

## Future of Hospital Pharmacy In India

*Praful Sheth, Past President of IPA and current Vice-President, FIP, was awarded the prestigious Prof. M. L. Khorana Memorial Lecture Award at the recently concluded 62<sup>nd</sup> IPC, 2010 at Manipal. On popular demand, we have reproduced his lecture here.*

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### Introduction

I never got an opportunity to meet professor M. L. Khorana personally. However as per Prof. Harkishan Singh, M. L. Khorana was an academician and a professional. His was an era (1909-67) during which the foundation of modern pharmacy in India was solidified and building of superstructure started.<sup>2</sup> I am fortunate to deliver Prof. M. L. Khorana memorial lecture a century after his birth.

In India, hospital pharmacy is now at a stage where the traditional practice should be upgraded so as to bring it at par with some of the best global practices. The 62<sup>nd</sup> Indian Pharmaceutical Congress 2010 hosted by the Indian Hospital Pharmacists' Association at Manipal offers an excellent platform for setting the vision for hospital pharmacy.

### Seven Global Initiatives

Globally, the efforts for the development of community and hospital pharmacy have been concurrently spearheaded by **FIP and WHO** and were linked to the development of Good Pharmacy Practices (GPP). These developments can be identified by following seven landmarks:

1. Defining Role of Pharmacists
2. Development of GPP Guidelines
3. Pharmacy Curriculum Reform
4. Concept of Pharmaceutical Care
5. Important WHO Resolutions
6. Bangkok Declaration
7. Basel Statements on the Future of Hospital Pharmacy.

#### 1. Defining Role of Pharmacist

In 1986, Revised Drug Strategy was adopted by the World Health Assembly which was followed by two meetings first in New Delhi on healthcare system in 1988 subsequently in Tokyo on Quality Pharmaceutical Services in 1993. These efforts resulted in the adoption of the famous World Health

Assembly resolution WHA 47.12 in support of the WHO Revised Drug Strategy in 1994.

#### 2. Development of GPP Guidelines

In 1992, standards for pharmacy services were developed by the International Pharmaceutical Federation (FIP) under the heading "Good pharmacy practice in community and hospital pharmacy settings". In 1999, FIP/WHO joint document on Good Pharmacy Practice (GPP) was released.

#### 3. Pharmacy Curriculum Reform

The two meetings first on "Preparing the future pharmacists" Vancouver (1997) and "Self care and self medication" The Hague (1998) reinforced the need for pharmacy curricular reform and the added value of the pharmacist in self-care and self-medication.

#### 4. Concept of Pharmaceutical Care

In 2006, the first edition of a practical handbook "Developing Pharmacy Practice - A Focus on Patient Care" was published jointly by FIP and WHO. This handbook is designed to meet the changing needs of pharmacists, setting out a new paradigm for pharmacy practice and presents a step-by-step approach to pharmaceutical care.

#### 5. Six Important WHO Resolutions

In course of these developments,

1.	WHO Medicines Strategy	WHA54.11
2.	Strengthening health systems in developing countries	WHA54.13
3.	Ensuring accessibility of essential medicines	WHA55.14
4.	Quality of care: Patient safety	WHA55.18
5.	Health promotion	WHA57.16
6.	Rational use of medicines	WHA60.16



*Praful Sheth receiving the Prof. M. L. Khorana Memorial Lecture Award from Dr. V. S. Acharya, Minister for Higher Education of Karnataka.*

following six important WHO resolutions were adopted:

#### 6. Bangkok Declaration on GPP

In 2007 the "Bangkok declaration on good pharmacy practice in the community pharmacy settings" in the South-East Asia Region was adopted by the South East Asian FIP-WHO Forum of National Pharmaceutical Associations (SEARPharm Forum) and sets the commitment of its Member Associations towards raising standards of pharmacy services and professional practice.

#### 7. Basel Statements on the Future of Hospital Pharmacy

More recently in 2008 the FIP annual congress at Basel on the future of hospital pharmacy adopted 75 consensus statements successfully. These were developed by 348 pharmacists representing 98 nations and adopted for profession's preferred vision of practice in the hospital setting.

### Hospital Pharmacy in SEA Region- Thailand and India

Current status of hospital pharmacy in **Thailand** is relatively strong when compared with other pharmacy professions. Hospital pharmacists in big hospitals are member of pharmacy and therapeutics committees and are well recognized amongst the authorities

1 The author is the Vice-President of International Pharmaceutical Federation (FIP) and Professional Secretary of SEARPharm Forum. FIP is a global federation of 124 national organisations of pharmacists and pharmaceutical scientists. Through its member organisations, FIP connects, represents and serves more than two million pharmacists around the world for better discovery, development, access and safe use of appropriate, cost effective, quality medicines worldwide. At regional level FIP operates through FIP-WHO forums.

2 Feature Article on Manohar Lal Khorana and His Journalistic promotion of the Profession. Pharma Times, Prof. M L. Khorana Birth Centenary Special, July 2009.

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and other medical professions. Hospital pharmacist plays role in storage/dispensing/warning labels/expiration dates for break pack medicines/warning for off label use/side effect/ADR monitoring/Drug Interaction.<sup>3</sup>

In India, it is estimated that there are over 12,000 full-fledged hospitals with about 9,00,000 hospital beds. As per the recent MCI guidelines, it is now mandatory that each teaching hospital has a Pharmacy Practice Department and a Drug Information Centre. India does not have any GPP Guidelines for Hospital Pharmacy and Pharmacy and Therapeutics Committees are non-existent in most hospitals nor there is a concept of hospital formulary. Pharmacists working in Govt. hospital are not given training in any of the areas by the Govt. However, Indian Hospital Pharmacists Association (IHPA) conducts regular training programs. It is unfortunate that in India, pharmacists have not much role to play in National Health programmes.<sup>4</sup>

However, there is good news as well. After considerable efforts of PCI and professional associations, the pay scale of in-service pharmacists has been almost doubled by fast track committee that too with a retrospective effect from 01.01.2006. In another 12 months, the 1<sup>st</sup> batch of Pharm.D (Post Baccalaureate) will come out. These are all clinically oriented pharmacists with sufficient hospital /clinical exposure.

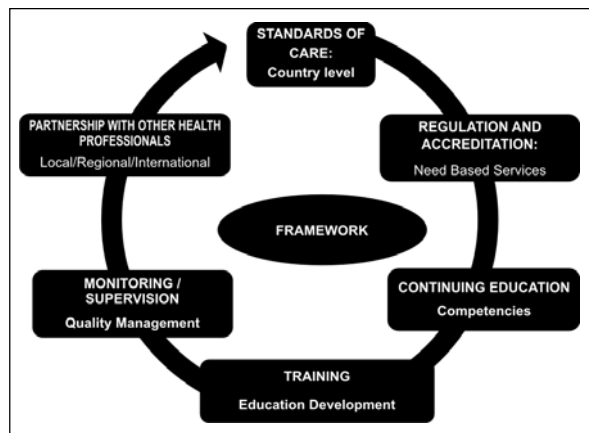
## Recommendations of NHRC-India

In 1999, The National Human Rights Commission (NHRC), India issued exhaustive directives relating to the manufacture, storage and distribution of large volume parenterals (LVP)<sup>5</sup> wherein the role of the pharmacist in drug management in Hospitals and Medical Stores Depots got highlighted. However, the recommendations still remain to be implemented. Therefore the best way forward is to identify major themes for implementation outlined in NHRC and Basel Statements. It may be interesting to note that for the future of hospital pharmacy in India while the recommendations of NHRC may be seen as offering the role, the Basel Statements can be taken as definition of the functions.

## Road Map - Quality Enablers

Finally the role of hospital pharmacy should focus on quality enablers e.g. training, continuing education, monitoring and supervision, laying down standards of care,

NHRC report	Basel Statements
<b>Overarching statement</b>	
Set up modern hospital pharmacy under Head, hospital pharmacy services, minimum qualification PG, reporting to MS, seniority at least Assistant Professor.	Chief Pharmacist/Director of Pharmacy, a senior professional should coordinate judicious, safe, efficacious, appropriate, and cost effective use of medicines in the hospital.
<b>Theme 1: Procurement</b>	
Develop policies and procedures for the procurement of multisource medicine items and inventory control, receipt, handling, storage, quality control, distribution and dispensing, etc.	Procurement of pharmaceuticals is a complex process that requires pharmacist control and technically competent staff.
<b>Theme 3 - Preparation and Delivery</b>	
Frame Good Warehousing Practices guidelines, impart training to hospital staff, record keeping of defective stocks and appropriate labeling including cautionary labeling.	Hospital pharmacists should assume responsibility for the appropriate labeling and control of medicines stored throughout the hospital.
<b>Theme 4 - Administration</b>	
Set up a Computerized Drug Information Service	Hospital pharmacists should ensure that the information resources needed for safe medicines preparation and administration are accessible at the point of care.
<b>Theme 5 - Monitoring of Medication Practice</b>	
Develop written policies and procedures for handling of quality related complaints, all medication errors and ADRs	A reporting system for ADRs should be established and maintained, and the necessary action should be taken to minimize identified risks. Reaction reports should be sent to regional or national pharmacovigilance reporting programs where these are available.
<b>Theme 6 - Human Resources and Training</b>	
Impart continuing education to hospital staff including pharmacists, nurses, doctors in the visual inspection of particulate matter before administering iv fluids to patients.	Human resource plans should cover all cadres and linked to health targets. Plans should describe strategies for education and training, recruitment and retention, competency development, salary and career progression.



regulation and accreditation of hospital pharmacy. This would involve planning of processes, execution with measurement and continuous improvement, engaging hospital pharmacists at country level.

## Conclusion

- In India, with the introduction of clinical

pharmacy oriented curriculum, in 21<sup>st</sup> century, profession should transform traditional hospital pharmacy system to emerge as essential service sector with best global practices.

- The IPC 2010 should reflect current practices and identify potential levers for action at country level.
- The roadmap should lead to development of Hospital Pharmacy policy and plans, identification of gaps in evidence and priority setting,

process enablers and facilitators, development of skills, attitude & knowledge for patient care, capacity building and partnership for action at country level.

This will be a fitting tribute to the memory of late Prof. M. L. Khorana.<sup>6</sup>

3 Mr. Teera Chakajnarodom, President, The PhAT, in preparation to first regional conference on future of hospital pharmacy in South East Asia Region (SEAR)

4 Mr. Raj Vaidya, Chair of the Community Pharmacy Section of IPA in preparation to first regional conference on future of hospital pharmacy in SEAR

5 Large volume parenterals: Towards Zero Defect, National Human Rights Commission, New Delhi.

6 The author profusely thanks M. Ahmed Khan for the help.