Volume 3, Issue 1 Jan-Feb, 2014

Indian Pharmaceutical Association–
Community Pharmacy Division (IPA-CPD)

IPA CPD E–Times

www.ipapharma.org

Editor: Dixon Thomas, IPA CPD

Message from the President of Community Pharmacy Section-International Pharmaceutical Federation (FIP CPS) and President of PharmaSuisse

Dear Colleagues,
It is a pleasure and an honor for me to have the opportunity to address you with a few words. The Community Pharmacy Section (CPS) is the biggest section of the International Pharmaceutical Federation (FIP). In 2012, we published our vision 2020 based on the most important incoming trends we expect in the future. We have tried to explain in a pragmatic way the issues pharmacy will face and how to meet the challenges. I am sure that a look at the vision 2020 published on our webpage will give you a lot of useful ideas for your own strategy.
In Switzerland, my country, we have implemented a lot of these ideas already. Education, new remuneration system based on fee for services, Quality management system, new role of pharmacist for chronic patients or acute patients with triage and first medication or e-Health promotion, are some of the challenges we have tackled successfully. If we want to change our profession and adapt it to the local needs of patients and those of the national health system, we have to be proactive and innovative.
To be part of FIP and attend the Congress is a great opportunity to benefit from an international exchange of ideas, solutions or projects. Come to Bangkok and see for yourself what I mean. Community pharmacy is a big family and you are definitely part of it. I'm looking forward to meeting you during FIP 2014. Best regards. (**Mr Dominique Jordan**)

In this Issue

Message from the Vice-President and Chairperson, IPA CPD

Dear Pharmacists, I am writing to you with pleasure and pride that the Indian Pharmaceutical Association (IPA) has entered its platinum jubilee year. It's a time to remember and salute all the IPA leaders who formed and nurtured the Association to take it to great heights. Community Pharmacy Division (CPD) has formulated its plans for the platinum jubilee year and is beginning a special 'Campaign for Awareness on Responsible Use of Medicines' (CARUM) focusing on consumer education. We are also developing educational materials for the pharmacists.

In the community pharmacy sector in India there has been lot of stirring regarding fulfilling basic aspects of pharmacy practice. The mere presence of pharmacist in the pharmacies while dispensing of medicines is still a concern. The Indian Pharmaceutical Congress Association (IPCA) in its annual congress 2013 has passed an important resolution addressing this issue. We do hope that this will act as an important advocacy step to improve the situation in the country. Please do read the resolution on page 15 for more information.
I wish all our local and global readers a very happy New Year. Have a wonderful year 2014! (**Mrs Manjiri Gharat**)

Editorial

Dear Pharmacists, Wishing you all a very happy New Year 2014.
As usual, this issue is stuffed with educational overviews about dosage forms, drug information, lab information, consumer dialogue, & good pharmacy practice training. This time we have community pharmacy practice write-ups from Finland & Canada, the video about pharmacy practice in Finland is comprehensive and I suggest using the link in page 7 to watch it. One special write-up this time is by Dr Claire on the need of social pharmacy education in India. After couple of news items another interesting write-up is about a resolution passed in the Indian Pharmaceutical Congress on improving pharmacy practice in India. Finally, we have an authentic article on role of pharmacists in pharmacovigilance programme of India written by the office bearers of the programme. We are always committed to publish novel pharmacy practice examples from India. Please send us stories and overviews about model practice experiences. (**Dr Dixon Thomas**)

Dosage form instructions: Tablet formulations

Types of tablet formulations	How to use	General information
Standard compressed tablets Multiple compressed tablets Compression coated tablet	Oral tablets for ingestion	Do not crush or break without pharmacist or physician advice. Swallow the tablet with a full glass of water (240ml).
Layered tablet Inlay tablet Modified Release tablet Delayed action tablet Targeted tablet Floating tablet Colon targeting tablet	Oral tablets for ingestion	To be swallowed whole. Do not crush or break, unless it is so specified in the label or advised by doctor or pharmacists in special occasions.
A. Chewable tablet B. Dispersible tablet C. Mouth dissolving tablet	Tablets for slow ingestion	A. To be chewed thoroughly, then swallow it with a glass of water. B. Place tablet in a small cup or a spoon of water, allow to break into powder, then swallow the suspension. C. Place in the mouth and allow to dissolve, then swallow the dissolved portions.
Lozenges and troches Sublingual tablet Buccal tablet Dental cones	Tablets used in the oral cavity	To be placed in the right place according to pharmacist or physician advice. Lozenges and troches to be dissolved slowly and swallowed. Sublingual tablet is to be placed beneath the tongue. Not to be swallowed, chewed, or broken.
Vaginal tablet Implants	Tablets administered by other routes	Vaginal tablets are introduced in the vaginal cavity. Not to be swallowed. Implants are inserted into subcutaneous tissue by surgical procedures.
Effervescent tablet Hypodermic tablet Soluble tablet	Tablets used to prepare solution	To be mixed with water and make a suspension / solution according to pharmacist or physician advice.

References: www.patient.co.uk.

Contributed by: **Dr L. Britto Duraisingh**,
Clinical Pharmacist &Asst Prof, PSG College of Pharmacy, Coimbatore.

Drug information: Metformin hydrochloride

250 mg,
500 mg,
500 mg SR
850 mg SR
1000 mg SR

Few examples of common Brands: Glycomet, Glyciphage, Dibeta etc.

Pharmacological class and Indication:

Biguanides, adjunct to diet to lower blood glucose level in patients with type 2 diabetes mellitus, Polycystic Ovary Syndrome.

Route	Onset	Peak	Duration
Oral	Unknown	Unknown	Unknown

To be taken under medical supervision

Counselling the patient:

- Advise to take metformin with or immediately after meals, at times and intervals recommended by the doctor. This is to avoid lactic acidosis. Do not change the dose without doctor's advise.
- Advise not to cut, break, or chew SR tablets.
- Metformin is contraindicated in patients with hypersensitivity to drug, heart failure, renal disease, hepatic disease or metabolic acidosis.
- Instruct patient to inform about metformin use if they are undergoing radiologic studies involving parenteral administration of iodinated contrast materials because it may result in acute renal dysfunction.
- Safety and efficacy of metformin is not established during pregnancy.
- Make sure the patient understands that therapy relieves symptoms but doesn't cure diabetes.
- Stress the importance of adhering to specific diet, weight reduction, exercise, and personal hygiene programs. Explain how and when to perform self-monitoring of blood glucose level.
- Advise the patient to check blood sugar regularly as directed by the doctor. Inform a doctor if blood sugar measurements are too high or too low.
- Inform patients about signs, symptoms & management of hyperglycaemia and hypoglycaemia.
- Symptoms of hypoglycaemia are: shaking, sweating, anxiety, dizziness, hunger, rapid heartbeat, impaired vision, weakness & fatigue, headache & irritability.
- Management of hypoglycaemia: drink half cup of juice, or chew 3-4 hard candies, or 2 table spoon resins, or 1 tablespoon honey or 1 table spoon of condensed milk.
- Inform the patient to avoid alcohol during therapy; it may potentiate toxicity (hypoglycaemia) of metformin in the patient.
- Advise the patient to drink enough fluids to prevent dehydration unless your doctor directs you otherwise.
- Advise to store in a cool and dry place.

For further details and comments, e-mail to ipacpdtimes@gmail.com

AUXILLARY LABEL

Metformin tablet x mg
Take orally with or just after food

Drug information service is a vital part of the functioning of pharmacies. A computer with internet connection could help in providing authentic and unbiased information to health care professionals.

Reference: AHFS Drug Information 2010

Lab information: SGOT & SGPT

Theory:

The most commonly measured liver enzymes to detect the abnormalities in liver are the aminotransferases. The two aminotransferases that are checked include alanine aminotransferase (ALT or SGPT) and aspartate aminotransferase (AST or SGOT).

Normal values:

SGOT	Males	8-26 U/L
	Females	8-20 U/L
	Children	19-28 U/L
SGPT	Males	7-46 U/ml
	Females	5-35 U/ml
	Children	3-37 U/L

Importance:

These are the intracellular enzymes involved in amino acid metabolism. They transfer the amino group from donor molecule to a recipient molecule. They are present in large concentrations in liver, skeletal muscle, brain, red cells, and heart. They are released into the bloodstream when tissue is damaged, especially in liver injury

Interpretation:

Increased in:

Acute viral hepatitis, biliary tract obstruction (cholangitis, choledocholithiasis), alcoholic hepatitis and cirrhosis, liver abscess, metastatic or primary liver cancer; right heart failure, ischemia or hypoxia, injury to liver (shock liver), extensive trauma. Drugs that cause cholestasis or hepatotoxicity.

Decreased in:

Pyridoxine (vitamin B6) deficiency.

Clinical Diagnosis:

Management of abnormal levels of SGOT and SGPT:

- Treatment depends upon the diagnosis of disease
- Repeat liver function tests (LFTs) in 6 months time.
- If the cause is alcohol-related then inform the patient and ask them to abstain, and repeat the tests.
- Other lifestyle changes may help, e.g. good diabetes mellitus control and weight loss.
- If the patient is unwell despite slightly abnormal LFTs then they may need to be referred more urgently.

Reference:

http://www.med-health.net/Sgot-Sgpt.html
http://www.webmd.com/a-to-z-guides/liver-function-test-lft
http://www.medicinenet.com

Consumer dialogue: Nausea & vomiting in pregnancy

Pharmacist: Good morning, my name is xxx, I am the pharmacist at your service. How can I help you?

Patient: Hi, myself yyy and I am suffering from nausea and vomiting; can you please dispense me this medications?

Pharmacist: Sure, can I ask few questions, since when have you been suffering from nausea and vomiting?

Patient: Yes, I have been suffering since 5 days and my doctor said it is because I am pregnant. Why does it happens? My sister had no vomiting when she was pregnant!

Pharmacist: No evidence available why pregnant women have nausea and vomiting during pregnancy. It's probably due to all of the changes taking place in their body, such as high levels of hormones in blood, but it is unclear what exactly causes it.

Patient: How long will these symptoms last?

Pharmacist: Nausea and vomiting usually starts around the sixth week of pregnancy and stops around the 12th week. However, you may still have it after that, often up to until your 20th week. Some women will have nausea and vomiting for longer duration, maybe even until the end of pregnancy.

Patient: Should I be worried? Will it affect nutrition to my baby?

Pharmacist: Nausea and vomiting isn't usually harmful for pregnant women and their babies. For most women, nausea and vomiting doesn't last all day and there are times when they feel hungry and take food. However, in severe cases you may not be getting the nutrients and fluids that you and your baby need. Speak with your doctor if you are so sick that you miss meals day after day.

Patient: What if I just can't take any food?

Pharmacist: This is when you are so sick that the lack of fluids and nutrients becomes dangerous for you and your baby. The biggest worry is dehydration. If you don't pass urine regularly or have dark yellow urine, and you cannot drink enough liquid to correct this condition, consult your doctor. You should also get help if you are so sick that you are losing weight rapidly.

Nausea and vomiting can be difficult to control; the sooner you are diagnosed and get treatment, the more likely you will be to avoid severe symptoms.

Patient: Is there any medicines that can help?

Pharmacist: Many women want to avoid taking medicine when they are pregnant. However, changing your diet and daily routine might not be enough to relieve your symptoms. You shouldn't feel guilty about wanting to feel better, and your doctor can prescribe medication to help reduce your nausea and vomiting.

A combination of doxylamine (an antihistamine) and pyridoxine (vitamin B6), which is the only medication approved for the treatment of nausea and vomiting during pregnancy.

Patient: Are natural products safe?

Pharmacist: People often assume that 'natural' products or remedies are safer than prescription medications. However, many of these natural or herbal products have not been clinically tested to evaluate their safety and efficacy. Even fewer products have been properly tested during pregnancy. Ask your doctor or pharmacist before taking any herbal remedies.

Patient: Should I worry if I don't have nausea and vomiting?

Pharmacist: No. Every pregnancy is unique: the severity of nausea and vomiting you experience may be different from other women, and may even be different each time you are pregnant.

Patient: Ok, thank you for providing me all the valuable information and I will contact you further if any other information is required.

Pharmacist: Thank you for spending your valuable time. And I will be always at your service to provide information. Our pharmacy phone number is on the medicines cover, you can call me if you have a doubt.

GPP patient instructions: Case 2

The community pharmacy receives a prescription on the letterhead of a doctor:

Rx
For Mr Ashwin Patil (Name changed for confidentiality)

Brand A Tab Fluvoxamine (Antidepressant) Cr	100mg	1-0-0	
Brand B Tab Amisulpride (Mood stabilizer)	200mg	0-0-1	
Brand C Tab Oxcarbazepine (Thought Stabilizer)	600mg	1-0-0	
Brand D Tab Pantoprazole (Acidity control)	40mg	1-0-0	*For 20 days*

Analyzing the prescription:

The community pharmacy receives a prescription on the letterhead of a doctor:
Analyzing the prescription:
Quick check to confirm that the doctor is qualified – YES, MD Psychiatrist.
Quick check to see the date – YES, fresh date.
That means the prescription is valid.
Patient Mr Ashwin – Check whether the person who had brought the prescription is the patient. Confirm him he is an adult.
Basic patient instructions to be given irrespective of patient asking or not (use a language the patient understands):

- Please DO NOT use Brands A, B & C more than the dose, more often than recommended by the doctor, and for longer duration than recommended by the doctor.
- Tablet Brand A Fluvoxamine: Please take one tab once a day in the morning after breakfast along with a glass of water.
- Brand B is Amisulpride. Please take one tab 1 hour before dinner with plenty of water.
- If you have diabetes, your diabetes may need careful monitoring.
- Brand C is Oxcarbazepine. Take one tab in the morning with or without food. Do not stop taking this medicine abruptly.
- Brand D is Pantoprazole. Take one tab empty stomach with a glass of water in the morning 01 hour before any food.

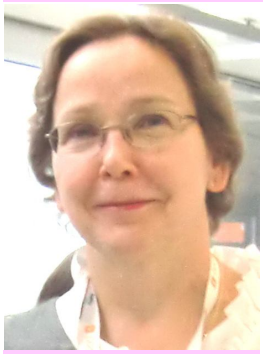
Additional information which could be provided if the patient asks/wants to know (one or more of the following information can be shared):

- Tablet Brand A: Fluvoxamine. Since any psychoactive drug may impair judgment, thinking, or motor skills, patients should be cautioned about operating hazardous machinery, including automobiles, until they are certain that Fluvoxamine therapy does not adversely affect their ability to engage in such activities.
- Side effect is increased risk of bleeding. Nonsteroidal anti-inflammatory drugs, warfarin, and other anticoagulants may add to this risk.
- Brand B Amisulpride: Withdrawal symptoms including nausea, vomiting and insomnia have been described after abrupt cessation hence gradual withdrawal is required.
- Risk of Hyperglycemia hence blood sugar monitoring is a must.
- Brand C Oxcarbazepine: Consult Doctor immediately if serious skin reactions occurs.
- Brand D Pantoprazole is an enteric coated tablet. If taken with alkaline food, the enteric coating dissolves & medicine is affected by the acid present in stomach. So take either one hour before or 2 hours after food.
- Alcohol can interfere with medicines please avoid or give interval of 2 hours.

If at all you experience any side effects during the treatment, please contact your doctor immediately.
If you have any other question about your medicines, please feel to discuss the same.
Please bring a fresh prescription next time as I have dispensed full course prescribed on this prescription.

Contributed by: **Mr Mahadev Patel,**
Community Pharmacist, Patel Medical, Mulund, Mumbai

Finnish healthcare & community pharmacy practice



Eeva Teräsalmi

Finnish healthcare:

Finland is located in Northern Europe. It is a parliamentary democracy with 5.5 million inhabitants. In historical times, Finland has been part of Sweden (1300-1809) and autonomous area under Russian rule (1809-1917). Its independence was declared 6.12.1917.

The country has a large area of 338 435 km^2. Over 10 % is covered by water with over 1000 lakes. We have four seasons, long days in summer and long nights in winter. The population density is low with 17.9 people/km^2. Finland belongs to the EU and our currency is Euro. The official languages are Finnish and Swedish.

Finnish economy is open, free market with quite big official sector. GDI is about 36000 $/capita (21st place). The service sector covers about 60 % of GDI. Main industries are chemical, foresting, machinery and IT.

Healthcare and primary education are organized by municipalities and covered by taxes. The schools, universities and vocational education are free of charge, as is healthcare. There is a small private sector in healthcare where the costs are reimbursed by a national insurance company, Kela. Kela also reimburses the prescription medicines which people buy from community pharmacies.

Finnish community pharmacies:

We have about 600 private community pharmacies with about 200 dispensaries owned by proprietor pharmacists and some 30 hospital pharmacies owned by hospitals. The hospital pharmacies are not allowed to sell medicines to outpatients.

In the following links you can learn more of community pharmacies in Finland:

www.youtube.com/user/SALAFP/videos

and

www.apteekkariliitto.fi/en/annual-reviews.html

Contributed by: **Ms Eeva Teräsalmi**,
MS in Pharm, eMBA, Pharmacy Owner, Finland.
Vice-President, International Pharmaceutical Federation (FIP).

Community pharmacy practice in Canada

Readers may be interested in these comparisons between Canada and India:

Parameters	Canada	India
Population density per square KM	4	411
Pharmacists per 10,000 population	10	06
Percentage community pharmacists	71	55

Pharmacists in Canada continue to rank near the top of polls measuring most trusted professionals. That trust no doubt comes by professionals adhering to a code of ethics and standards of practice and professionals expressing a desire to help the patient with their healthcare and pharmaceutical needs.

In this article we will highlight some current activities in Canadian pharmacy.

Connect and CARE Model:

In May 2013, 2 Canadian researchers Lisa Guirguis and Sherrill Johnson developed a toolkit to investigate and support increased communication between pharmacists and patients. The landscape of community pharmacy is changing rapidly across Canada. Health care providers are increasingly moving towards the adoption of patient-centred care models, which require shared decision-making between health care providers and patients. Concurrently, new pharmacy service frameworks are being implemented across the country, giving community pharmacists the ability to prescribe, inject medications and provide routine medication reviews. In many jurisdictions, reimbursement frameworks compensate pharmacists for performing these new roles. Community pharmacists provide services that are much needed with an aging Canadian population, increasing rates of chronic disease, and insufficient access to physician services.

Community pharmacists have the distinction of being one of the most geographically and temporally accessible health care service providers in Canada, yet are also noted as a vastly underutilized resource in community-based health care services.

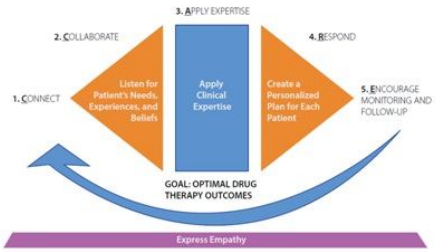
The goal of this project was to produce an evidence-based model that would support community pharmacists to increase engagement with patients in community pharmacies.

Warren Meek

The **Connect and CARE Model** is comprised of the following five stages, illustrated below:

1. Connect: Take a moment to connect with the person at the counter.
2. Collaborate: Talk with the patient about medication or medical issues. Collaboration in a patient-centred model assumes that communication will be bi-directional, between pharmacist and patient, and address patient needs and concerns.
3. Apply Clinical Expertise: Use clinical knowledge and expertise to ensure patients receive the right medication-related solutions.
4. Respond: Respond to patient's needs with a personalized plan, with information that is tailored to - and relevant for - the individual patient. Support the patient in understanding how medication information applies to their specific needs and concerns.
5. Encourage Monitoring and Follow-up: make patients aware pharmacists are interested in their health and want to know how they are doing. Also ensure patients have enough information to make sure their medications are working for them.

Expressing Empathy helps to create and maintain the connection. It can occur at any stage – or all stages – of the Connect and CARE Model.



A webinar presented by the Canadian Pharmacists Association can be viewed at: http://tinyurl.com/ourj9of

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Arthritis screening and support program

Shoppers Drug Mart – Canada's largest pharmacy network launched the company's Arthritis Screening program - a unique way for Canadians to work with a pharmacist to help detect arthritis early and manage their condition. An estimated one in six Canadians aged 15 years and older live with arthritis and its prevalence has a tremendous impact, translating into lost productivity, absenteeism and increased health care spending – costing an estimated $33 billion annually.

The program was developed from research carried out at the Arthritis Research Centre of Canada with funding provided from the Government of Canada through the Canadian Institutes of Health Research. It shows how researchers, patients and the private sector can work together to provide innovative health solutions to Canadians.

Pharmacists at more than 1,200 Shoppers Drug Mart stores across Canada will be providing arthritis screening and information to Canadians as part of a three-year partnership between Shoppers Drug Mart/Pharmaprix, Arthritis Consumer Experts and the Arthritis Research Centre.

http://tinyurl.com/nntffpz will link you to the Shoppers Drug Mart program.

Pharmaceutical Opinion Ontario

Pharmacist Bryan Gray feels that pharmacy in Canada is facing many challenges but also many new opportunities. With the expanding scope of practice for pharmacists, remuneration is available for a variety of cognitive services. With an aging Canadian population taking increasing amounts of medication, there is great potential for side effects and/or drug interactions. To remedy this, the Ontario MedsCheck program was launched as a 20- to 30-minute one-on-one meeting with a community pharmacist to review the medication regimen and look for any drug-related problems or areas for optimization. Following a medication review,

the pharmacist may receive remuneration for providing clinical recommendations through the Pharmaceutical Opinion Program.

The Pharmaceutical Opinion Program launched in Ontario on September 1, 2011, and is intended to supplement the MedsCheck program that began in 2007.

Developing strong relationships with prescribers will be critical. As minor ailments prescribing, adaptation and substitution become more common; prescribers must be able to trust the pharmacist to make evidence-based, patient-centred decisions. Even when pharmacists are able to access the patient's medical record, inter-professional collaboration will still be essential. The Pharmaceutical Opinion Program is a great first step for the profession, but more must be taken to reach our full potential.

Bryan's complete article can be read at http://cph.sagepub.com/content/146/6/329.full

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9000 Points of Care: Improving Access to Affordable Healthcare

The member corporations of the Canadian Association of Chain Drug Stores (CACDS) along with the Canadian Generic Pharmaceutical Association (CGPA) have aligned in Canada's broader pharmacy community to play a vital role in ensuring the availability and affordability of drug therapies that Canadians need. That alignment delivers an estimated $12.5 billion in economic value to Canada's healthcare system every year. That $12.5 billion in value comes from preventing hospitalizations, offering a strong portfolio of generic medications, and making the most of an efficient distribution system and supply chain. Their nationwide community includes prescription drug manufacturers, distributors and nearly 9,000 community pharmacies affiliated with and through CACDS.

Out of this collaboration has come Broader Pharmacy's Plan for Improving Access to Affordable Healthcare. It outlines five key initiatives that seek to improve patient outcomes, contain costs, and ensure the sustainability of our healthcare system for the sake of the patients of tomorrow. In working together, Canada's broader pharmacy community can in three years:

Prevent up to 600,000 ER visits, 1,500 hospitalizations, and free up to 2.4 million physician hours for focus on more critical care by expanding pharmacists' scope of practice to include treating minor ailments and administering vaccines;

Prevent up to 1.3 million ER visits, 500,000 hospitalizations, and free up to 6.3 million hours of physician time by managing chronic conditions more effectively;

Reduce system costs by $7 to $9 billion through improved access and use of affordable medications;

Implement state-of-the-art emergency preparedness and pandemic response systems by leveraging pharmaceutical distributors; and

Avoid up to 300,000 emergency room visits and up to 86,000 hospitalizations resulting from adverse drug reactions by focusing on better electronic infrastructure and resources, connectivity, and information sharing.

The plan's five key initiatives are:

Treating minor ailments and administering vaccines by continuing to expand pharmacists' scope of practice;

Ensuring affordable access to key medications by creating policies and plan designs that encourage lower-cost alternative therapies;

Helping patients manage chronic conditions more effectively to improve quality of life and keep patients out of critical care;

Leveraging the pharmaceutical distribution model by building state-of-the-art emergency preparedness and pandemic response systems; and

Further preventing adverse drug reactions by focusing on information sharing, user-friendly eHealth systems, and connectivity with other healthcare practitioners.

Details on this plan are available at http://9000pointsofCare.ca

Contributed by: **Mr Warren Meek**
BSc (Pharm), RPh, FFIP,
Past-President, Canadian Pharmacists Association,
Past Ex-Co Member, Community Pharmacy Section, International Pharmaceutical Federation (FIP CPS).

Why social pharmacy education is needed in India

Claire Anderson

The practice of pharmacy, and consequently, the pharmacy curriculum in many countries have changed considerably over the last twenty years in response to a rapidly changing economic, political and social environment. The cost of providing health care continues to escalate, with a greater range of health technologies available to an ever increasing ageing population. The costs of medicines continue to rise and there is heightened awareness of patient safety issues and the occurrence of errors and adverse events. People are increasingly knowledgeable about the medicines they take and many will have already consulted the internet to find out more information, by the time they seek professional help. They will also demand more information and not blindly trust the advice of health professionals. If pharmacists are technically excellent and also communicate in a patient centred manner, patients will not only be better informed but will also be more satisfied with their care. In a UK study only 16% of patients prescribed a new medicine took it as prescribed, experienced no problems and receives as much information as they needed. Ten days after starting a medicine, almost a third of patients were already non-adherent. So pharmacists need to have the skills to support people in their medicines taking, advise doctors about safe and rational prescribing as well as in simply supplying medicines.

In many countries there has been a blurring of roles between health care professionals leading to increased competition for example, in UK, Canada and New Zealand accredited pharmacists are able to prescribe medicines. The pharmacy profession has had to face up to key technological developments, in particular the development of original pack dispensing and robotics but also the evolving role of the pharmacy technician which has meant that community pharmacy has lost one of the components that sustained its professional status—compounding and to some extent dispensing. In the UK for example technicians can now dispense and check medicines. This leaves pharmacists free to provide patient facing clinical and public health services for example, medicines use reviews, smoking cessation services, immunizations etc. These new roles mean that pharmacists need to have excellent communication and consultation skills, understand people's heath beliefs and their concerns about taking medicines.

As a result of these developments, the pharmacy curriculum in many countries have evolved from being dominated by the physical sciences meeting the needs of drug discovery, development and control only, to including clinical, social, psychological, administrative and practice elements. The basic and applied sciences of pharmaceutical chemistry, pharmaceutics, pharmacognosy and pharmacology, with their heavy reliance on the teaching of the drug entity, its chemical nature, its derivation from plant and animal sources, its action on and disposition within the body and the formulation of various dosage forms, have given way to a greater emphasis on subjects based around the clinical and social requirements of patients and a knowledge of medicines and diseases.

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In 1979 Johnson and Wertheimer proposed a general definition for what they then called "behavioural pharmacy": Behavioural pharmacy is the field concerned with the development of behavioural science knowledge and techniques relevant to the understanding of drug use, drug effects, drug selection and prescribing, behavioural-therapy adjuncts and alternatives to drug therapies, the professional behaviour and wellbeing of pharmacy practitioners, and the application of this knowledge and these techniques to prevention, diagnosis, treatment and rehabilitation.

Social pharmacy is a hybrid discipline, drawing on the theories and methodologies of the social and behavioural sciences, including sociology, social psychology, psychology, political sciences, educational studies, communications, economics, history, and anthropology. As such, it can be conceived of as part of a socio-environmental or bio-psycho-social approach to understanding health and illness as distinct from the commonly accepted biomedical approach. One of the chief contrasts between these two approaches is that the former emphasises the social and psychological determinants of health for example, the effect of working environment, access to healthcare and educational level. Whereas the biomedical model focuses on the physical aspects of disease and treatment.

If a pharmacist understands something about patient behaviour regarding health and illness and taking medicines he or she will be better equipped to help someone change their behaviour and to adhere to their medicines. For example a lady comes to the pharmacy with a prescription for antibiotics but says she can only afford two days of capsules the pharmacist would need to carefully explain the importance of taking a full course of antibiotics and explain treatment and antibiotic resistance in a simple manner tailored to that particular lady's needs and beliefs. If the lady only gets money on a daily basis the pharmacist could encourage her to come back every day to get her antibiotics rather than buying them all at once. If pharmacists in India wish to provide more services like smoking cessation it will be important for them to understand people's behaviour and the psychology of changing behaviour like smoking, a person has to want to change and have the necessary support to do so. If people are asking to buy inappropriate medicines that may be abused or for example an antibiotic to treat a viral infection it is important for the pharmacist to be able to engage with the patient and have a consultation to determine which medicine is appropriate and if the need to be referred to a doctor rather than just sell the requested product. If a doctor is prescribing irrationally and the prescription is a threat to patient safety pharmacists need to learn how to communicate effectively with doctors to resolve the issues for the patient's benefit. Communication and consultation skills can always be improved and developed, not everyone is born with these skills. It is essential that pharmacists and pharmacy students in India, like their colleagues across the world are also trained in social pharmacy so that they can better interact with patients and other health professionals and provide excellent patient centred care.

Contributed by: **Dr Claire Anderson** PhD, FRPharmS, FFRPS, FRSPH

Professor of Social Pharmacy, Head of Division of Social Research in Medicines and Health School of Pharmacy, University of Nottingham, UK.

Pharmacy practice module: Advanced learning series—6

Organizing team with resource persons

Indian Association of Colleges of Pharmacy (IACP) in association with St. Peter's Institute of Pharmaceutical Sciences, Hanamkonda and 26 pharmacy institutions in the state of Andhra Pradesh jointly organized Pharmacy Practice Module: Advanced Learning Series-6 on October 6-8, 2013, at Hotel Daspalla, Hyderabad, Andhra Pradesh, India. This Pharmacy Practice Module: Advanced Learning Series-6 was inaugurated by Prof. Krishna Kumar, Howard University, Washington DC, USA in the presence of Prof. T. V. Narayana, Secretary, Indian Pharmaceutical Congress Association, Dr B. Jayakar, Treasurer, IACP, Mr T. Jayapal Reddy, Chairman, St. Peter's Institute of Pharmaceutical Sciences, President AP Pharmacy Private Colleges Association, Dr Amy Kennedy, Assistant Professor at University of Arizona, Tucson, AZ, USA, Mr Malla Reddy, Dr Ram Das, Mr Pandu Ranga Reddy, Dr Rao Vadlamudi and Dr Suresh Bandari, Scientific Coordinator and Principal St. Peter's Institute of Pharmaceutical Sciences and various college managements and principals.

Continuing pharmacy education (CPE) at Cochin, Kerala


Inauguration

Lisie College of Pharmacy in collaboration with Kerala State Pharmacy Council (KSPC) organized a continuing education program (Pharmalit 2014) for working pharmacists on Jan 11, 2014. Pharmalit 2014 was inaugurated by Sri. Hibi Eden MLA in presence of Rev. Fr. Thomas Vaikathuparambil. Over 150 pharmacists from different parts of Ernakulam District, Kerala actively participated in the educational event. KSPC has been conducting such CPEs in different parts of the state and made it mandatory for all working pharmacists for renewal of their registration. In the morning session Mr Emmanuel James, Assoc. Professor, Amrita School of Pharmacy, Ernakulum discussed on counselling of patients with hypertension and hyperlipidemia. It was followed by a discussion on counselling of asthma patients by Mr M. Sureshchand, Retd. Professor, College of Pharmaceutical Sciences, Trivandrum. In the afternoon session, a well known pharma activist Ms Leena Thomas showcased the role of modern pharmacists in patient's hour of need. Then Dr Dixon Thomas from IPA CPD discussed on tuberculosis control by community pharmacists. Finally a demonstration on usage and handling of inhalation devices was delivered by Cipla Respiratory Unit. Participating pharmacists expressed their feedbacks on usefulness of such programs in upgrading the profession and business. Especially many of the pharmacists were interested in being recognized as DOTS pharmacists.


Participants

Hearty Congratulations!

Mr Santosh Ghodinde, Community Pharmacist, Dhanwantari Medical, Panvel, Maharashtra received 'Udyogaratna Puraskar' (award for vocational excellence) from Takle Charitable Trust situated in Panvel for his healthcare service toward the community for last 28 years. He is actively involved in IPA activities as well as has been ex-President of the Rotary Club in Panvel. We congratulate him for this honor and wish him success in the future.

Brief information about schedule H1 in Indian drug law

Govt. of India, on a wide notification No. 441, dated Aug 30, 2013 vide GSR (588) 3 has amended the Drugs & Cosmetics Act to include new schedule, namely Schedule H1. Please find here below certain salient features of the same:

1) The Schedule H1 will be in effect from March 1, 2014.
2) Schedule H1 consists of a list of 46 drugs, which is given in the Annexure 1.
3) Those retailers who are doing manual billing (not computerized) are advised to keep separate bill books or separate series of bill numbers, so that they can produce the records immediately when asked by the drug control officials.
4) Those retailers using computerized billing are advised to fill the column of schedule in product master against those drugs included in the Schedule H1, as Schedule "H1".
5) Retailers have to maintain a separate register to record the sale of Schedule H1 drugs. The Schedule H1 register should have the following columns: a) Name of the product and potency, b) Quantity sold, c) Name and address of the prescriber, d) Name of the patient.
6) These records are to be maintained for a period of minimum 3 years.
7) It is mandatory from March 1, 2014 that all the products included in schedule H1 are labeled with schedule H1 drug warning "To be sold by retail only on the prescription of a Registered Medical Practitioner only" in a box with red border.
8) Preparation of Schedule H1 drugs for eye, ear and nose are included where as preparation of schedule H1 drugs containing products for topical and external use are not included in the schedule.

Facts in the law which automatically apply to Schedule H1:

1. These drugs are to sold only against the prescription of a Registered Medical Practitioner.
2. The prescription has to be complete in all aspects, with full details.
3. When the prescription is dispensed, the pharmacy/medical store has to put the "dispensed" stamp and date and sign it.
4. A prescription can be dispensed only once unless the doctor specifies in writing that it can be dispensed more than once, and how many times.
5. Verbal, telephonic, E-mail, Fax, SMS, etc. requests/orders for dispensing Schedule H1 cannot be entertained.

Annexure 1

Alprazolam, balofloxacin, buprenorphine, capreomycin, cefdinir, cefditoren, cefepime, cefetamet, cefixime, cefoperazone, cefotaxime, cefpirome, cefpodoxime, ceftazidime, ceftibuten, ceftriaxone, ceftizoxime, chlordiazepoxide, clofazimine, codeine, cycloserin, diazepam, diphenoxylate, doripenem, ertapenem, ethambutol hydrochloride, ethionamide, feropenem, gemifloxacin, imipenem, isoniazid, levofloxacin, meropenem, midazolam, moxifloxacin, nitrazepam, pentazocine, prulifloxacin, pyrazinamide, rifabutin, rifampicin, sodium para aminosalicylate, sparfloxacin, thiacetazone, tramadol, zolpidem.

Note: In case of any queries about schedule H1, please consult the drug inspector of your area.

IPC Resolution on presence of pharmacist for dispensing medicines in India

A resolution was moved and passed at the recently concluded Indian Pharmaceutical Congress (IPC) on 22nd December, 2013 in Delhi regarding the presence of pharmacist in the pharmacy set ups, which includes drug stores, rural medical dispensaries, sub-centres, urban health centres, primary health centres, community health centres, district hospitals and even the central Govt. public hospitals and dispensaries, defense services and railways. Mr Prafull Sheth, Vice President, FIP (International Pharmaceutical Federation) proposed the resolution and Hon'ble Labour Minister Mr Oscar Fernandes read out the operative part of the resolution and assured to look into the matter. We hope that this will be an important advocacy initiative to ensure the presence of pharmacists in pharmacies across the country which is much needed as per the drug laws and most importantly for public safety.

The Resolution Draft:

The Pharmacist is a formally qualified health professional who is trained in handling prescriptions and medicines. One of the important provisions of the Drugs & Cosmetics Act 1940 & Rules 1945 is that, “The supply, otherwise than by way of wholesale dealing, of any drug supplied on the prescription of a registered medical practitioner shall be effected only by or under the personal supervision of a registered pharmacist. “Furthermore, provision of the Pharmacy Act 1948 is that “no person other than a registered pharmacist shall compound prepare, mix, or dispense any medicine on the prescription of a medical practitioner”. This means that it is mandatory for a registered pharmacist to be present in the pharmacy/medical stores throughout its opening hours and dispense medicines.

Unfortunately, in India the situation is not fine, some of the facts are:

- A Pharmacist is not always present in the pharmacy/medical store. (Situation vary from region to region, state to state and pharmacy to pharmacy)
- Officially many pharmacies/medical stores show that they have a registered pharmacist, but this is only on paper. The pharmacist may not be always present, and many times the certificate of one pharmacist is displayed in more than one pharmacy.
- Even if each pharmacy has one Pharmacist exclusively to itself, at times, the pharmacy remains open/sells medicines beyond the working hours of the pharmacist, in his/her absence.
- Similar situation exists in the rural medical dispensaries, sub-centres, urban health centres, primary health centres, community health centres, district hospitals and even the central Govt. public hospitals, defence services and railways, where dispensing does take place to variable extents by unqualified persons including Jawans/attendants/sweepers/peons etc. but not always by pharmacists.

Besides being a breach of law, dispensing of prescriptions and medicines in the absence or without supervision of the pharmacist is a serious health risk, which unfortunately the public is exposed to across the country - day in and day out. Medicines have to be used responsibly for best outcomes. They may have side effects and misuse of potent medicines may lead to harm, and serious health consequences.

In spite of stiff opposition from various interested stakeholders, some of the states like Maharashtra, Gujarat, Tamil Nadu, Andhra Pradesh, Karnataka, Goa etc. the FDA Commissioners and Drug Controllers are making a difference. They are trying their best to implement the law. The outcome of their efforts has improved the presence of pharmacists at the pharmacy counters. This is indeed a significant step towards better public health.

It is RESOLVED that the Ministry of Health should take up this issue seriously with the Central Drugs Standard Control Organization, State Health Secretaries, State Drug Controllers/FDA Commissioners, Pharmacy Council of India and State Pharmacy Councils so that Drugs & Cosmetics Act & Rules and The Pharmacy Act are implemented uniformly throughout the country. This will ensure that medicines are always dispensed only by or under the supervision of a registered pharmacist in the best interest of the public health.

Roles and responsibilities of pharmacist in Pharmacovigilance Programme of India

Adverse Drug Reactions (ADRs) are a major cause of patient morbidity and mortality. Spontaneous reporting of ADRs remains the corner stone of pharmacovigilance and is important in maintaining patient safety. The spontaneous reporting system is one of the most efficient warning system of ADRs. A reliable and responsive therapeutic drug monitoring service depends on team work between nurses, doctors, pharmacist, scientist, and technical staff.

Pharmacists have a central role in drug safety by contributing to the documentation, identification, reporting and prevention of ADRs. Once a drug is available to the public, making a determination about its safety is the shared responsibility of all who are part of the prescribing process including the patients. Pharmacists clearly understand that no drug product is completely safe and that pre-marketing trials do not fully identify the risks, particularly of recently marketed drugs.

Pharmacist play different roles and responsibilities at different level in Pharmacovigilance Programme of India (PvPI) i.e. at National Coordination centre (NCC) level and at ADR Monitoring Centres (AMCs).

Role of pharmacist at AMCs:

1. Ward round participation & making ADR reporting forms accessible.
2. Development, maintenance, and evaluation of ADR records within the organization.
3. Monitoring the patients who are prescribed with drugs highly susceptible to cause ADRs.
4. Monitoring the patients who are at greater risk of developing ADRs.
5. Assessing healthcare professionals in detection and assessment of ADRs.
6. Encouraging/ stimulating healthcare professionals in reporting on ADRs.
7. Follow up of patients to assess the outcome of the reaction and management.
8. Educating healthcare professionals about the importance of an ADRs.
9. Patient counselling.
10. A communication link between physicians, nurses, and other health professionals in the ADR monitoring program.
11. To promote rational use of medicines.

Role of pharmacist at NCC:

1. Analysis of each reported ADRs.
2. Identification of drugs and patients at high risk for being involved in ADRs.
3. The development of policies and procedures for the ADR-monitoring and reporting program.
4. Use of the PvPI program for educational purposes.
5. Development, maintenance, and evaluation of ADR records received from AMCs.
6. The organizational dissemination and use of information obtained through the PvPI.
7. Contributing to Indian regulatory system.
8. Publication and presentation of important ADRs to the medical community.
9. Signal detection.
10. Risk management.

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Role of retail/community pharmacist in pharmacovigilance:

1. Patient counselling.
2. Educate and aware the patients about the ADR reporting and patient safety.
3. Pharmacist can report the ADRs which are caused by self medication/ over the counter drugs (OTC Drugs).
4. Monitoring at community level and will help in promoting medication safety in the community.
5. Prevention/Risk management of the ADRs related to the self medication/ over the counter drugs (OTC Drugs).
6. Emphasizing the benefits of completing the medication as prescribed.

It is the pharmacist's responsibility and professional obligation to report any suspected ADRs. ADR-monitoring and reporting programmes encourage ADR surveillance, facilitate ADR documentation, promote the reporting of ADRs, provide a mechanism for monitoring the safety of drug use in high-risk patient populations, and stimulate the education of healthcare professionals regarding potential ADRs. Pharmacists can also play a vital role in preventable ADRs. Educating healthcare professionals and patients about drug effects and increasing their level of awareness regarding ADRs. Pharmacists are able to report serious and rare ADRs and ADRs associated with newly marketed drugs.

Pharmacists should exert leadership in the development, maintenance, and ongoing evaluation of ADR programmes. As part of the healthcare team, pharmacists should initiate the culture of reporting of ADRs which would be helpful in regulatory decisions.

Pharmacist should use Helpline number 1800 180 3024 which is dedicated by Indian Pharmacopoeia Commission under Pharmacovigilance Programme of India on October 11, 2013 to the nation, to collect the suspected ADRs with the use of medicines and to ensure patient safety.

On December 9-10, 2013 PvPI has launched its web link to make the programme publically available & popular. The link: http://www.ipc.gov.in/PvPI/pv_home.html

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Contributed by: **Dr Kalaiselvan V, Dr Archana S, Dr Gyanendra Nath Singh**, Indian Pharmacopoeia Commission, Ghaziabad.

Brain Ticklers-7

1. Which of the following drug is used in treatment of dementia?
a. Enalapril
b. Trihexyphenidyl
c. Donepezil
d. Celecoxib

2. Which of the following auxiliary label should be attached to the container while dispensing Lomotil?
a. This medication causes drowsiness
b. Avoid excessive exposure to sun
c. Do not take with antacids
d. Store in refrigerator

3. Which of the following has a bacteriostatic activity?
a. Amoxicillin
b. Ciprofloxacin
c. Erythromycin
d. Cephalexin

4. Gentamycin is available in following dosage forms except?
a. Injection
b. Ointment
c. Ophthalmic solution
d. Tablets

5. Prolongation of quinidine sulphate activity can be best accomplished by?
a. Increasing pH of urine
b. Decreasing pH of Urine
c. Increasing water intake
d. Decreasing water intake

Please send your answers to ipacpdetimes@gmail.com on or before February 28, 2014

JOIN Indian Pharmaceutical Association and select Community Pharmacy Division (IPA CPD)

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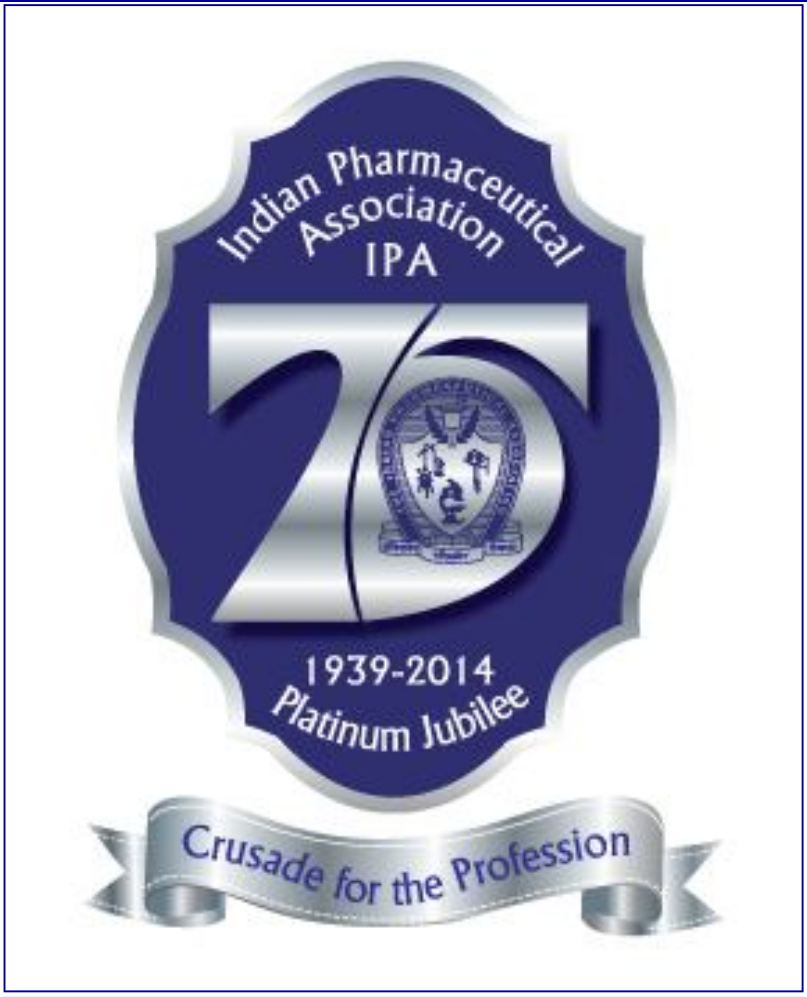
Provide your feedback to this issue of the CPD E-Times; pass it to more pharmacists and also send in your thoughts/issues/problems faced by you in pharmacy practice.



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Upcoming scientific events

- Indian Congress of Pharmacy Practice, Bangalore, Feb 21-22, 2014. Visit: www.iacp.org
- Indo-European Symposium on Pharma-coeconomics Policies, Anantapur, March 3, 2014, Email: isporap@gmail.com
- FIP PSWC 2014, Melbourne, April 13-16, 2014. Visit: www.fip.org
- NMS 2014, Brisbane, May 21-23, 2014. Visit: www.nps.org.au
- 74th FIP Congress, Bangkok, Aug 31-Sep 4, 2014 Visit : www.fip.org

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Published by:

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