WORLD NO TOBACCO DAY 31st May

Volume 4 • Issue 3 May-June 2015

IPA CPD *e*-Times

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

In this Issue:

Messages and editorial

Dosage form tips

Drug information

Lab information

Consumer dialogue

Patient instructions

Brain ticklers

Pharmacy Practice in Republic of Ireland

Department of Pharmacy Practice in Puna College of Pharmacy

My opinion

Abbreviations

News and Training

WHPA meeting news

CARUM

Upcoming Events & Contact Us

The tobacco industry and criminal groups pritofrom the illegal tobacco trade, leaving the public to pay the health and security costs. Apply the Protocol to Eliminate Illicit Trade in Tobacco Products!



#NoTobacco BEWARE! ILLEGAL TOBACCO

Crusade for the profes

WORLD NO **FOBACCO DAY**

31 MAY





Message from President of Community Pharmacy Section (CPS) of International Pharmaceutical Federation (FIP)



Join FIP and Share in the global conversation as we strive to improve the practice of pharmacy worldwide. Greetings to all Pharmacists in India!

I look forward to reading each issue of eTimes, which is sent to me by IPA Community Pharmacy Division.

I am a practicing Community Pharmacist in Sydney and I am involved with the Pharmacy Guild of Australia. Through my work with the Guild, I became involved with FIP (International Pharmaceutical Federation) and I would like to share with you my Indian colleagues some of the wonderful work which is done by FIP and in particular the Community Pharmacy Section (CPS).

FIP is the global body representing pharmacy and pharmaceutical sciences. FIP works to support the development of the pharmacy profession, through practice and emerging scientific innovations, in order to meet the world's health care needs and expectations.

FIP's mission is to improve global health by advancing pharmacy practice and science to enable better discovery, development, access to and safe use of appropriate, cost-effective, quality medicines worldwide.

The Community Pharmacy Section (CPS) of FIP is the largest section within the organization and has pharmacists from around the globe on its Executive Committee. (India and the sub-continent are well represented by Mrs ManjiriGharat). The work of CPS focuses on promoting community pharmacy practice in all parts of the world and in particular by promoting good pharmacy practice and assisting in the development of community pharmacy in emerging and developing countries. There is much to be learned from each other, and CPS is a forum where information exchanges, professional program development, clinical updating and practical skills recognition for better practice can all happen. CPS offers bimonthly news bulletins, webinars, training modules, very enriching sessions at the annual FIP Congresses and much more to the community pharmacists around the globe.

The role of the community pharmacist is rapidly changing. No longer are we simply dispensers of medicines but rather we are realizing opportunities to deliver professional services via medication management and disease state management programs. FIP and CPS support the expanded role of the community pharmacist in delivering improved patient outcomes in their daily practice.

I would encourage all Community Pharmacists in India to join the FIP family and become a member in the Community Pharmacy Section. Share in the global conversation as we strive to improve the practice of pharmacy worldwide. We are all part of a wonderful profession and we can share and learn much from each other. I appeal all of you to be part of FIP Congress to be held at Dusseldorf, Germany from 28th September till 4th October, 2015.

Mr Paul Sinclair, B.Pharm

President, Pharmacy Guild of Australia-New South Wales Community Pharmacy Section, International Pharmaceutical Federation Email:paul.sinclair@guild.org.au

Volume 4, Issue 3, May-June, 2015

Message from IPA CPD Chairperson



I request all our readers to share with us any particular problems they face in daily practices and please write what they expect from IPA CPD to do to tackle it Greetings from Community Pharmacy Division of IPA!

Last couple of months, CPD has been busy reaching different parts of the country through DOTS TB pharmacists training programmes. It's always interesting to meet and interact with fellow pharmacists from diverse backgrounds. Cut-throat competitions, insufficient staff, cross practices by prescribers (non-allopathic doctors prescribing allopathic medicines), and large number of products making it difficult to manage inventory have been some of the common areas where pharmacists face problems in their daily practice. Indian pharmacies are open for very long hours (on an average 12 to 14 hours) and that puts additional pressure, compromising the quality of life of pharmacists since most pharmacies run with a single pharmacist. In some parts of the country, it is difficult to find registered pharmacist present in the pharmacy for all open hours even though the law does demand it. Pharmacies running with a pharmacist, following good pharmacy practices face unethical profit making competition from those who do not follow the law. Recently online pharmacies are also posing fear of further competition and in some states actions are taken by Food and Drug Administration since the online sale of prescription medicines do not yet have any legal provision as per the existing laws

I request all our readers to share with us any particular problems they face in daily practices and please write what they expect from IPA CPD to do to tackle it. We have a list of 'to do' items related to several issues and will be happy to hear the voice of fellow pharmacists from around the country. IPA has been already vocal about many advocacy issues and has written to the Government of India about "Dangers of easy availability of prescription medicines without prescription", "Shortcomings in storage temperature instructions on medicine labels", "Comments and suggestions for draft of the National Health Policy" and a few more. You can see all these representations of IPA in 'Advocacy Corner' on IPA website www.ipapharma.org.

FIP Community Pharmacy Section successfully completed a set of four webinars on the topic of Maternal Newborn and Child Health (MNCH). Many pharmacists from India for the first time attended the webinars and had the new virtual experience of being with the global community of pharmacists. Participant pharmacists received the certificates from FIP after successful completion of the online tests. CPS will certainly plan for more webinars and am sure more number of pharmacists will take benefit of this innovative way of knowledge updating.

I repeat my requests to all of you to start planning for the FIP Congress to be held at Dusseldorf in Sept-Oct, 2015 as well as I appeal all our local-global student readers to plan for the IPSF World Congress at Hyderabad, India, in July 2015. Don't miss this exciting opportunity! See more details on the last page of this issue.

Happy Reading!

Mrs Manjiri Gharat

Vice-President and Chairperson, IPA CPD

Email: manjirigharat@ipapharma.org

2

Editorial



Models of Patient Care

Dear Pharmacists,

Kindly conduct a self-review to assess the model of patient care applied in your practice site. Use strength, weakness, opportunity, & threat (SWOT) analysis and plan for improvement in the practice.

The patient care process in pharmacy is a business model. It is essential to apply principles of business in the pharmacy operations. As per Harvard University, USA; there are at least six critical factors for shaping new business models;

- Financing,
- Structure,
- Public Policy,
- Consumers,
- Technology, and
- Accountability.

Getting the expertise is one of the first steps. Pharmacies should dare to appoint highly qualified and trained pharmacists. There is always room for better quality medicines and better quality pharmacists;provided they are affordable and acceptable respectively. The expertise is not limited to healthcare. Consultation to a business planner will help in scientifically plan and develop the business model to real world needs.

Incorporate innovation in to the pharmacy business model. Many pharmaceutical care and medication therapy management models were found to be successful around the world. The key strategy is to focus on a specific patient population for example, diabetes mellitus, and give expert care in the field. Collaborative practice agreements areimportant for the successful business. Pharmacists should recognize the scope as well as the professional limitation. Patients who need the care of doctors or other healthcare professionals must be referred to them and a local practice agreement will help in clarity on the professional healthcare responsibilities.

As usual this issue is stuffed with continuing pharmacy education. In all the practice exercises in consumer dialogue, GPP instructions, pharmacy practice in a foreign country, & a pharmacy practice department in India; you can find features of advanced pharmacy practice business models. The other regular topics on dosage form instructions, drug information, and lab information is expected to add to the knowledge of practicing pharmacists. Finally don't forget to go through the news section, giving briefs about some pharmacy practice activities in India.

Enjoy reading this current issue of e-Times!

Dr Dixon Thomas Editor, IPA CPD e-Times E-mail: dixon.thomas@gmail.com

Always there is room for better quality medicine and better quality pharmacist; provided they are affordable and acceptable respectively.

Dosage Form Instructions: Gargle



Gargling is an important addition to your oral health. It clears out unhealthy bacteria and promotes good oral health. Gargling may sound unappetizing or weird, but when done in the comfort of your bathroom, it's discreet and perfectly

STEP: 1



Find a clean glass. This is now your "gargling cup." While you don't have to use a special cup to put your gargling liquid in, it's often safer than drinking directly out of a bottle of mouthwash, because you avoid transmitting bacteria.





Fill your gargling cup with your gargling liquid of choice. A little bit is fine-better to start out with less than with too much.





STEP: 4



STEP: 5



STEP: 6

Source: http://www.wikihow.com/Gargle

Put a small amount of the gargling liquid in your mouth and swish it around in your mouth. The goal is to try to get the front and sides of the mouth, areas that gargling won't get, during this first sweep.

Move your cheeks in and out, and your tongue back and forth, to swish the gargling liquid back and forth in your mouth.

Tilt your head back, and without swallowing the liquid, try to open your mouth and make the "ahhh" sound. Keep the small flap in the back of your throat, the epiglottis, closed so that none of the liquid gets accidentally swallowed.

This may take a bit of time to get used to, but when done correctly, the vibrations in the back of your mouth will cause the gargling liquid to move about, almost as if the liquid were boiling.

Gargling will coat the back of the mouth with whatever liquid you choose, eliminating some bacteria and soothing a sore throat.

Spit the gargling liquid out into the sink. Continue with your oral health routine by brushing your teeth or flossing.

Contributed by: Dr L. Britto Durai Singh Clinical Pharmacist & Assistant Professor, PSG College of Pharmacy, Coimbatore, E-mail: brittopharmaco@gmail.com

Drug Information: Montelukast Sodium (Prescription Only Medicine) Tab: 4mg, 5mg, 10mg

Common Brands: Telekast, Montek, Montair, etc. Pharmacological action: Leukotriene receptor agonist Indication: Prophylaxis of mild to moderate asthma. DOSE: Adults: 25-50mg daily.

Maintenance dosage: 25-100mg once daily.

Route	Onset	Peak	Duration
Oral	Unknown	2-2 ¹ / ₂ hr	Unknown

Contraindications:

- Patients with hypersensitivity to the drug, history of liver disease, acute asthmatic attack.
- **Pregnancy:** Risk category B; should not be used by pregnant women.
- Lactation: It is not known if the drug is excreted in breast milk. Weigh the risk versus the benefits before using.
- Children: Safety and efficacy in children less than 6 years have not been established.
- **Geriatric patients:** No difference in safety and effectiveness of drug has been reported between geriatric and younger population.

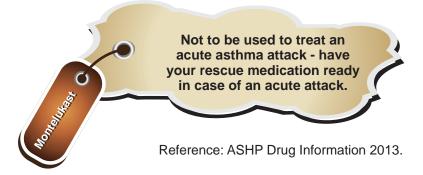
Counselling to patient:

- Montelukast is usually taken in the evening without regard to meals. Take with food if stomach upset occurs.
- Swallow the regular tablet whole with a glass full of water. The chewable tablet must be chewed completely before you swallow it.
- Take Montelukast daily, even if asymptomatic, do not miss the dose. Contact doctor if asthma isn't well controlled.
- Patients with phenylketonuria should be warned that chewable tablets contain phenylalanine, a component of aspartame.
- · Patients with aspirin sensitivity should avoid aspirin or other NSAIDs while taking Montelukast.
- Montelukast is not beneficial in acute asthma attacks or in exercise-induced bronchospasm. Patients should keep appropriate rescue medications available for acute attack of asthma.
- It is not known whether montelukast passes into breast milk or if it could harm a nursing baby. Do not use this medication without telling your doctor if you are breast-feeding a baby.

DOSE:

Adults and adolescents: 10mg once daily. Children age 6-14 years: 4mg once daily.

Name in auxiliary label:



Lab information: Blood Gases

Blood gases are a measurement of how much oxygen and carbon dioxide are present in blood. They also determine the acidity (pH) of blood.

Why the Test is performed

The test is used to evaluate respiratory diseases and conditions that affect the lungs. It helps determine the effectiveness of oxygen therapy. The test also provides information about the body's acid/base balance, which can reveal important clues about lung and kidney function and the body's general metabolic state.

Normal Results

Values at sea level:

- Partial pressure of oxygen (PaO2): 75 100 mmHg
- Partial pressure of carbon dioxide (PaCO2): 38 42 mmHg
- Arterial blood pH: 7.38 7.42
- Oxygen saturation (SaO2): 94 100%
- Bicarbonate (HCO3): 22 28 mEq/L Note: mEq/L = milliequivalents per liter; mmHg = millimeters of mercury

What Abnormal Results Mean?

Abnormal results may be due to lung, kidney, or metabolic diseases. Head or neck injuries or other injuries that affect breathing can also lead to abnormal results.

Abnormal results of any of the blood gas components may indicate one or more of the following issues:

- A person is not getting enough oxygen •
- Aperson is not getting rid of enough carbon dioxide
- There is a problem with a person's kidney function

All other components of the blood gas analysis (pH, PaCO2, HCO3-) are interrelated and the results must be considered together.

Certain combinations of results, if abnormal, may indicate a condition that is causing acidosis or alkalosis. These may include the following:

Respiratory Acid-Base Disorders

1) Respiratory Acidosis

- Findings:
- excess CO2 retention
- pH<7.35
- HCO3->28 mEq/L (if compensating)
- PaCO2 > 45 mm Hg

Possible Causes:

- CNS depression from drugs, injury, or disease
- asphyxia
- hypoventilation due to pulmonary, cardiac, musculoskeletal, or neuromuscular disease

Signs and Symptoms:

- diaphoresis headache
- tachycardia confusion
- restlessness · apprehension

2) Respiratory Alkalosis

Findings:

- excess CO2 excretion
- pH > 7.45
- HCO3- < 24 mEq/L (if compensating)
- PaCO2 < 35 mm Hg

Possible Causes:

- hyperventilation due to anxiety, pain, or improper ventilator settings
- respiratory stimulation caused by drugs, disease, hypoxia, fever, or high room temperature
- gram-negative bacteremia

Signs and symptoms:

- rapid, deep breathing parasthesia
 - light-headedness • twitching
- anxiety fear

Metabolic Acid-Base Disorders 1) Metabolic Acidosis

Findings:

- HCO3-loss (acid retention)
- pH < 7.35
- HCO3-<24 mEq/L •
- PaCO2 > 35 mm Hg (if compensating) •

Possible Causes:

- HCO3- depletion due to renal disease, diarrhea, or small-bowel fistulas
- excessive production of organic acids due to hepatic disease
- endocrine disorders including diabetes mellitus. hypoxia, shock, and drug intoxication

Signs and Symptoms

- rapid, deep breathing •
- fruity breath • drowsiness
- . lethargy
- •

nausea

Findings:

- HCO3- retention (acid loss)
- pH > 7.45
- HCO3->28 mEq/L
- PaCO2 > 45 mm Hg

Possible Causes:

- Inadequate excretion of acids due to renal disease
- Loss of hydrochloric acid from prolonged vomiting or gastric suctioning
- Loss of potassium due to increased renal excretion (as in diuretic therapy) or steroid overdose

confusion

twitching

apathy

tetany

seizures

excessive alkali ingestion

Signs and Symptoms:

- slow, shallow breathing
- hypertonic muscles
- restlessness
- irritability
- coma (if severe)

References:

- Medline Plus:
- http://www.nlm.nih.gov/medlineplus/ency/article/0038 55.htm&

•

Nurses Learning: http://www.nurseslearning.com/courses/nrp/labtest/c ourse/section8/c1.htm

vomiting

fatique

headache

coma (if severe)

2) Metabolic Alkalosis

Consumer Dialogue: Chronic Obstructive Pulmonary Disease (COPD)

Pharmacist: Hello sir my name is Mr YYY, and I am your pharmacist. How can I help you?

Patient: Hello my name is Mr XXX, Can you give me these medicines?

Pharmacist: (checks prescription) Sir, Do you know what these are for?

Patient: I have shortness of breath and a productive cough for a prolonged period of time and doctor explained to me that I have symptoms of chronic obstructive pulmonary disease. Can you explain me what it is?

Pharmacist: COPD, or chronic obstructive pulmonary disease, is a long-term lung disease that refers to both chronic bronchitis and shortness of breath. COPD symptoms include persistent cough with mucus and shortness of breath, which is often preventable and treatable. Do you know why this occurs?

Patient: I don't know it clearly, but doctor says that it is because of my smoking habit, is it correct?

Pharmacist: The primary cause of COPD is tobacco smoke, over time; breathing tobacco smoke irritates the airways and destroys the stretchy fibres in the lungs. Other things that may put you at risk include breathing chemical fumes, dust, or air pollution over a long period of time. Second-hand smoke also may damage the lungs. It usually takes many years for the lung damage to start causing symptoms, so COPD is most common in people who are older than 60.

Patient: What should I do to prevent COPD attacks?

Pharmacist: As you are a smoker, stopping smoking is the only measure shown to slow down the worsening of COPD. Even at a late stage of the disease, it can reduce the rate of

worsening lung function and delay the onset of disability and death. Talk to your doctor about products and medicines that can help you quit. Join a smoking cessation programmes offered by many organizations. Ask your family and friends to support you, and ask them to help you manage your COPD by not smoking in your home or around you.

Patient: OK I understand. How can I live well with COPD?

Pharmacist: There are many things you can do at home to stay as healthy as you can.

- Avoid things that can irritate your lungs, such as smoke and air pollution.
- Use an air filter in your home.
- Do regular exercise to stay as strong as you can.
- Eat well so you can keep up your strength. If you are losing weight, ask your doctor or dietician about ways to make it easier to get the calories you need.

(Pharmacist dispenses the medication.)

Patient: Can you show me how to use this metered dose inhaler properly? I am not yet sure if I use it correctly.

Pharmacist: Yes, I will show you how to use it properly. And I do also have a Peak Flow Meter. I will measure your peak expiratory flow rate (PEFR), which will give an idea about narrowing of the airways well in advance of an asthma attack. It is used mainly by people with moderate to severe and persistent asthma.

Patient: Thank you for providing all this information.

Pharmacist: It was my pleasure, Hope you feel well soon and you are always welcome on phone or in person for any query.

Good Pharmacy Practice (GPP) patient instructions- Case 9

Prescription received in pharmacy as follows: Dr XYZ, MS, D.Ortho Reg. no xxxx

Name of Patient	Age	Weight	Sex				
Mrs ABC	45	50kg	Female				
Rx							
for one month							
A) Tablet Ac	A) Tablet Aceclofenac						
+ Parace	tamol (Acetamino)	phen) 500 mg	1-0-1				
B) Tablet Rabeprazole		20 mg	1-0-1				
C) Tab Methylprednisolone		4 mg.	1-0-1				
D) Tab Hydroxychloroquine Sulphate		ulphate 400 mg	1-0-0				
E) Tab Sulfasalazine sulphate		1000mg	y 0-0-1				

A) Aceclofenac 100mg, Paracetamol(Acetaminophen) 500 mg. It is a non-steroidal anti-inflammatory drug that is used to alleviate pain and swelling.

Dosage: 1 tablet in the morning after breakfast & 1 tablet at night after dinner.

Common side effects may include: nausea, drowsiness and headache.

Advice for patients: Take after food to avoid gastric irritation.

B) Rabeprazole, to help prevent drug induced stomach irritation, ulceration and gastritis (NSAIDs, Corticosteroids in this instance).

Dosage: 1 tablet in the morning 1 hr before breakfast

Advice for patient: Take when the stomach is empty for best results.

C) Methylprednisolone 4 mg, which is a Glucocorticoid used to reduce the inflammation.

Dosage: 1 tablet in the morning after breakfast & 1 tablet at night after dinner.

Common side effect such as: Nausea, vomiting, heartburn, headache, dizziness, nervousness, decreased sleep, appetite changes, increased sweating, or acne may occur. If any of these effects persist or worsen, contact the doctor.

Advice for patient: This medication may make your blood sugar level rise, which can cause or worsen diabetes. Tell your doctor immediately if you develop symptoms of high blood sugar, such as increased thirst and urination. If you already have diabetes, be sure to check your blood sugars regularly. Your doctor may need to adjust your diabetes medication, exercise program, or diet.

Remember that your doctor has prescribed this medication because he has judged that the benefit to you is greater than the risk of side effects. Many people using this medication do not have serious side effects. Tell your doctor right away if you have any serious side effects, including: unusual weight gain, menstrual period changes, bone/joint pain, easy bruising/bleeding, mental/mood changes (such as mood swings, depression, agitation), muscle weakness/pain, puffy face, slow wound healing, swelling of the ankles/feet/hands, thinning skin, unusual hair/skin growth, vision problems, fast/slow/irregular heartbeat. This drug may infrequently cause serious (rarely fatal) bleeding from the stomach or intestines. If you notice any of the following unlikely but serious side effects, consult your doctor or pharmacist immediately: black/bloody stools, vomit that looks like coffee grounds, persistent stomach/abdominal pain.

D) Tab Hydroxychloroquine Sulphate 400 mg & E) Tab Sulfasalazine1000mg both are DMARDs (Disease-Modifying Antirheumatic Drugs) - used to treat rheumatoid arthritis, a chronic condition in which the immune system (which normally fights infection), attacks the lining of the joints, causing swelling, stiffness, and pain. If left untreated, it can lead to irreversible joint damage.

Dosage: Tab hydroxychloroquine should be taken in the morning after breakfast.

Tab Sulfasalazine 1000mg: should be taken at night after dinner.

Advice for patient: DMARDs do not cure rheumatoid arthritis, but they do alleviate symptoms and may help prevent further joint damage.

Final Patient counselling: Rheumatoid Arthritis is a disease that makes your joints become painful, swollen and stiff. This is caused by inflammation taking place in the joints. Inflammation is normally caused by our body's immune system when we are injured or have an infection. We do not know what causes the immune system to cause inflammation in the joints.

RA cannot be cured at present, but for many patients it can be controlled.

Exercise is important. It can reduce joint pain and stiffness and keep your muscles strong. This will improve your level of fitness and make you feel better.

Contributed by: Mr. Santosh S Ghodinde Dhanwantari Medical, Panvel, Maharashtra Email: santoshghodinde@gmail.com

Brain Ticklers (Solutions in Page No. 17)

1. Chronic long-term therapy of myastheniagravis is usually accomplished with:

- A. Edrophonium
- B. Neostigmine
- C. Echothiophate
- D. Carbachol
- 2. Which of the following cholinomimetics is used in the treatment of atropine intoxication?
 - A. Neostigmine
 - B. Carbachol
 - C. Physostigmine
 - D. Lobeline
- 3. Which neuromuscular blocking agent has the potential to cause the greatest release of histamine?
 - A. Succinylcholine
 - B. Tubocurarine
 - C. Pancuronium
 - D. Rocuronium

4. Which of the following neuromuscular blocking agents cause cardiac arrhythmias?

- A. Vecuronium
- B. Tubocurarine
- C. Rapacuronium
- D. Succinylcholine



Pharmacies in the Republic of Ireland



The Irish Pharmacy Union (IPU) is the representative and professional body for community pharmacists in the Republic of Ireland. The IPU's sole focus is on protecting, promoting and strengthening the profession now and long into the future, and advising and

supporting members in their professional and business lives.

There are 1800 pharmacies in the Republic of Ireland and with a population of only 4.5 million there are 56 pharmacies per 100,000 inhabitants, which is among the highest densities in the European Union (EU). It is not a requirement to be a qualified pharmacist to own a pharmacy but each pharmacy would require a registered pharmacies are owned by pharmacists with 12% owned by non-pharmacists. Approximately 50% of pharmacy outlets in the Republic of Ireland are single ownership with the other 50% in chain ownership.

Pharmacy ownership is dominated by males with seven out of 10 pharmacies in male ownership.

In 2014, 45% of the adult population visited a pharmacy within the past week equating to 85 million pharmacy visits per year, or 19 visits per annum for every man, woman and child in the State. Community pharmacies are generally open to the public on average 56 hours per week, equating to just over nine hours a day on a six day

week basis. Women use pharmacy services more often than men and 54% of women have visited a pharmacy in the past week and 91% in the last month, whereas the numbers of men visiting are 27% and 64% respectively.

The dispensing role of medication remains the core activity of Irish pharmacies with approximately 80% of all revenues generated in this area as opposed to 20% in front-of-pharmacy, which includes over-the-counter medicines, cosmetics and other items. The vast majority of pharmacies dispense items on behalf of the State through the General Medical Services Scheme (GMS) and the Community Drugs Schemes, for which they receive a payment for each item dispensed. Over 75 million prescribed drugs were dispensed to patients under the GMS and Community Drugs Schemes in 2014.

On average, 83% of all items dispensed in a typical pharmacy is through the GMS and Community Drugs Schemes. Due to economic pressures, a significant reduction in the State's health budget and the introduction of Reference Pricing (reduces the reimbursement rates for certain medicines) payments through the State schemes have been severely reduced in the last number of years, which has put financial pressures on many pharmacies.

Although healthcare budgets and State payments for medicines are falling there are increased demands being placed on Irish community pharmacists by an ageing and growing population. With large pharmacy chains expanding their footprint and supermarkets encroaching on traditional pharmacy business, competition has never been more intense. These environmental pressures are pushing





pharmacists towards collective purchasing through buying groups and also towards symbol groups. These groups have gained popularity in the last five years as smaller independent pharmacies search for improved procurement margins to counteract the impact of government reimbursed rate cuts. The majorities of pharmacists are members of at least one buying or symbol group.

Even though the pharmacy sector has experienced significant challenges over the last number of years, primarily from reduced incomes and economic uncertainty, this has had no impact on undergraduate enrolments, which have increased by 4% between 2013 and 2014 and a significant 63% since 2004. Interestingly, while the majority of pharmacy owners are male the vast majority (68%) of pharmacy undergraduates are female.

While medicine dispensing remains the core pharmacy activity there is a growing focus on providing healthcare services. Pharmacists are now delivering emergency hormonal contraception, participating in the Needle Exchange Service and are providing an Influenza Vaccination Service and a Smoking Cessation Service. The IPU is actively engaging with the Health Minister and Senior Staff in the Department of Health to further expand the range of services available from community pharmacies including a Minor Ailment Scheme, New Medicine Services, Medicine Use Reviews, Chronic Disease Management and Extended Vaccination services, among others. In the Republic of Ireland there is severe pressure on GP services and hospital emergency departments; expanding the role of community pharmacists is the logical solution to addressing these pressures and will position pharmacy at the centre of community healthcare.

Survey evidence confirms that the perception of pharmacists in Irish society is extremely positive with 96% of the public rating their professionalism and 93%



their medical advice as good or very good. Irish patients are supportive of an expansion in the role of pharmacists, with 94% agreeing that they would like to see pharmacists treat minor ailments and offer advice on medicine regimens.

Many challenges remain for Irish pharmacies and the sector is changing from a landscape that was predominated by smaller independent pharmacies towards an ever-growing influence from group chains and supermarkets. With an ageing population and an increase in chronic illnesses the role of community pharmacy will become even more important and independents with their position within communities will need to build a proposition that is uniquely local to ensure that they survive in this competitive arena

Contributed by: Jim Curran Director of Communications & Strategy Irish Pharmacy Union. E-Mail: jim.curran@ipu.ie



Department of Pharmacy Practice in Bharati Vidyapeeth, Pune, Maharashtra

BharatiVidyapeeth University, Poona College of Pharmacy is a pioneer institute in Maharashtra offering six year integrated Pharm.D.and three year Pharm.D. Post Baccalaureate courses with thegoal to provide direct patient care. The department of Clinical Pharmacy was established in August 2009 which is attached to Bharati Hospital and Research Centre, a 1000 bedded tertiary care teaching hospital with modern and ultramodern healthcare facilities and multispecialty departments.



Pharm. Dstudents trained in ward rounds

Pharm D. students are trained to develop the skills required to solve the complex medication management problems presented in health care today while providing patient-focused care. It enables the student to work as part of a multidisciplinary healthcare team.

Drug Information Centre (DIC) was started in September 2009 to cater the needs of healthcare professionals for patient care. Subsequently, the services **DIC HELPLINE** were extended to the society in 2011, which enables the common man to seek and get information regarding "MEDICINES" by a phone call, email or personal visit. The centre also functions in collaboration with Maharashtra State Pharmacy Council to provide training to community pharmacists.

The DIC is also responsible for publishing "**Pharmawiz**" newsletter. The focus is to transmit knowledge and recent updates coming in healthcare sectors. Our guest column is the special feature for the students who aspire to uptake pharma jobs. Students do contribute to the column by focussing on critical drug reviews and ADR updates.

An important professional a c t i v i t y extended to Paediatric department is dose division. U p o n requisition and requirement from the Paediatricians,



Dose division activity for paediatric patients.

the department provides service of paediatricdose divisionfor various drugs for the patient. Then each divided powder drug is dispensed with labelling and counselling for the administration of the drug.

In less than six years of inception, the department was entrusted to offer a certification course in "Pharmacovigilance and Medication Safety" in collaboration with Sciformix Technologies, Pune, a leading Scientific Process Organization (SPO) providing

s c i e n t i f i c k n o w l e d g ebased services and research in the areas of Safety & Risk Management, C l i n i c a l Research & Post-Approval S u p p o r t Services and R e g u l a t o r y Affairs.



Dr. Atmaram Pawar at a community programme

The department is very enthusiastic in working at community level for providing public healthcare services in the form of awareness, health screening, monitoring and counselling programmes. Such programs are conducted with independent initiation or with collaboration with various medical departments, integrated research units, NGOs or social organizations.

Staff and students at the department have 40 publications and over 60 scientific abstracts and presentations in various international and national conferences. In less than six years the staff and students have won several awards at various scientific meets. The department has also successfully conducted Quality Improvement Programmes on "Pharmacotherapy review for advanced clinical pharmacy practice" and "Pharmacy and Healthcare System: New avenues and applications" and ICMR(Indian Council of Medical Research) sponsored seminar on "Pharmacovigilance-Collaborative role of industry and academia".

Along with the trend of 100% admissions every year, students are successfully completing the Pharm.D.programme and are 100% placed in India or abroad, in contract research organizations, hospitals, government organizations, academics, and pharmaceutical industries.

Contributed by: Dr. Atmaram Pawar Dean, Pharmaceutical Sciences, BVDU Vice Principal & Professor in Pharmaceutics, Head Pharm D Program, Poona College of Pharmacy, Erandwane, Pune-411038, E-mail: p_atmaram@rediffmail.com



My opinion: Future healthcare and e-Health - how does it affect the community pharmacy?



Health care is facing major changes, and now it's going faster than ever. When levels of care are shifting, the patient's home and healthcare centres become more important – and the role and function of community pharmacy will change as well.

Not so long ago we went to the nearest hospital when we got sick, and we did not question the doctor's words. Today we read about diseases and treatments on the Internet and health professionals acquire more and more the role of a coach. And patients become customers. As customers, if they are not satisfied with the health care provided, they seek care elsewhere. In ten years from now we can expect the patient care process within the health care system to be completely different from today. We are facing a paradigm shift within our health care systems. Health care is shifting focus from healthcare to "risk-care", thus reducing the risk of diseases to occur. If health problems can be avoided or postponed, we can save on human suffering and costs for society. And healthcare is moving into e-Health.

Today's medical progress is fast. Among other things, the increased possibility to track different medicinal values in the home is a fantastic development both for the health care system as for the patient. This means that patients don't need to make return visits as long as all values are good, but can be called in directly if anything changes. The dense or frequent monitoring process also creates the opportunity to customize healthcare to each individual's needs. And this is all part of the future e-Health. So healthcare in the home environment, mobile solutions and smart technology measuring the individual patient's health opens up new opportunities for health promotion and care - both for those who are healthy and want to maintain good health, as for those who have a chronic illness. Patient empowerment is strengthened. Many samples, such as ECG, blood pressure and blood counts

are taken at the home of the patient. The results are sent electronically to the health care center, are evaluated by health care professionals and decisions on changes are taken. E-health can therefore reduce the number of visits a patient has to make to health care system, by allowing them to ask questions and follow their progress via the computer or the smart phone.

An important aspect of future healthcare is an increased focus on health. If we are going to live longer, while maintaining a high quality of life, health care needs to be preventive in order for patients to, as long as possible, maintain a good health.

Pharmacies should – to an increased extent be engaged as the first and last link in the healthcare chain for a healthy life, for increased patient safety, for optimal drug benefit, increased availability for health- and pharmacy services and a more efficient and affordable healthcare system for community and society.

Furthermore, as new technologies increases in the community pharmacy industry, it is now easier to register the activities of pharmacists, measure the clinical outcomes, and write in the health records as other health professionals do. And this development does not only apply to developed countries, but will affect pharmacist all around the Globe, and probably have a more strong impact on a 'step-wise' development in developing countries. If we let technology take care of the 'boring' routine tasks, staff can devote more of their time to perform tasks that require empathic and professional abilities. It will be a win-win situation for everyone.

My opinion is that pharmacists have to participate in the future healthcare model and e-Health record system, because pharmacists can:

- Improve safety and reduce adverse drug reactions by using the more available medication information-for example, being alerted to allergies-which will benefit the patient and society.
- Help patients, particularly those with chronic and complex conditions, to better manage their medications.
- Reduce the risks for human errors for example, misreading information on



prescriptions.

- Improve continuity of care.
- Enabling individuals to be more active in their healthcare.
- Enabling patients to focus more on their individual health, even by using prescription medicines, since an appropriate use of medicines makes it easier to feel well.
- Be part of the health care team-yes pharmacists already are-and pharmacies can and will be guiding the patient towards

Contributed by: Lars-ÅkeSöderlund, CPS ExCo-member (FIP), Senior & Strategic Advisor, Apoteket AB, Sweden Email:Lars-Ake.Soderlund@apoteket.se an optimized and appropriate use of medicines, in other words contribute to a life in health.

In this changing health care environment - how do you think pharmacy will and should develop? What are our options and opportunities? What will be our future role? And how are you involved in this development in your country? Join the Community Pharmacy Section within FIP, and let's develop both the e-health and the future together!

Know the Abbreviations and Clinical Terms

COPD	Chronic Obstructive lung Disorder
CSF	Cerebrospinal Fluid
ABG	Arterial Blood Gases
AMD	Age related Macular Degeneration- eye problem
CMV	Cytomegalovirus – A virus causing infections of salivary glands
CPR	Cardio-Pulmonary Resuscitation
CRP	C-reactive protein – a protein in plasma increased in inflammation
DVT	Deep Vein Thrombosis
ECHO	Echocardiogram
Fx	Fracture
GTT	Glucose Tolerance test
IBS	Irritable Bowel Syndrome
HCG	Human chorionic Gonadotrophin
HDL	High Density Lipoprotein
LDH	Lactate Dehydrogenase
LD	Lethal dose
MRI	Magnetic Resonance imagery
OT	Occupational therapy
OS, LE	Left eye
OU, BE	Both eyes
PKU	Phenylketouria
рН	Hydrogen ion Concentration
pCO ₂	Partial pressure of Carbon-dioxide
PP	Post prandial





IPA CPD in collaboration with PSG College of Pharmacy, Department of Pharmacy Practice conducted a DOTS-TB training program for pharmacists in association with the Revised National TB Control Programme (RNTCP) on March 25, 2015.A total of 45 pharmacists from the hospital and community sectors participated in the programme. Dr Anupama Murthy, HOD, Respiratory Medicine, PSG Hospitals delivered a lecture on the clinical issues in tuberculosis management. Dr V. Subramanya Raja, WHO-Medical Consultant, Tamil Nadu and Dr M. Sakthivel, Deputy Director–Medical Services-TB, Coimbatore addressed on public-private partnership to identify and monitor the TB patient in the community. The participants were educated on the use of Referral Form for TB Suspects, Notification format, Treatment Record Cards& IPA TB Training Module. Mrs Manjiri Gharat of IPA-CPD spoke on the significant role of pharmacist in controlling drug resistant TB, preventing treatment failure, and ensuring optimal DOTS delivery.

DOTS TB training at Chandrapur and Bhandara, Maharashtra

IPA CPD with the Maharashtra State Chemists and Druggist Association (MSCDA) and District TB Offices conducted DOTS TB training programmes at Chandrapur and Bhandara on 3rd and 4th May respectively. A total of 100 pharmacists were trained for DOTS protocols and role of pharmacist in these 2 sessions by District TB Officers Dr Dipak Selokar, Dr S.Kamble, and Mrs Manjiri Gharat Mr D. R. Gahane and Mr Nandrekar, Assistant Commissioners, Food and Drug Administration, Nagpur region motivated the



pharmacists for this socio-professional work. Mr MukundDube, Mr Nagpure of MSCDA and Mr Harish Ganeshani of State Pharmacy Council expressed their wish to extend this public-private mix model to all districts of Nagpur region.

IPA CPD Executive Council Member Mrs Anita Bhishikar along with Mr Niket Kshirsahar and Mr Milind Gampwar took enormous efforts to organise these highly successful and well organised trainings.



DOTS TB training at Bhandara and Chandrapur



DOTS TB training at Dehradun, Uttarakhand

IPA CPD along with Dehradun District TB Office and Shri Guru Ram Rai Institute of Technology & Science (SGRRITS) conducted DOTS TB training on 10th May at Dehradun. 35 community pharmacists attended this training. This was a first of its kind training programme in the northern part of the country. Dr. Abhishek Gupta, District TB Officer, Dr Rita Mishra, Technical Consultant, International Union against TB and Lung Diseases and Mrs. Manjiri Gharat trained the pharmacists. Dr Preeti Kothiyal, Director of SGRRITS with her team comprising of Dr Arun Kumar, Dr Prashant and other faculty members took enormous efforts to organise this training successfully. Dehradun Chemist Association cooperated with SGRRITS for this training.



DOTS TB training at Dehradun

Awareness Campaign on "World Health Day" and "World Tuberculosis Day", Waranagal, Andhra Pradesh

On the occasion of World Tuberculosis day on March 24, 2015, the IPA Student's Forum at St. Peter's College of Pharmaceutical Sciences, in association with the National Service Scheme (NSS) unit conducted a TB awareness camp in Hasanparthy, an underdeveloped area in Warangal city. The programme aimed to spread awareness about tuberculosis disease. Dr Suresh Bandari, Principal, with other faculty members and MsAnuRao, Mentor of IPA SF coordinated the event.

The camp had inculcated a pre-assessment point wherein the general public was allowed to answer questions regarding their knowledge about tuberculosis. Thereon, people were directed to the poster presentation on the basic information about the organism causing TB, risk factors, causative factors, signs & symptoms, preventive measures. Those who needed a screening were directed to the nearby govt. based DOTS centres for the diagnosis &treatment of TB. The people were assessed by the post-assessment questionnaire on what all they were educated about tuberculosis through posters. Meanwhile, the volunteers of the student chapter visited the houses and shops in that area and assessed their knowledge about tuberculosis through a questionnaire.

On 7th April 2015-the World Health Day, "Awareness campaign on Food Safety" was organized. Public were provided with a pamphlet on "Diet and Health" at Public Gardens, Hanamkonda. As the theme for this year was "FOOD SAFETY"; the volunteers took the initiative to bring awareness about the four steps for food safety: Clean, Separate, Cook, and Chill. Dr Raguram, Orthopedic Surgeon, MGM Hospital, Dr T. Sanjay, Chief Neurosurgeon, Rohini Hospital, Dr B. Jagadesh Babu, Psychiatrist and Dr Naresh, General Physician gave talks related to their field of specialization and also clarified queries and misconceptions related to the diet. In addition to the talks, a free blood sugar test was conducted by "Abbott Health Care"for around 200 people





Solution of Brain Ticklers

- **1. B.** Neostigmine-Neostigmine and Pyridostigmine a class of medications called acetylcholinestrase inhibitors, typically taken every 4-6 hours, which treat just the symptoms associated with Myasthenia gravis. They can enhance the transmission of nerve impulses and increase muscle strength.
- **2. C.** Physostigmine- Atropine causes anticholinergic toxicity; physostigmine reverses this by inhibiting acetylcholinestrase, given I. V.
- **3. B.** Tubocurarine- d-tubocurarine causes the most histamine release by a direct effect on mast cells, it is contraindicated in asthmatics and patients with allergies.
- D. Succinylcholine is an ultra-short-acting depolarizing-type, skeletal muscle relaxant for intravenous (IV) administration succinylcholine may induce serious cardiac arrhythmias or cardiac arrest due to hyperkalemia.





WHPA India handbook for healthcare professionals can be downloaded from the websites of three associations

India's leading healthcare professional groups unite to protect patient safety

- Indian Medical Association, Indian Nursing Council, Indian Pharmaceutical Association collaborate to tackle the issue of spurious medicines
- Over 600 doctors, nurses and pharmacists pilot bespoke new training program
- 10,000 healthcare professionals reached through handbook publication



L to R: Candida Halton (FIP/WHPA), Luc Besançon (FIP/WHPA), Dr Rao Vadlamudi (IPA), Dr K K Aggarwal (IMA) and T Dileep Kumar (INC)

A significant step forward in the battle against spurious medicines has taken place. India's three premier Healthcare Professional Groups have completed a collaborative pilot project to raise awareness and increase education on the dangers of spurious medicines.

The Indian Medical Association (IMA), the Indian Council of Nurses (ICN) and the Indian Pharmaceutical Association (IPA) have worked together to deliver enhanced training and resources, improving knowledge and motivating action amongst their constituencies. To date over 600 HCPs have attended training sessions as part of the campaign, piloting a new education module on the issue. Many more have been reached through awareness-raising, including the commission and publication of the Spurious Medicines Handbook for healthcare professionals, destined for over 10,000 recipients.

Doctor K K Aggarwal, IMA Honorary Secretary General said: "The time is right for enhanced collaboration between the healthcare professions concerning patient safety. Spurious medicines are a serious concern and the IMA is pleased to collaborate with nurses and pharmacists on the issue."

Mr T Dileep Kumar, INC President commented: "The nursing role is key to promoting and protecting patient safety. The INC is fully supportive of this initiative to combat spurious medicines and we are pleased to be raising awareness and understanding on this important issue amongst nursing community."



Dr Rao Vadlamudi, IPA President: "Pharmacists have a critical role in tackling the spread of spurious medicines in India. Education and awareness are important strategies to enable action, and we are delighted to join hands with our healthcare colleagues on the issue."



The campaign has endorsement and involvement from senior Government officials from the Ministry of Health and Family Welfare (MoHFW), Regulators from Central Drugs Standard Control (CDSCO), and experts from leading healthcare facilities, security and market research. In addition, Pfizer Inc. Headquarters provided sponsorship, technical support and input to the campaign.

The campaign was initiated by the World Health Professions the support of Pfizer Inc. The WHPA has supported similar activities to address the threat of spurious medicines in Africa, Asia, Central America and Eastern Europe.

Contributed by: Pradeep Mishra, Project Manager, WHPA India Email: pramish71@gmail.com, searpharmforum@hotmail.com





Whom to complain to if you have any complaint **regarding** your Pharmacy and medicines

By law

Most medicines are required to be sold in a pharmacy/medical store only under the direct supervision of a Registered Pharmacist. Each pharmacy/medical store needs to be licensed by the local drug control authority.	If you come across a pharmacy/medical store with proper license or without a Registered Pharmacist.
A bill or a cash memo is the only proof available that a particular medicine of a particular manufacturer and batch number were purchased from a particular pharmacy. This is especially important in case of any defects/complaints are detected in the medicine.	If the pharmacy personnel refuse to give you a pro complete cash memo.
The pharmacy must stock and sell genuine and quality medicines.	If you suspect any medicine to be not of standard que (spurious, misbranded or fake) by visually inspect or if you suspect it to be ineffective.
The pharmacy has to be maintained neatly and as per regulations.	If on your visit you find that it is not properly maintain
The pharmacy cannot charge you more than the cost written on the label of the medicine.	If the pharmacy overcharges you.
All prescription medicines have to be sold only against the prescription of a Registered Medical Practitioner.	If you find the pharmacy selling such medicines with a prescription.
Whom to complain? You can complain to: • Drugs control Administration of your respective State	

- The Consumer forum in your respective district
- For filing an online complaint log on to: www.core.nic.in



PHARMACY COUNCIL OF INDIA Statutory body under the Ministry of Health & Family Welfare, Govt. of India www.pci.nic.in



Issued in public interest by: INDIAN PHARMACEUTICAL ASSOCIATION COMMUNITY PHARMACY DIVISION www.ipapharma.org

When to file a complaint?

COMPLAINT BOX

www.core.nic.in

nout a

roper,

quality ting it

ned.

thout



Innovate

Upcoming Events:

- · IPA Convention, Mumbai, India, June 5-6, 2015, Visit: www.ipapharma.org
- · IPSF Congress, Hyderabad, India, July 30 to August 9, 2015, Visit: www.ipsf2015.org
- 75th FIP Congress, Dusseldorf, Germany. September 29-October 3, 2015 Visit: www.fip.org

Health days

World Asthma Day 5th May, 2015

World Hypertension Day 17th May, 2015

World No Tobacco Day 31st May, 2015

World Blood Donor day 14th June, 2015

International day against **Drug Abuse** 26th June, 2015

JOIN

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

www.ipapharma.org ipacpdetimes@gmail.com

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.

61st IPSF World Congress 2015 Hyderabad, India 30thJuly - 9th August, 2015 International Pharmaceutical Students' Federation (IPSF) World Congress is

for the first time in 60 years being hosted in India by Indian Pharmaceutical Association - Students' Forum (IPA-SF), the student wing of the Indian Pharmaceutical Association (IPA)

Experience pharmacy with innovative learning



General Assembly :

It is the highest decision making body of the Federation. The General Assembly is the origin of many new policies and ammendments formulated for the better and brighter future of tomorrow's pharmacists.

Workshops :

Each workshop focuses on a particular area of interest, and allows our delegates to learn from one another in a supportive, friendly atmosphere. Also includes Industrial Visit, Public Health Campaign and Competitions.

Social Events :

Each night of the ten day congress is themed differently. The events include : Welcome night. Pool party, Bollywood night, Indian night, International night, Holi party, Lab coat party and Gala night.

Explore the pharmacy education as a holistic experience of learning with innovative Pharma-Fun

Visit our website for registration : www.ipsf2015.org

Venue : Marriott Hotel **Convention Center** Hyderabad, India



Hiren Davawala (+919892400884) registrations@ipsf2015.org



For other details/ queries

contact:

f) () (B)

IPA CPD Editorial team

For registration details

contact:

Editor: Dixon Thomas • Chairperson: Manjiri Gharat • Immediate Past Chairman: Raj Vaidya • Advisor: Pradeep Mishra Editorial Assistants: Kavita Gaonkar, Amruta Deshpande, Vidya Peter, Tinu Joshy

For private circulation to healthcare professionals only

Disclaimer: Drug information is for health care professionals only. We try our level best to gather updated healthcare information, but it is better advised to refer and consult other relevant resources before taking a practice decision. Views of the authors are not necessarily, the views of IPA CPD, editors, and the IPA and/or editorial board members are not responsible for any damage caused due to information published in IPA CPD e-Times. Editorial board hold the right to do any corrections while publishing e-Times and committed to publish corrections on the published content when noticed in writing. Subjected to Mumbai Jurisdiction only.

Published by:

Indian Pharmaceutical Association—Community Pharmacy Division, IPA Headquarter, Kalina, Santacruz (E), Mumbai - 400 098.

Creative Design: PMS Arts & Communications, www.pmsarts.com



Website: www.ipapharma.org Tel:91-22-2667 1072 Fax :91-22-2667 0744 Email: ipacpdetimes@gmail.com https://sites.google.com/site/ipacpdetimes/