012

ACTION AGAINST DRUG MANUFACTURERS FOR VIOLATING CDSCO RULES DURING CLINICAL TRAIL

2690. SHRIMATI MAYA SINGH:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether it is a fact that Central Drugs Standard Control Organisation (CDSCO) has left some companies involved in clinical trials by simply warning them;

(b) if so, the details thereof and the rules of CDSCO violated by these companies and the reasons for sparing these companies without awarding any punishment to them;

© whether the decision will lead to increase in possibility of clinical trail; and

(d) if so, the details thereof?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) & (b): The action for violation of the conditions

of permission for clinical trials under the Drugs and Cosmetics Rules, 1945 are taken in accordance with the severity of the violation and after making necessary investigations in each case.

© No.

(d): Does not arise.

Question No. 2693
Answered on. 18.12.2012

REVIVAL OF VACCINE PRODUCING PSUs

2693 SHRI AMBETH RAJAN

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to satate :-

2693. SHRI AMBETH RAJAN:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether any road map had been drawn by Government for revival of vaccine producing PSUs, namely, the Central Research Institute (CRI), Kasauli, the Pasteur Institute of India (PII), Coonoor, and the BCG Vaccine Laboratory (BCGVL), Chennai; and

(b) if so, the details thereof?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a & b): The revival of Public Sector Vaccine Manufacturing Units has been taken up by the Government. The details are as under:-

The upgradation work for manufacturing of Diphtheria, Pertussis & Tetanus (DPT) group of vaccine at Central Research Institute (CRI), Kasauli has been completed.

Upgradation of DPT group of vaccine manufacturing facility at Pasteur Institute of India (PII), Coonoor has been approved. The preliminary work at ground level has started.

Upgradation of BCG Vaccine Laboratory, Guindy for manufacturing of Bacillus Calmette-Gue'rin(BCG) vaccine has been approved and the project has started.

Question No. 2697
Answered on 18.12.2012

UNAUTHORISED DRUG TRIALS IN ANDHRA PRADESH

2697 SHRI NANDI YELLAIAH

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to satate :-

2697. SHRI NANDI YELLAIAH:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) the details of unauthorised medical clinical drug trials having been conducted in Andhra Pradesh, District-wise, for the periods 2009-10, 2010-11 and 2011-12;

(b) the details of action taken so far with regard to unauthorised medical clinical drug trials having been conducted in Andhra Pradesh for the periods 2009-10, 2010-11 and 2011-12; and

(c) the details of action taken and proposed to be taken to put an end to such unauthorised medical clinical trials in Andhra Pradesh and in various other States of India?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) & (b): Two cases of alleged irregularities in clinical trials conducted in Andhra Pradesh were reported during the period of 2009-10, 2010-11 and 2011-12. A statement giving details of the cases and action taken thereon is annexed.

© : The Drugs & Cosmetics Rules, 1945 provide that no clinical trial for a new drug shall be conducted except under and in accordance with the permission, in writing, from the Drugs Controller General (India). The following measures have been taken to strengthen the regulatory control over clinical trials in the country:

(1) Registration of clinical trial in ICMR registry at www.ctri.in has been made mandatory since 15.6.2009.

(2) 12 New Drug Advisory Committees (NDAC) consisting of leading experts from the government medical colleges, institutes from all over the country have been constituted to advise CDSCO in matters related to approval of clinical trials and new drugs.

(3) Applications of Investigational New Drugs (IND); i.e, New Drug Substances which have never earlier been used in human beings, are evaluated by the IND committee, chaired by the Director General, Indian Council of Medical Research.

(4) Every approval / permission for conducting clinical trials now includes a condition that in case of study related injury or death, applicant will provide complete medical care as well as compensation for the injury or death and statement to this effect would be incorporated in the informed consent form.

(5) Guidelines for conducting inspection of Clinical Trial sites and sponsor /Clinical Research Organizations (CROs) have been prepared.

(6) Draft rules have been notified to provide for the following:

(I) Medical treatment and financial compensation to the trial subjects in case of trial related injury or death;

(ii) Procedure for payment of financial compensation;

(iii) Enhancement of responsibilities of Ethics Committee (EC), Sponsor & Investigator to ensure that financial compensation as well as medical care is provided to the trial subjects who suffer trial related injury or deaths and such information is provided to the Drugs Controller General (India) [DCG(I)].

(iv) Amendment of the format for obtaining informed consent of trial subjects to include the details of address, occupation, annual income of the subject so as to have information regarding socio-economic status of the trial subjects.

(v) Giving authority for clinical trials inspections to CDSCO and to take administrative actions like restriction on investigators/ sponsors / CROs from conducting future clinical trials in case of non-compliance.

(vi) Specifying requirements and guidelines for registration of Ethics Committee.

Question No. 2722
Answered on 18.12.2012

AMENDMENTS TO DRUGS AND COSMETICS ACT, 1940

2722. DR. PRADEEP KUMAR BALMUCHU

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether Government is contemplating on bringing major changes in the Drugs and Cosmetics Act, 1940 in the light of inadequate monitoring of clinical trials;

(b) if so, the details thereof; and

(c) the details of the proposed alterations in the Act?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) to (c): A Bill, namely the Drugs and Cosmetics (Amendment) Bill, 2007 for the purpose of, inter alia, regulating clinical trials of drugs in the country has already been introduced in the Rajya Sabha on the 21st August, 2007. The Bill contains specific chapter on Clinical Trials, and penal provisions for violations of the conditions stipulated therein.

Question No. 257
Answered on 11.12.2012

SALE OF BANNED DRUGS

257 SHRI PALVAI GOVARDHAN REDDY

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to satate :-

(a) whether it is a fact that drugs banned in other countries are being sold in the country;

(b) if so, the names of such drugs, the countries where they are banned and the reasons for permitting the sale of the same in the country;

© whether it is also a fact that many public representatives and health activists are demanding to ban sale of such drugs in the country; and

(d) if so, the action the Ministry has taken in this regard?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a)to(d): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA STARRED QUESTION NO. 257 FOR 11TH DECEMBER, 2012

(a)to(d): A drug banned / restricted in one country may continue to be marketed in other countries as the respective government examines the usage, doses, indications permitted etc. and overall risk benefits ratio and takes decisions on the continued marketing of any drug in that country.

Safety issues of drug formulations, as and when reported, are assessed in consultation with the Expert Committees / Drugs Technical Advisory Board (DTAB). Based on the recommendations of the Expert Committees / DTAB, the Central Government prohibits manufacture, sale and distribution of such drugs in the country through Gazette Notification.

Concerns were raised on the continued marketing of certain drugs like nimesulide, phenylpropanolamine etc. in the country. Safety issues of drugs were examined by Expert Committee / Drugs Technical Advisory Board and based on their recommendations, the Central Government has prohibited / suspended

manufacture, sale and distribution of following drugs during the last three years and current year in the country through Gazette Notification.
1. Rimonabant.
2. Rosiglitazone.
3. Nimesulide formulations in children below 12 years of age.
4. Cisapride and its formulations for human use.
5. Phenylpropanolamine and its formulations for human use.
6. Human Placental Extract and its formulations for human use except its
(I) Topical application for wound healing, and
(ii) Injection for pelvic inflammatory disease.
7. Sibutramine and its formulations for human use.
8. R-Sibutramine and its formulations for human use.
9. Gatifloxacin formulation for systemic use in human by any route including oral and injectable
10. Tegaserod and its formulations
11. Letrozole for induction of ovulation in anovulatory infertility.
12. Serodiagnostic test kits for diagnosis of tuberculosis
Such action has been taken in respect of 91 drugs in the country so far.

Question No. 1916
Answered on 11.12.2012

MISLEADING ADS BY DRUG MANUFACTURERS

1916. SHRI UPENDRA KUSHWAHA:
Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether the Drug Controller General of India (DCGI) is scanning the tall claims being made through drug advertisements by drug manufactures;

(b) if so, the details thereof;
© whether these ads do not satisfy the criteria laid down by WHO and if so, action taken in the matter;

(d) the details of companies booked for misleading ads during the last two years;

(e) the measures taken to stop telecast of misleading ads on TV channels; and

(f) whether there is any proposal to make it mandatory for drug manufacturing companies to get their ads approved from DCGI before telecast to check misleading ads?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) & (b) The information/complaints received by the office of DCG(I) about misleading advertisements are forwarded to State / UT Drugs Control Authorities concerned for taking action as advertisements of drugs and magic remedies are regulated under the provisions of the Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 which is administered by the State / UT Governments.

© Any action in respect of misleading advertisements is taken on the basis of violations of the provisions of the domestic law.

(d) The Central Drug Standard Control Organisation (CDSCO) has not booked any complaint under the Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 as only the State / UT Governments are empowered to take action in respect of violations of the said Act.

(e) Electronic media is not covered under the provisions of the Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954.

(f) No.

Question No. 1944
Answered on 11.12.2012

INTRODUCTION OF DRUGS WITHOUT CLINICAL TRIAL

1944. SHRI KAPTAN SINGH SOLANKI:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether it is a fact that the Central Drugs Standard Control Organisation (CDSCO) has approved 33 new drugs between January, 2008 and October, 2010 without testing them through human trial;

(b) if so, whether Government has fixed the accountability of anyone in this regard;

© whether as per above facts, the drugs have been introduced in three or four sites in the market without undergoing any clinical trials and legal requirement; and

(d) if so, the details thereof?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) to (d): The Department Related Parliamentary Standing Committee on Health & Family Welfare in its 59th Report on the Functioning of the Central Drugs Standard Control Organisation (CDSCO) has raised various issues pertaining to the functioning of the organisation, including alleged approval of drugs without clinical trials.

New drugs are approved by the CDSCO based on non-clinical data, clinical data of safety and efficacy of drug, regulatory status in other countries etc. as per the Guidelines and requirements specified in Rule 122A, 122B, 122D and Schedule-Y of the Drugs and Cosmetics Rules, 1945. However, as per Rule 122 A (2) and Rule 122 B (3), the requirement of clinical trial may not be necessary if the drug is of such a nature that the Licensing Authority may, in public interest, decide to grant permission to import / manufacture the new drug on the basis of data available from other countries. Further, as per clause 1 (3) of Schedule Y, for drugs indicated in life threatening / serious diseases or diseases of special relevance to the Indian health scenario, clinical data requirements may be abbreviated, deferred or omitted, as deemed appropriate by the Licensing Authority. For grant of permission to import / manufacture of the Fixed Dose Combinations (FDC), the requirements are prescribed under Appendix-VI of Schedule-Y. As per these requirements, clinical trial on Indian patients is required in certain category of FDCs

Government had constituted a three member expert committee to examine the issues raised by the Parliamentary Committee comprising Dr. V.M. Katoch, Secretary (Department of Health Research) and Director General, ICMR, Dr. P.N. Tandon, President, National Brain Research Centre, Department of Biotechnology, Manesar and Dr. S.S. Aggarwal, former Director, Sanjay Gandhi Post-graduate Institute of Medical Sciences, Lucknow to inter alia examine the validity of the scientific and statutory basis adopted for approval of new drugs without Phase-III clinical trials on Indian population. The Report of the Expert Committee has been received and the same is under consideration.

Question No. 77
Answered on 27.11.12

COMPULSORY PRESCRIPTION OF MEDICINES BY GENERIC NAMES

*77. SHRI AVINASH RAI KHANNA:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether use of generic names or the International Non-proprietary Name (INN) by doctors has been made compulsory;

(b) if so, the mechanism Government would bring in place to implement it;

© whether any punishment has been envisaged for doctors for violating this law:

(d) whether Government has decided to set up a Central Drug Authority to enable centralized issuance of licenses for manufacture and sale of drugs; and

(e) if so, the details of its objectives and by when it would be set up?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a)to(e): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA STARRED QUESTION NO. 77 FOR 27TH NOVEMBER, 2012

(a)to© The Government has taken several steps for promoting generic drugs, and has impressed upon State Governments the need to take time bound steps in this regard. Instructions have been issued to all Government hospitals and CGHS dispensaries to prescribe generic medicines to the maximum extent possible. Medical Superintendants of hospitals in Delhi have also been advised to encourage / motivate doctors to prescribe generic drugs.

The Department of Pharmaceuticals has also launched the 'Jan Aushadhi Campaign' in collaboration with the State Governments by way of opening of Jan Aushadhi Generic Drug Stores in Government Hospitals and supply of medicines through Central Pharma PSUs. At present, 231 medicines are being supplied in the 122 Jan Aushadhi Stores opened till 30th July, 2012.

Government has issued a statutory direction to the State/UT Governments on 1.10.2012 under Section 33P of the Drugs and Cosmetics Act, 1940 to grant/renew licenses to manufacture for sale or for distribution of drugs in proper/generic names only. The Government has also published a draft notification GSR 748(E) dated 5.10.2012 for amending the Drugs & Cosmetics Rules, 1945 allowing issuance of licenses of single ingredient drugs in generic / proper names only.

(d) No, Sir.

(e) Does not arise.

Question No. 522
Answered on 27.11.2012

SELLING OF UNBRANDED DRUGS UNDER BRANDED NAMES

522. SHRI OM PRAKASH MATHUR:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether Government is aware that several 'unbranded' drugs are being sold in the market under 'branded names' at the same cost and the labels do not contain the fixed dose combination (FDC) and generic name; and

(b) if so, what check the Ministry is exercising on

pharmaceutical companies in the country, price-wise and FDC-wise, to save the common man from paying heavy cost on generic drugs as poor people cannot afford to pay?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) & (b): Central Drugs Standard Control Organisation (CDSCO) has not received any such report that several drugs are being sold in the market under 'branded' names and the labels do not contain the name of Fixed Dose Combination (FDC) and generic names. As per Rule 96 of Drugs and Cosmetics Rules, the proper name of the drug shall be printed or written on the label in a more conspicuous manner than the trade name, if any, which shall be shown immediately after or under the proper name. The Ministry of Health & Family Welfare has issued direction under Section 33P of Drugs & Cosmetics Act & Rules thereunder to the all States/UTs to instruct their respective Drug Licensing Authorities to grant/renew licenses to manufacture for sale or for distribution of drugs in proper/generic names only.

Question No. 529
Answered on 27.11.2012

CHECK ON MISUSE OF ANTIBIOTICS

529. SHRI S. THANGAVELU:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether Government is concerned that many medicines specially antibiotics are being misused in the country;

(b) if so, whether Government has initiated any system to undertake surprise inspections at chemists and pharma stores across the country; and

(c) if so, the details thereof and action taken by Government in this regard?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) Yes.

(b) & (c) Sale of drugs is regulated trough a system of inspection and licensing under the Drugs & Cosmetics Rules, 1945. Sale premises of drugs are required to be inspected not less than once in a year. The Government has also published draft rules for the purpose of introduction of a new Schedule H1 containing antibiotics, certain habit forming drugs and anti-TB drugs under these rules. Introduction of antibiotics, certain habit forming drugs and anti-TB drugs in the proposed Schedule H1 would facilitate their regulation in a more focussed manner to restrict their indiscriminate sale. Under these rules, the drugs included in the Schedule H1 would be required to be labelled with the following warning in a box with a red border that "It is dangerous to take this preparation except in accordance with the medical advice. Not to be sold by retail without the prescription of a Registered Medical Practitioner."

Session Number; 228

MINISTRY OF HEALTH & FAMILY WELFARE

Question No. 1639
Answered on 12.03.13

CURBING OF SUB STANDARD DRUGS

1639 DR. JANARDHAN WAGHMARE
Will the Minister of HEALTH AND FAMILY

WELFARE be pleased to satate :-

(a) the financial and Administrative schemes offered by Government tominimize the manufacture of sub-standard drugs in the country;

(b) the names of the drug companies and their turnover but which have no manufacturing units of their own;

© the value and quantity of imported finish medicines that are allowed to be imported by Drug Controller General of India, year-wise, during the last three years and are also being manufactured indigenously and available at low prices;

(d) the number of meetings taken place and issues discussed at Inter-Ministerial groups which are formed as per recommendations of the 45th Report of Parliamentary Standing Committee on Health; and

(e) the reaction of Government thereto?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a): To minimize the manufacture of sub-standard drugs in the country and making the regulatory control more effective, the 12th Five Year Plan contains substantial provision for further strengthening the drug regulatory system both at central and state level.

(b) & (c): The licensing and regulatory control of manufacture of drugs are the subject matter of the State Licensing Authorities and State Drugs Control Departments. The information about the details of the manufacturers are, therefore, not maintained centrally. Further, the Central Drugs Standard Control Organisation (CDSCO) does not regulate the quantum of production of drugs by the drug companies.

©: As per the available information, the value of all finished medicines imported during the last 3 years is as under:

April 2010- March 2011 Rs. 2591.23 crores
April 2011- March 2012 Rs. 3893.83 crores
April 2012- February 2013 Rs. 3820.40 crores

(d) & (e): The Department of Pharmaceuticals in the Ministry of Chemicals & Fertilisers had constituted a High Powered Inter-ministerial Coordination Committee (HPIMCC) under the Chairmanship of the Secretary of that Department to implement the Government's commitment to provide quality medicines at affordable prices to the public. As per the available information, the first meeting of the Committee was held on 29.3.2010. Based on the decision taken in that meeting, two Working Groups, viz., Working Group for Quality of Medicines and Working Group for Pricing of Medicines were formed. In its second meeting held on 26.6.2012, the HPIMCC considered the suggestions made in the reports of the two Working Groups. Thereafter, the minutes of that meeting and the Reports of the two Working Groups were conveyed to the Ministry of Health & Family Welfare on 14.9.2013. The suggestions are broadly agreeable.

Question No. 881
Answered on 05.03.13

BILL ON MANDATORY USAGE OF GENERIC NAMES OF

881. DR. K.P. RAMALINGAM:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether it is a fact that Government is

considering to bring in a Bill to make use of genericnames for drugs mandatory for Government procurement and distribution;

(b) if so, the details thereof;

© whether it is also a fact that such a move will break the nexus between the Pharmaceutical companies and doctors; and

(d) if so, the details thereof?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) to (d) The Ministry of Health & Family Welfare has envisaged bringing in a clear provision in the law with its objective of promoting generic drugs. It has published a draft notification GSR 748(E) dated 5.10.2012 for inviting comments of stakeholders on amending the rules pertaining to the conditions for the grant or renewal of licences, for manufacture of drugs under the Drugs and cosmetics rules, 1945 to facilitate approval of drug formulations containing single active ingredient by the State Licensing Authorities in their proper/generic name only.

It has also taken up the matter with the State/UT Governments requesting them to formulate a time bound action plan for promotion of generic drugs. For promoting prescription of generic drugs by the medical practitioners, this Ministry has from time-to-time issued circulars to the Directors/Medical Superintendants/ Chief Medical Officers/In-Charges of all the central Government hospitals/dispensaries/wellness centres situated in Delhi and in other parts of the country administered by the CGHS Division of this Ministry.

At the hospitals level also, circulars by Medical Superintendants of hospitals in Delhi have been issued from time to time encouraging/motivating doctors to prescribe generic drugs. All the Sate/UT Governments have also been requested to take similar steps in their Hospitals/Health Institutions.

Question No. 886
Answered on 05.03.13

REVIEW OF VACCINE INDUSTRY BY WHO

886. SHRI PALVAI GOVARDHAN REDDY:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:
(a) whether it is a fact that a 16-MemberWHO team visited the country to review quality and other aspects of vaccine industry in the country;

(b) if so, the details thereof;

© the outcome of the review by WHO;

(d) whether it is also a fact that India failed in review test three times earlier; and

(e) if so, the lessons the Ministry has learnt from this and prepared its National Regulatory Authority to comply with WHO specifications?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE

(SHRI GHULAM NABI AZAD)

(a) to (c): Yes, The WHO National Regulatory Authority (NRA) Assessment of Indian Vaccine Regulatory Authority and relevant Institutions carried out from 10-14 December 2012 by a 16-members WHO team consisting of international experts from as many as eight countries- the US,

Sweden, France, China, Thailand, Egypt, Iran and Indonesia, was successful. The Indian Regulatory Authority was declared as functional against the stringent WHO NRA assessment indicators. This assessment ensures that the Indian regulatory overweight of NRA for vaccines continues to meet the international standards. Terming this as 'indeed a great achievement', the WHO congratulated the Ministry of Health and Family Welfare and hoped that the outcome of this NRA Assessment shall go a long way in strengthening the National Regulatory System in India and will reaffirm WHO's Country Cooperation Strategy's priority of supporting an improved role of the Government I of India in global health with a particular focus on strengthening the pharmaceutical sector, including drug regulatory capacity.

(d) & (e) : NRA assessment, done by WHO in 2001, 2004 and 2007 on some indicators as defined by WHO were not met. However, the NRA was declared as functional by WHO in 2009. NRA Assessment is a systematic and continuous assessment process followed by the WHO which also enables strengthening the regulatory mechanism through a method of gap assessment and subsequent compliance.

Question No. 229
Answered on 26.02.13

SALE OF NIMULID IN THE COUNTRY

229. SHRIMATI GUNDU SUDHARANI:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether it is a fact that Nimulid is banned in many countries of the world;

(b) if so, the countries where it is banned;

© the reasons for banning the same in these countries; and

(d) the reasons for sale of Nimulid in the country?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) to (c): Marketing authorization of Nimesulide containing medicinal products were suspended in Finland and Spain in 2002 and in Ireland in 2007 because of serious side effects affecting the liver. Further, the drug was prohibited in Malaysia (2008), Singapore (2008), Vietnam (2008) and Argentina (2009). However, the Committee for Medicinal Products for Human Use of European Union recommended for restricted use of Nimesulide containing medicinal products and the treatment with Nimesulide limited to maximum 15 days.

(d): Safety issues of Nimesulide drug formulations were assessed in consultation with an Expert Committee. As per the recommendations made by the Expert Committee, the Government prohibited the manufacture, sale and distribution of Nimesulide formulations for human use in children below 12 years of age through a Gazette Notification 82(E) dated 10.02.2011 as the use of drug is likely to involve certain risks to human beings and whereas safer alternatives to the drug are available. Further, it has been directed to all manufacturers of nimesulide containing formulations, on recommendations of the Drug Technical Advisory Board (DTAB), to incorporate a box warning on label as well as package insert and other promotional literature of nimesulide formulations that use of nimesulide should ordinarily be restricted to 10 days. If longer clinical use is warranted, liver function test should be assessed periodically.

Question No. 248
Answered on 26.02.13

AVAILABILITY OF BANNED DRUGS IN THE MARKET

248. SHRI A. ELAVARASAN:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:
(a) whether it is a fact that several drugs which are banned in developed countries are freely available in India and some of these drugs have proved more harmful;

(b) if so, the details thereof including the drugs banned outside India but available in India;

© whether it is also a fact that several drugs banned in India are still available in the domestic market;

(d) if so, the details thereof; and

(e) the steps taken to implement strictly the Central authority's ban on drugs and verify whether any banned drugs are being sold in the market?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI GHULAM NABI AZAD)

(a) & (b): A drug banned / restricted in one country may continue to be marketed in other countries as the respective government examines the usage, doses, indications permitted etc. and overall risk-benefits ratio and takes decisions on the continued marketing of any drug in that country.

Safety issues of drug formulations, as and when reported, are assessed in consultation with the Expert Committees / Drugs Technical Advisory Board (DTAB). Based on the recommendations of the Expert Committees / DTAB, the Central Government prohibits manufacture, sale and distribution of such drugs in the country. So far, the Central Government has prohibited the manufacture, sale and distribution of 91 drugs.

© to (e) The manufacture or sale of a drug prohibited by the Central Government is an offence. Under the provisions of the Drugs & Cosmetics Act, 1940 and the Drugs & Cosmetics Rules, 1945, the Drug Control Authorities of the State / Union Territory Governments ensure that the drugs prohibited are not marketed in the country. However, being a clandestine activity such practices are dealt with only through continuous surveillance and surprise inspections raids by the State Drug Control Departments. The inspectorate staff keep strict vigil and draw samples of drugs for test and analysis to monitor the quality of drugs moving in the country. The violations, if any, are dealt with by them in accordance with the provisions of the Drugs and Cosmetics Act. A new scheme has been prepared by the Central Government for providing assistance for strengthening of State Drug Control Departments during the 12th Five Year Plan.

Session Number; 228

MINISTRY OF CHEMICALS AND FERTILIZERS

Question No. 2830
Answered on 22.03.2013

MARKET BASED PRICING OF DRUGS

2830 SHRI D. BANDYOPADHYAY

Will the Minister of CHEMICALS AND FERTILIZERS be pleased to satate :-

(a) whether Government is considering to replace the time-tested and hitherto unchallenged cost

-plus-based pricing of medicines by market-based pricing; and

(b) if so, how Government is going to ensure availability of essential life saving drugs at affordable prices to the low and medium income earners, particularly when 80 per cent outpatient visits and 60 per cent hospital visits occur at private health care facilities/chemists in the country?

ANSWER

MINISTER OF STATE(INDEPENDENT CHARGE) IN THE MINISTRY OF CHEMICALS AND FERTILIZERS AND MINISTER OF STATE(INDEPENDENT CHARGE) IN THE MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION (SHRI SRIKANT KUMAR JENA)

(a) & (b): The Department of Pharmaceuticals has notified the National Pharmaceutical Pricing Policy-2012 under which the prices of National List of Essential Medicines-2011 are to be controlled & regulated price on the basis of Simple Average Price of all the brands having market share (on the basis of Moving Annual Turnover) more than and equal to 1% of the total market turnover of that medicine. The objective is to put in place a regulatory framework for pricing of drugs so as to ensure availability of required medicines – "essential medicines" – at reasonable prices even while providing sufficient opportunity for innovation and competition to support the growth of industry, thereby meeting the goals of employment and shared economic well being for all.

Question No. 2840
Answered on 22.03.2013

REVIVAL OF CLOSED PHARMACEUTICAL COMPANIES

2840 SHRI SHADI LAL BATRA

Will the Minister of CHEMICALS AND FERTILIZERS be pleased to satate :-

(a) the number of pharmaceutical companies closed during last five years, State/UT- wise;

(b) whether closure of these companies has badly affected the supply of cheaper drugs in the country;

© if so, the details thereof and the reactions of Government thereto; and

(d) the action taken by Government for revival of these closed pharmaceutical companies?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) IN THE MINISTRY OF CHEMICALS & FERTILIZERS AND MINISTER OF STATE (INDEPENDENT CHARGE) IN THE MINISTRY OF STATISTICS & PROGRAMME IMPLEMENTATION (SHRI SRIKANT KUMAR JENA)

(a) No such information is maintained by the Department.

(b) to (d) In view of reply to part (a) above, do not arise.

Question No. 2061
Answered on 15.03.2013

ESSENTIAL MEDICINES UNDER PRICE CONTROL MECHANISM

2061 SHRI N. BALAGANGA

Will the Minister of CHEMICALS AND FERTILIZERS be pleased to satate :-

(a) the details of the total number of essential medicines covered under the price control mechanism so far;

(b) whether Government has any proposal to bring in all the essential medicines under the price control regime to protect the interests of patients; and

© if so, the details thereof, and if not, the reasons therefor?

ANSWER

(a) : Under the provisions of the Drugs (Prices Control) Order, 1995 (DPCO, 1995) the prices of 74 bulk drugs as listed in its First Schedule and the formulations containing any of these scheduled drugs are controlled. There is no classification as "essential medicines" in the Drugs (Price Control) Order, 1995.

(b) & (c): The National Pharmaceutical Pricing Policy, 2012 (NPPP-2012) has been notified on 7th December, 2012. As per provisions of NPPP-2012, all the medicines as specified under National List of Essential Medicines-2011 (NLEM-2011) shall be under price control. NLEM contains 614 formulations of specified strengths and dosage forms, spread over 27 therapeutic categories and satisfy the priority healthcare needs of majority of the population of the country.

Question No. 2062
Answered on 15.03.2013

LEGISLATION FOR PRICE CONTROL AND MONITORING OF DRUGS

2062 SHRI A. ELAVARASAN

Will the Minister of CHEMICALS AND FERTILIZERS be pleased to satate :-

(a) whether Government has decided to bring in a new legislation for price control and monitoring of drugs replacing the existing regulatory frame work, Drug Price Control Order (DPCO) to meet the requirements of the new Pharmaceutical Pricing Policy;

(b) if so, the details thereof;

© whether the National Pharmaceutical Pricing Authority (NPPA) will be implementing authority for the new policy and the new DPCO; and

(d) if so, the details thereof?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS (SHRI SRIKANT KUMAR JENA)

(a) & (b): To implement the provisions of National Pharmaceutical Pricing Policy, 2012, the process of finalising a new Drug (Price Control) Oder has started.

(c) & (d): National Pharmaceutical Pricing Authority is the implementation authority of existing Drug (Price Control) Order the National Pharmaceutical Pricing Policy, 2012 and the new Drugs (Prices Control) Order.

Question No. 2063
Answered on 15.03.2013

PROMOTION OF LOW COST GENERIC DRUGS

2063 DR. T.N. SEEMA

Will the Minister of CHEMICALS AND

FERTILIZERS be pleased to satate :-
(a) whether differences have been found at large scale in the prices of essential medicines in the country;

(b) if so, the details thereof and the reasons therefor;

© the share of generic and non-generic medicines in the total medicine sale in the country during each of the last three years and the current year;

(d) whether Government is taking any steps to control the prices of drugs and to promote the use of low-cost generic drugs;and

(e) if so, the details thereof?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS (SHRI SRIKANT KUMAR JENA)

(a) & (b): There is no classification as "essential medicines" in the Drugs (Prices Control) Order, 1995. However, under the provisions of the DPCO, 1995 the prices of 74 bulk drugs as listed in its First Schedule and the formulations containing any of these scheduled drugs are controlled. National Pharmaceutical Pricing Authority (NPPA) fixes or revises prices of scheduled drugs / formulations as per the provisions of the DPCO,1995. No one is authorized to sell any scheduled drug / formulation at a price higher than the price fixed by NPPA. Therefore, in the case of scheduled medicines based on same chemical combinations, there may be bare minimum difference in prices among different brands.

In respect of drugs - not covered under the DPCO, 1995 i.e. non-scheduled drugs, manufacturers fix the launch prices themselves without seeking the approval of Government / NPPA. There is no control over the launch price of non-scheduled medicines. Therefore, differences in prices among different brands of medicine based on same chemical combinations in non-scheduled category are not ruled out.

©: The information on the share of generic and non-generic medicines in the total medicine sale in the country is not maintained centrally.

(d) & (e):The prices of scheduled drugs / formulations are controlled and fixed/revised by NPPA as per the provisions of the DPCO,1995. As a part of price-monitoring activity, NPPA also regularly examines the movement in prices of non-scheduled formulations. Wherever a price increase beyond 10% in a period of one year on moving basis is noticed, the manufacturer is asked to bring down the price voluntarily failing which, subject to prescribed conditions, action is initiated under paragraph 10(b) of the DPCO, 1995 for fixing the price of the formulation in public interest.

In order to provide relief to the common man in the area of healthcare, a countrywide campaign in the name of 'Jan Aushadhi Campaign' has been initiated by the Department of Pharmaceuticals, Government of India, in collaboration with the State Governments, by way of opening up of Jan Aushadhi Generic Stores in the Government Hospitals by way of supply of generic medicines through Central Pharma Public Sector Undertakings, to make available quality generic medicines at affordable prices to all. So far, 149 Jan Aushadhi Stores have been opened in different States/UTs in the country as on 28.2.2013.

Further, the National Pharmaceutical Pricing Policy, 2012 (NPPP-2012) notified by the Government on 7th December, 2012 has the

provision of bringing the medicines under National List of Essential Medicines-2011 (NLEM-2011) under price control.

Question No. 1272
Answered on 08.03.2013

PHARMACEUTICAL MNCs IN THE COUNTRY

1272 SHRI N. BALAGANGA

Will the Minister of CHEMICALS AND FERTILIZERS be pleased to satate :-

(a) the details of the total number of MNCs that have set up pharmaceutical companies in the country, during last two years, year-wise and company-wise;

(b) whether it is a fact that prices of medicines have been hiked after their entry and their subsequent actions; and

© if so, the details thereof and the response of Government thereto?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS (SHRI SRIKANT KUMAR JENA)

(a) As per the information from Centre for Monitoring Indian Economy(CMIE), six MNCs have set up pharmaceutical units as per table below:

Sl. No Name of MNC Year

1. Abbott Healthcare Pvt. Ltd. 2011
2. Fresenius Kabi Oncology Ltd. 2011
3. Mylan Laboratories Ltd. 2011
4. Vascular Concepts Pvt. Ltd. 2011
5. Shantha Biotechnics Ltd. 2011
6. Ranbaxy Laboratories Ltd.(Daichi-Sankyo Group) 2012

(b) & (c) Under the provisions of the Drugs (Prices Control) Order, 1995, the prices of 74 scheduled bulk drugs and the formulations containing any of these scheduled drugs are controlled. NPPA/Govt. fixes or revises prices of scheduled drugs/formulations as per the provisions of the DPCO, 1995. No one is authorized to sell any scheduled drug/formulation at a price higher than the price fixed by NPPA/Govt.

In respect of drugs not covered under the Drugs (Prices Control) Order, 1995 i.e. "non-scheduled drugs", manufacturers are at liberty to fix the prices by themselves without seeking the approval of Government/NPPA. Also there is no control on the launch price of the non-scheduled formulations.

However, as a part of price-monitoring activity, NPPA regularly examines the movement in prices of non-scheduled formulations. The monthly reports of IMS Health and the information furnished by individual manufacturers are utilized for the purpose of monitoring prices of non-scheduled formulations. Wherever a price increase beyond 10% per annum is noticed, the manufacturer is asked to bring down the price voluntarily failing which, subject to prescribed conditions, action is initiated under paragraph 10(b) of the DPCO, 1995 for fixing the price of the formulation in public interest.

Question No. 35
Answered on 22.02.2013

INTRODUCTION OF NEW DRUG POLICY

35 SHRI AJAY SANCHETI

Will the Minister of CHEMICALS AND FERTILIZERS be pleased to satate :-

(a) whether Government proposes to introduce a new drugs policy;

(b) if so, the salient features of the new policy; and

© how it would be beneficial to consumers, especially the common man?

ANSWER

(a): Yes, Sir. The Government has notified the National Pharmaceutical Pricing Policy, 2012 (NPPP-2012) where it has also been proposed to regulate and control the prices of National List of Essential Medicines-2011.

(b): The salient features of National Pharmaceutical Pricing Policy, 2012 (NPPP-2012) are as under:

The regulation of prices of drugs is on the basis of essentiality of drugs as under National List of Essential Medicines-2011.

The regulation of prices of drugs is on the basis of regulating the prices of formulations only. The regulation of prices of drugs is on the basis of fixing the ceiling price of formulations through Market Based Pricing (MBP).

©: The provisions under National Pharmaceuticals Pricing Policy-2012(NPPP-2012), are to put in place a regulatory framework for pricing of essential drugs as per the strength and dosages as specified in National Lit of Essential Medicines-2011 which satisfy the priority healthcare needs to majority of the population.

SHRI S. LAKSHMI NARAYANAN

(12-1-1948 - 9-2-2013)

OBITUARY

Shri. S. Lakshmi Narayanan is Pharmacy graduate from Madras Medical College. He was actively involved in various Associations' activities such as, Hon. Secretary, The Pharmaceutical Manufacturers' Association of Tamil Nadu, from 2004 to till date and Secretary General in the Federation of South Indian Pharmaceutical Manufacturers' Associations, from 2004 till date. Joint Secretary, Confederation of Indian Pharmaceutical Industry (SSI) till date from the date of its inception. He was also Secretary for Alathur Pharmaceutical Manufacturers' Association, Alathur, Tamil Nadu. He was the Director of M/s. Arlab India Pvt. Ltd. Alathur. He was also in the Executive Committee, Indian Drug Manufacturers' Association, Tamil Nadu State Board, as Special Invitee. He was President of Indian Pharmaceutical Association in 2005. He was survived with wife, two sons and grand children.

We pray his soul be rest in peace