PHARMACISTS DAY
SEPTEMBER 25, 2016

PHARMACISTS: CARING FOR YOU

Connect with Pharmacists for a Healthy India
Message from the Chief Executive Officer of the International Pharmaceutical Federation (FIP)

I am delighted to have been invited to mark this 25th issue of CPD e-Times with a message from the International Pharmaceutical Federation (FIP). We are pleased to see how this Indian Pharmaceutical Association journal has grown since the first issue was published in 2012 and I offer my hearty congratulations to the e-Times team for their achievements.

In India, where a relatively large proportion of colleagues work in the industry sector and where the regulation of pharmacy practice has only recently come into force in the form of the 2015 Regulations, the vision of CPD e-Times - to offer readers a means of professional development - is hugely significant. The pharmacy profession and recognition of pharmacists in India is advancing. No longer are pharmacists simply suppliers of medicines but they are now officially recognized, through the new regulations, as primary health care professionals — the managers of medicines and providers of advice. This is a truly significant milestone and I urge you to continue to uphold these crucial new standards.

The ethos of CPD e-Times mirrors that of FIP. Not only does its team work - through its content - to enable pharmacists to ensure the responsible use of medicines, but it has also had the foresight to adopt a global outlook. Learning from one another, across borders, is an important part for the progression of our profession and the journal gives strong focus to pharmacy on a global level. Through its pages, CPD e-Times readers are kept up to date with what is happening around the world, from articles about pharmacy practice in other countries to news of international resources from FIP. We understand that CPD e-Times is also read by colleagues as far afield as Indonesia, China Taiwan, Zimbabwe and Zambia and so you, too, share your valuable professional activities, such as your inspiring work in the area of tuberculosis control.

I have no doubt that pharmacists in India are, rightly, proud of our profession; we are always impressed with how India embraces World Pharmacist Day through myriad activities. I encourage you to continue in activities that you can be proud of. I cannot stress enough the importance of maintaining and updating our skills as healthcare professionals (defined as one of the four main roles for pharmacists in the joint FIP/World Health Organization guidelines on Good Pharmacy Practice) so that currently practicing pharmacists are already able to advance the profession and lead the way to the next generation of pharmacists. Continue to develop your knowledge. Beyond reading CPD e-Times, I call on each of you to reflect on what changes you will be making after reading each issue so that your reading really has an impact on patients. I look forward to the advancement of Indian pharmacy and many more successful issues of CPD e-Times to come.

Luc Besançon
Chief Executive Officer
International Pharmaceutical Federation (FIP)
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Pharmacists Without Borders-Canada

Pharmacists without Borders-Canada (PSF-Canada) is a non-profit organization that is dedicated to offering humanitarian assistance to developing countries by providing pharmaceutical care through training, education and organization of resources. Since its foundation in 1994, PSF-Canada continues to conduct development and evaluation missions in different areas of the world. PSF-Canada currently has ongoing missions in Benin, Haiti and Uganda. Our missions promote the work of pharmacists in the humanitarian sector and international cooperation. In addition, we are a pharmaceutical reference for other non-governmental organizations and collaborate with them on joint projects.

PSF-Canada evaluates the needs of populations in developing countries with the aim of establishing optimal local strategies for the logistic of essential medications and medical supplies where they are most needed. PSF-Canada does not accept medication donations.

Through professional development projects in several countries, PSF-Canada conducts reviews on drug distribution, inventory management, and good pharmaceutical practice. In order to promote the rational use of medications, we provide training to local health professionals.

To overcome challenges in delivering and understanding pharmaceutical advice, PSF-Canada's pictogram project was used in several health centers in rural areas of Mali. These illustrations provided explanations on dose administration and specifics about pharmacological therapy. The pictograms were particularly useful in these areas since illiteracy is common and the population speaks varying dialects.

Pharmacists without Borders-Canada is a humanitarian movement of pharmacists that is committed to promoting optimal health outcomes through its international missions. If you have the opportunity, I encourage you to get involved in a non-profit organization that you are passionate about.

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Dear Pharmacists,

World Pharmacists Day with the theme “Pharmacists: Caring for You” is just over and we saw plethora of activities all across India on this day ranging from felicitating senior pharmacists to public awareness rallies to arranging health camps for the community. I am glad that the trend is setting in well to celebrate this day. It is 6th year of the inception of this day and such activities are making the profession much more visible to other stakeholders. The best part is that everyone who is connected with pharmacy participates - the practicing pharmacists, the teachers, the students, the regulators and industry professionals as well. You can see few glimpses of this event on pages …of this issue.

Attending the FIP Congress has always been an enriching and enjoyable experience. This year’s congress at Buenos Aires, from 28th August till 1st September happened to be even more happier and memorable. I was among the 8 FIP Fellow awardees. I sincerely thank FIP for this recognition. It is a great honour to me, IPA and to India. It makes me more humble and increases my responsibility to continue my professional journey with same zeal, enthusiasm and commitment. I take this opportunity to thank all my mentors, and my dear colleagues in IPA and FIP, my college and all other organizations with whom I work such as the Pharmacy Council, chemist associations, media, industry, FDA, consumer organisations for their constant support and for giving me ample of opportunities for professional contribution.

At IPA we look forward to two major happenings before this year ends. First is the National Pharmacy Week (NPW) which is in November and the theme is “Pharmacists for a Healthy India: Role in Diabetes Prevention and Management”. I request all to gear up for this important event and keep checking IPA website (www.ipapharma.org) for any updates. Another one is a mega event and that is 68th Indian Pharmaceutical Congress (IPC). The annual event is organised by the Indian Pharmaceutical Associations (IPA) and supported by the Commonwealth Pharmacists Association (CPA), Pharmexcil, the Indian Drug Manufacturers’ Association (IDMA) and the Organization of Pharmaceutical Producers of India (OPPI) It will be held from 16th to 18th December in the beautiful beach city of Visakhapatnam in Andhra Pradesh. The theme of IPC is “Quality Pharmaceuticals and Patient Welfare” and there will be a galaxy of speakers from India and abroad delivering the sessions which will be of interest to all, from students to practicing pharmacists to industry professionals. The good news is in a recent development - PCI has announced that the sessions at 68th IPC will be recognized by PCI as continuing pharmacy education (CPE) programmes and thus the sessions will have accreditation by PCI giving benefit to the attendees. Please see more details of IPC on website http://www.68ipc.com/ or on Facebook page: https://www.facebook.com/68ipc2016vizag/. I appeal all to plan to be a part of this biggest national conference of pharma professionals in India.

This is the 25th issue of IPA CPD eTimes, and its great pleasure when I look back at our journey from a 4 page eTimes in September 2012 to now a full fledged periodical. It has been very satisfying journey evolving the eTimes along with my core team Raj Vaidya and Dr Dixon Thomas. It won’t be wrong if I say we three are emotionally connected to eTimes. I thank our editorial team members, regular contributors such as Dr L Britto, Amrita Deshpande, thank Pradeep Mishra and his team who design the eTimes beautifully. And most importantly I must say the response that we get from our local and global colleagues, is overwhelming and in fact that has been truly inspiring us. I do wish and urge all community pharmacists to read it and make the best use of it in practice - this has been the main motive in initiating eTimes.

Mrs Manjiri Gharat
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Editorial

Four years, 25 issues of a bimonthly professional journal, planning, coordinating with various professionals, organizing for their literary contributions, compilation, ensuring quality of contents, making it free from errors with repeat proof readings, designing it, ensuring it is released in time, and then emailing it to our readers! Whew, a very hectic task; but very satisfying. We wish to say a very big thank you and gratitude to all those who have been part of this journey.

eTimes was started to reach out and enlighten pharmacists with professional information. We have tried our best to cover various topics, to add new columns every few issues, to touch upon aspects which we felt community pharmacists would like to imbibe. With its regular features, eTimes has now swelled to almost 30 most pages per issue.

Initially, when we set out, our purpose was to cater to community pharmacists in India. But we soon started getting very good support from our international colleagues. It has indeed kept us on our toes to deliver eTimes as a good value reading issue after issue. Many thanks to you all for your valuable feedback and suggestions.

We have now also begun circulating the pdf version of eTimes through Whatsapp, making it even more convenient for pharmacists to go through it as per their convenience using their hand held devices. We are very much hopeful eTimes will become even more popular now.

As the world has gone into a digital mode, it should be the endeavour of professional bodies in India to take E learning to community pharmacists across the country. There is a strong need now to develop eModules (powerpoint/video and notes format) so that pharmacists who are generally occupied at their counter, often unable to leave the pharmacy to attend contact learning programmes, or are at locations which are either too far or inconvenient to travel to attend such contact programmes, can now upgrade themselves in the confines of their pharmacy, their home, or while on the move. E learning will definitely help to bring about a sea change in uplifting the professional knowledge of community pharmacists.

Let us hope the change will happen very soon!

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Message from Co-Editor

It is a great professional experience to be associated with the production of IPA CPD e-Times since its inception. e-Times being a traditional way of connecting pharmacists in India has opened opportunities to promote the profession. It has carefully knit collaborations between different healthcare professions globally. With vibrant leadership of IPA and CPD the changes in perspectives and practices happening in the profession have been showcased in the e-Times. e-Times has been closely following FIP, other leading agencies and reputed pharmacists to progress towards common goals. Continuing to contribute to the profession through e-Times is really rewarding to me. I thank all the readers and suggestions that helped us to deliver better. Enjoy reading the 25th issue of IPA CPD e-Times.

Dr. Dixon Thomas
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Dosage form Instructions: Enema

Before administering the enema:

1. Gather the supplies.
2. Find a warm, comfortable place to perform the enema, such as a private bathroom with a sunny window or heater.
3. Assemble the enema kit according to the instructions included with the kit.
4. Fold any towels on the bathroom floor.

Steps to follow:

1. Remove the protective tip from the enema bottle.
2. Lie down on back, with knees drawn towards chest.
3. Gently insert the enema nozzle into the rectum, with the tip pointing towards the navel.
4. If this causes pain, or difficulty in inserting the enema tip, stop.
5. Do not force the enema tip into the rectum - this could cause injury. Pull out the nozzle and try inserting again.
6. Some enema nozzles are pre-lubricated. If the nozzle is not pre-lubricated, lubricate it before inserting if required.
7. Once the nozzle is comfortably inserted into the rectum, empty the enema container slowly.
8. Squeeze the container from the end, until almost all of the liquid is removed.
9. Don’t worry about emptying the container completely because it is designed to contain extra liquid.
10. Remove the enema tip from the rectum.
11. Wait, and then evacuate the bowels by having a bowel movement.
12. The amount of time for bowel movement depends on the product being used.
13. Stop using the enema and consult a doctor if the bowel movement is not happening or if it bleeds.

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Lab information:
Gamma-glutamyl transpeptidase (GGT) blood test

The gamma-glutamyl transpeptidase (GGT) blood test measures the level of the enzyme GGT in the blood. GGT is an enzyme found in high level in the liver, kidney, pancreas, heart, and brain. It is also found in lesser amount in other tissues. An enzyme is a protein that causes a specific chemical change in the body. This test is used to detect diseases of the liver or bile ducts. It is also done with other tests (such as the ALT, AST, ALP, and bilirubin tests) to tell the difference between liver or bile duct disorders and bone disease. It may also be done to screen for or monitor alcohol use.

Drug-lab test interactions
Drugs that can increase GGT level include:
- Alcohol
- Phenytoin
- Phenobarbital

Drugs that can decrease GGT level include:
- Birth control pills
- Clofibrate

The normal range for adults is 8 to 65 U/L. Normal value ranges may vary slightly among different laboratories. Some labs use different measurements or may test different specimens.

An increased GGT level may be due to any of the following:
- Alcohol use
- Diabetes
- Flow of bile from the liver is blocked (cholestasis)
- Heart failure
- Swollen and inflamed liver (hepatitis)
- Lack of blood flow to the liver
- Death of liver tissue
- Liver cancer or tumor
- Lung disease
- Pancreas disease
- Scarring of the liver (cirrhosis)
- Use of drugs that are toxic to the liver

Interpretation
An elevation of GGT activity is seen in any and all forms of liver disease, although the highest elevations are seen in intra- or post-hepatic biliary obstruction. Elevated values can also indicate alcoholic cirrhosis or individuals who are heavy drinkers.

The finding of increased GGT and alkaline phosphatase (ALP) activity is consistent with hepatobiliary disease.

The finding of normal GGT activity and increased ALP activity is consistent with skeletal disease.

Resources:
- https://medlineplus.gov/ency/article/003458.htm
Drug Information: Doxepin

Brands available: Doxin, Spectra etc.

Pharmacological Class of drug: Anti-anxiety/Tricyclic antidepressant

Indications: Treatment of psychoneurotic patients with depression or anxiety, depression or anxiety associated with alcoholism, maniac depressive disorders, treatment of insomnia.

<table>
<thead>
<tr>
<th>Route</th>
<th>Onset</th>
<th>Peak</th>
<th>Half-life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>3 hrs</td>
<td>2-8hrs</td>
<td>6-24hrs</td>
</tr>
</tbody>
</table>

Contraindications:
- Hypersensitivity to tricyclic anti depressants, acute recovery from MI, angle closure glaucoma, increased pressure in eyes, urinary retention, prostatic hypertrophy.
- Pregnancy: Safety not established.

Counseling the patient:
- Take doxepin at least 3 hours after your last meal with a glass of water.
- Take doxepin by mouth within 30 minutes before bedtime.
- After taking doxepin, limit your activities to those needed to prepare for bed.
- Doxepin may cause drowsiness, dizziness, or blurred vision. These effects may be worse if you take it with alcohol or certain medicines. Use doxepin with caution. Do not drive or perform other possibly unsafe tasks until you know how you react to it. Do not drink alcohol while you are using doxepin.
- Doxepin may cause you to become sunburned more easily. Avoid the sun, sunlamps, or tanning booths until you know how you react to doxepin. Use a sunscreen or wear protective clothing if you must be outside for more than a short time.
- Do NOT use more than the recommended dose or for longer than prescribed without checking with your doctor.
- If you become pregnant, contact your doctor. You will need to discuss the benefits and risks of using doxepin while you are pregnant. Doxepin is found in breast milk. If you are or will be breast-feeding while you use doxepin, check with your doctor. Discuss any possible risks to your baby.
- If you miss a dose of doxepin and you no longer have time for a full night’s sleep, skip the missed dose. Do not take the dose in the morning or take 2 doses at once.
- Do not drink alcohol while you are using doxepin.
- It is important to continue taking this medication even if you feel well. Do not stop taking this medication without consulting your doctor. Some conditions may become worse when this drug is suddenly stopped. Also, you may experience symptoms such as mood swings, headache, and tiredness. To prevent these symptoms while you are stopping treatment with this drug, your doctor may reduce your dose gradually.

Dose: initial dose 75mg/day, increasing as tolerated max of 150mg/day for outpatients and 300 mg for in patients max single dose of 150mg/day at bed time, for mild organic disease 25-50mg/day
Consumer Dialogue: Prevention of Stroke

Pharmacist: Hello Sir I am xxx, a pharmacist working over here. How can I help you?

Patient: Hello I'm yyy, can you please explain me about stroke and its prevention?

Pharmacist: Yes Sir, stroke occurs if the flow of oxygen rich blood to a portion of the brain is blocked. Without oxygen, brain cells start to die after a few minutes. Sudden bleeding in the brain also can cause a stroke if it damages brain cells. There are two main types, an ischemic stroke caused by a blockage; a hemorrhagic stroke by rupture of blood vessels.

Patient: Who is at risk for a stroke?

Pharmacist: Certain traits, conditions and habits can raise your risk for stroke. These traits, conditions and habits are known as risk factors. The major risk factors for stroke include, high blood pressure (above 140/90 mmHG), smoking as it can damage blood vessels and raise blood pressure, diabetes and heart diseases. Your risk for stroke increases as you get older. At younger ages, men are more likely than women to have strokes. However, women are more likely to die from strokes. Other risk factors for stroke, many of which you can control include: alcohol and illegal drug use, unhealthy cholesterol level, lack of physical activity, unhealthy diet, obesity etc.

Patient: What are the signs and symptoms of stroke?

Pharmacist: The signs and symptoms of stroke often develop quickly. However, they can develop over hours or even days. Signs and symptoms of stroke may include: sudden weakness, paralysis, confusion, trouble speaking, problems breathing, loss of consciousness etc.

Patient: How can we prevent stroke

Pharmacist: Taking action to control your risk factors can help prevent or delay stroke. If you have already had a stroke, these actions can help prevent another one.

- Don't smoke. If you smoke or use tobacco, quit. Smoking can damage and tighten blood vessels and raise your risk of stroke. Talk with your doctor about programs and products that can help you to quit. Also, try to avoid second-hand smoke.
- Make healthy eating choices. A healthy diet includes a variety of fruits, vegetables, and whole grains. It also includes lean meats, fish, beans, and fat free or low fat milk or milk products.
- Maintain a healthy weight. If you are overweight or obese, work with your doctor to create a reasonable weight-loss plan.
- Be as physically active as you can. Physical activity can improve your fitness level and your health. Talk with your doctor about what types and amounts of activity are safe for you.
- Know your family history of stroke. If you or someone in your family has had a stroke, be sure to tell your doctor.
- If life style changes aren't enough you may need medicine to control this.

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

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

Volume 5, Issue 5, September-October 2016
Good Pharmacy Practice (GPP)
Instructions: Case 16

Prescription received from Paediatrician:

**Patient name:** yyy  
**Age:** 5 Years  
**Gender:** Male

**Reg. no.:** xxxx

Prescription was found to be valid.

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Medication</th>
<th>Dose</th>
<th>Frequency</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clarithromycin suspension 250mg</td>
<td>3ml</td>
<td>Twice a day</td>
<td>10 days</td>
</tr>
<tr>
<td>2</td>
<td>Salmeterol + Fluticasone 125 inhalation</td>
<td>1 puff</td>
<td>Twice a day</td>
<td>60 days</td>
</tr>
<tr>
<td>3</td>
<td>Salbutamol 100 mcg/Dose inhaler</td>
<td>2 puffs</td>
<td>Three times a day</td>
<td>7 days</td>
</tr>
<tr>
<td>4</td>
<td>Montelukast 5mg tab</td>
<td>1 tab</td>
<td>Once a day</td>
<td>60 days</td>
</tr>
<tr>
<td>5</td>
<td>Calcium syrup</td>
<td>-</td>
<td>Twice a day</td>
<td>60 days</td>
</tr>
<tr>
<td>6</td>
<td>Multivitamins chew tab</td>
<td>1 gummy</td>
<td>Twice a day</td>
<td>60 days</td>
</tr>
</tbody>
</table>

Original prescription: Error found  
Updated- after discussion with the doctor  
Calcium syrup: Dose not mentioned: 5 ml

**Drug Interaction:** When checked, the following interactions were found;

- **Clarithromycin + Montelukast** – Will increase the level or effect of montelukast by affecting hepatic/intestinal enzyme CYP3A4 metabolism.
- **Clarithromycin + Fluticasone** – will increase the level or effect of fluticasone inhaled by affecting hepatic/intestinal enzyme CYP3A4 metabolism.
- **Salbutamol + Salmeterol** –
  - Decrease serum potassium.
  - Both increase sympathetic (adrenergic) effects, including increased blood pressure and heart rate.

**Instructions to patient:**

- **Clarithromycin suspension 250 mg** – This suspension is an antibiotic that works by stopping the growth of the bacteria. It is used to treat acute and chronic infections related to the respiratory system.
- **Salmeterol + Fluticasone 125 inhaler** – It is inhalation that helps in dilating the airway and reduces the inflammation. It is having a corticosteroid that decreases inflammation.
- **Salbutamol 100 mcg inhaler** – It is another inhalation that is a quick reliever at the time of asthma attacks.
- **Montelukast 5 mg tablet** – This tablet will prevent and manage asthmatic attacks.
- **Calcium syrup 5ml** – This syrup is used to improve calcium levels in the body.
- **Multivitamins chew tab** – Used to improve vitamins in the body.
Medication schedule:

<table>
<thead>
<tr>
<th>S.no</th>
<th>Medication</th>
<th>When to take</th>
<th>Do not take with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clarithromycin suspension</td>
<td>To be taken twice daily before or after food</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Salmeterol + Fluticasone inhaler</td>
<td>1 puff twice daily once in the morning and once in the evening</td>
<td>Not to be taken with grapefruit juice.³</td>
</tr>
<tr>
<td>3</td>
<td>Salbutamol 100mcg inhaler</td>
<td>2 puffs thrice daily</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Montelukast 5mg tablet</td>
<td>1 tablet, once in the evening</td>
<td>Not to be taken with grapefruit juice.⁶</td>
</tr>
<tr>
<td>5</td>
<td>Calcium syrup</td>
<td>5 ml to be taken twice daily</td>
<td>Not to be taken with foods containing oxalic acid like spinach, peanuts, pecan, beets.⁶</td>
</tr>
<tr>
<td>6</td>
<td>Multivitamins chew tab</td>
<td>1 tab twice daily</td>
<td>-</td>
</tr>
</tbody>
</table>

Possible side effects of the prescribed medications:

**Clarithromycin** – Abdominal pain, diarrhoea, disorder of taste, disorder of taste.⁶

**Salmeterol + Fluticasone** – Nausea, musculoskeletal pain, dizziness.³

**Salbutamol** – feeling a bit shaky, increased or uneven heart rate, increased blood flow to your extremities.⁶

**Montelukast** – headache, abdominal pain, thirst, diarrhoea, nausea, vomiting, rash, fever.⁶

**Calcium syrup** - Abnormal taste in mouth, Constipation, Flatulence.⁶

References

6. DRUGDEX® System (electronic version). Truven Health Analytics, Greenwood Village, Colorado, USA. Available at: http://www.micromedexsolutions.com/

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Brain Ticklers
(Please find answers in page 13)

Q.1) Mr XR has been receiving Tolterodine therapy, 2mg tablet twice a day for his overactive bladder. He is also, recently prescribed erythromycin 500 mg twice a day by his general physician for tonsillitis. What you think will happen if both the drugs were taken as prescribed by the doctors?
   a. Plasma concentration of Erythromycin will be reduced
   b. Tolterodine will increase plasma concentration of Erythromycin
   c. Plasma concentration of Tolterodine will be elevated
   d. Nothing will happen

Q.2) Which drug among these given below, is used to produce sedation and amnesia during labour (twilight sleep)?
   a. Atropine
   b. Cyclopentolate
   c. Oxybutynin
   d. Hyoscine

Q.3) In Atropine poisoning, gastric lavage is done using?
   a. Potassium permanganate
   b. Tannic acid
   c. Sodium bicarbonate
   d. Physiological saline 1%

Q.4) Which of the following is not a mydriatic?
   a. Cyclopentolate
   b. Tropicamide
   c. Pilocarpine
   d. Homatropine

Q.5) Which of the following is contraindicated in glaucoma and prostatic hypertrophy?
   a. Trimethaphan
   b. Rimonabant
   c. Pilocarpine
   d. Atropine

Q.6) Oxybutynin is not used for?
   a. Hastening dilation of cervix
   b. Nocturnal enuresis
   c. Neurogenic bladder
   d. Spina bifida

Q.7) Dicyclomine is also used for?
   a. Urinary frequency and urge incontinence
   b. Asthmatic bronchitis
   c. Mydriatic
   d. Morning and motion sickness

Q.8) Antacids interact with anticholinergics, True or False?
   a. True
   b. False

Q.9) Which of the following is not true about Atropine?
   a. Causes tachycardia
   b. Depresses vestibular excitation
   c. Causes bronchodilation
   d. Increases sweat, salivary and lacrimal secretion

Q.10) Can benzhexol be given in chlorpromazine induced extrapyramidal side effects?
   a. Yes
   b. No
Aspirin (Acetyl salicylic acid) (A.S.A.)

Pharmacological class and Indications: Non Steroidal Antiinflammatory Agent (NSAID). Aspirin is used in a mild to moderate pain (headache, body ache, toothache, migraine, etc.), relieves pyrexia, anti-inflammatory, rheumatic diseases, anti-platelet.

Mechanism of action: Aspirin or any other NSAIDs inhibits the activity of the enzyme cyclo-oxygenase (COX) which leads to formation of prostaglandins, that causes inflammation, swelling, pain, fever. However by inhibiting this key enzyme in PG synthesis, aspirin also prevents the production of physiologically important PGs which protect the stomach mucosa from damage.

Contraindications:
- Children under 12 years (can cause Reyes syndrome), previous or active peptic ulceration, haemophilia, severe cardiac failure. NOT to be used for treatment of gout.
- Patients hypersensitive to aspirin or any other NSAIDs, which includes those in whom attacks of asthma, angioedema, and rhinitis have been precipitated by aspirin or NSAIDs.
- Avoid aspirin in hepatic impairment as it increases the risk of gastro-intestinal bleeding.
- Pregnancy- Increased dose may be related to intrauterine growth restriction and teratogenic effects, impaired platelet function with risk of haemorrhage and delayed onset and increased duration of labour with increased blood loss, can occur if used during delivery. Avoid analgesic doses if possible in last few weeks.
- Increased doses lead to closures of foetal ductus arteriosus in utero and possibly persistent pulmonary hypertension of new-born's, kernicterus in jaundiced neonates.
- Breast feeding – Possible risk of Reye's syndrome, regular use of high dose could impair platelet function and produce hypoprothrombinaemia in infant if neonatal vitamin K stores low.

Special warnings and precautions for use:
- Use of NSAIDs in third trimesters of pregnancy should be avoided due to effect on the foetal cardiovascular system (ductus closure)
- Also leads to alternation in maternal and foetal haemostasis. High doses have been associated with increased perinatal mortality, intrauterine, growth retardation, teratogenic effects.
- Aspirin is excreted in human milk use of increased dose can result in rashes, platelet abnormalities, bleeding in nursing infants.

Adverse Drug Reactions:
- EENT- Tinnitus, hearing loss.
- GI- Nausea, GI distress, occult bleeding, dyspepsia, GI bleeding.
- Hematologic- Leukopenia, thrombocytopenia, prolonged bleeding time.
- Hepatic- Abnormal liver function, hepatitis.
- Skin- Rashes, bruising, urticarial, angioedema.
- Other- Hypersensitivity reactions (anaphylaxis, asthma), Reye's syndrome.

Patient Counselling:
- Tell parents to keep aspirin out of children's reach, because aspirin is a leading cause of poisoning.
- Advise patients receiving high dose, long term aspirin therapy to watch for bleeding gums and signs of GI bleeding.
- Instruct patients to avoid use of aspirin if allergic to tartrazine dye.
- Patients to take drug with food or after meals to avoid GI upset.
- Effervescent tablet: Drop a tablet in a glass of water (200ml). As the tablet disperses, consume the suspension.
## Abbreviation/ACRONYM | Full Form
--- | ---
IDDM | Insulin-Dependent Diabetes Mellitus
NIDDM | Noninsulin-Dependent Diabetes Mellitus
GLUT | Glucose Transporter
IRS | Insulin Receptor Substrate Proteins
PIP₃ | Phosphatidyl Inositol Triphosphate
MAP Kinase | Mitogen-Activated Protein Kinase
T-Prk | Tyrosine Protein Kinase
Ras | Regulator Of Cell Division & Difference
AI | Aromatase Inhibitor
GLP | Glucagon-Like Peptide
SUR | Sulfonyl Urea Receptor
DPP-4 | Dipeptidyl Peptidase-4
DHT | Dihydrotestosterone
ER | Estrogen Receptor
AR | Androgen Receptor
PPH | Post-Partum Haemoglobin
VDR | Vit D Receptor
DCCT | Diabetes Control and Complication Trial
PGI₂ | Prostacyclin
OGT | Oral Glucose Tolerance
HbA₁C | Glycated Haemoglobin
DCCT | Diabetes Control & Complications Trial
NEFA | Non-Esterified Fatty Acid
LADA | Latent Autoimmune Diabetes in the Adult
MODY | Maturity Onset Diabetes of the Young
HLA | Human Leukocyte Antigen
AGPs | Advanced Glycation End-Products
SGLT-2 | Sodium-Glucose Co-transport-2 Inhibitor
NPH Insulin | Neutral Protamine Hagedorn insulin
OADs | Oral Anti-Diabetic Agents

## Solution of Brain Ticklers

Q.1) c – Tolterodine is metabolized by CYP3A4. Erythromycin inhibits CYP3A4 and thus dose of Tolterodine has to be reduced to half to prevent toxicity.

Q.2) d – Hyoscine causes sedation and amnesia due to its CNS depressing properties.

Q.3) b – Since potassium permanganate and others are ineffective in oxidizing Atropine, tannic acid is used.

Q.4) c – Except Pilocarpine, all are mydriatics whereas, Pilocarpine causes miosis.

Q.5) d – All atropinic drugs are contraindicated in individuals with a narrow iridocorneal angle, may precipitate acute congestive glaucoma. In elderly males with prostatic hypertrophy, urinary retention can occur.

Q.6) a – Oxybutynin is vasicoselective agent and thus does not hasten dilation of cervix during labour but instead, used in neurogenic bladder, spina bifida and nocturnal enuresis.

Q.7) d – Dicyclomine also has anti emetic property and thus used in morning and motion sickness also.

Q.8) a – Antacids interfere with the absorption of anticolinergics.

Q.9) d – Atropine has anti-cholinergic properties. It decreases sweat, salivary and lacrimal secretion through M3 blockade.

Q.10) a – Trihexyphenidyl is an anticholinergic agent and anticolinergics are the only drugs effective in Chlorpromazine and other Phenothiazines induced extrapyramidal side effects.
Community Pharmacy Practice in England

The word 'pharmacist' was first used in a publication in England in 1834 according to the Oxford English Dictionary in a novel by Lytton called The Last Days of Pompeii. However, it was certainly in use from the 18th century with the meaning of someone who prepared and dispensed medicines. Nevertheless, at the beginning of the 19th century most people working in this area would have called themselves chemists and/or druggists. The terms pharmacist and pharmaceutical chemist (now usually shortened to chemist) came later in the 1800s.

The word “pharmacy” has a much longer history in England. Chaucer in The Knight’s Tale (written around 1386) uses the word to describe a medical preparation of plants “farmacies of herbs.”

In the early 1800s, an Association was formed to put together a proposal to Parliament to set up a body that examined and regulated apothecaries, surgeon-apothecaries, midwives and dispensing chemists. The chemists and druggists took action, arguing that they were best placed to set their own standards, as they were more experienced in making up prescriptions and making medicines than the apothecaries, so they should not be put under their control. The chemists and druggists won their argument, and when the Apothecaries Act of 1815 was finally created, the apothecaries did not have control over making medicines.

In 1841, a group of chemists and druggists convened a public meeting in London to discuss a proposed medical reform bill. Although this bill failed at its second reading, the trade felt vulnerable. It was unregulated and unrestricted. Anyone could operate under the title of Chemist and/or Druggist.

Jacob Bell, the son of a Quaker pharmacist John Bell, emerged as a spokesman for those concerned. The group agreed that the best foundation for a permanent independent association was membership based on a recognised qualification. William Allen proposed the formation of the Pharmaceutical Society at a meeting on April 15th 1841 at the Crown and Anchor Tavern on the corner of Arundel Street and the Strand in London. John Bell seconded it. Allen went on to become the Society’s first president. A committee of forty was appointed as the first Council to frame laws and regulations. It served until elections in May 1842, when a Council of 21 members was formed.

Fast forward to the present day and the Society is still an independent professional body but now does not regulate the profession. Community Pharmacists are widening their role with more services being provided to the public from community pharmacy.

Community pharmacies in England

There were 11,674 community pharmacies in England as at 31 March 2015, compared to 11,647 as at 31 March 2014, an increase of 27 (0.2 per cent). There has been an increase of 1,802 (18.3 per cent) since 2005/06.

Most prescription items are dispensed by community pharmacies. In England in 2014/15 978.3 million items were dispensed by community pharmacies (92.1 per cent of all items dispensed in the community). This is an increase of 30.1 million (3.2 per cent) from 2013/14 when the figure was 948.2 million. This compares with 85.0 million items dispensed by doctor dispensing practices and 7.8 million by appliance contractors in 2014/15. 14.7 per cent of items dispensed by community pharmacies and appliance contractors were via the Electronic Prescription Service.

There were 124 appliance contractors on the pharmaceutical list as at 31 March 2015, 122 of which were actively dispensing between 1 April 2014 and 31 March 2015. Since 2005/06 this is a decrease of 17 appliance contractors actively dispensing but an increase of 4.6 million items dispensed.
In 2014/15, community pharmacies and appliance contractors provided the following Advanced Services:

- Medicine Use Reviews: 3.2 million provided by 10,916 community pharmacies
- New Medicines Services: 775,998 provided by 9,308 community pharmacies

Community pharmacies are situated in high street locations, in neighbourhood centres, in supermarkets and in the heart of the most deprived communities. Many are open long hours when other health care professionals are unavailable. There are several different types and sizes of community pharmacies, ranging from the large chains with shops on every High Street or in edge of town supermarkets, to small individually owned pharmacies in small communities, in the suburbs and often in deprived areas or rural settings.

The traditional role of the community pharmacist as the healthcare professional who dispenses prescriptions written by doctors has changed. In recent years community pharmacists have been developing clinical services in addition to the traditional dispensing role to allow better integration and team working with the rest of the NHS.

**What services do pharmacies offer in England?**

All pharmacies provide the following services:

- dispensing
- repeat dispensing
- disposal of unwanted or out-of-date medicines
- advice on treatment of minor conditions and healthy living

**Other services that may be available from local pharmacies**

- Medicines Use Reviews
- New Medicine Service
- Advice on alcohol consumption
- Carer support
- Chlamydia screening and treatment service
- Condom supply service
- Emergency hormonal contraception (EHC) service
- Emergency supply of prescription medicines
- Independent prescribing by pharmacists – some pharmacists can now prescribe prescription-only medicines for certain medical conditions
- Minor ailment service
- Needle and syringe exchange service
- NHS Health Check (blood pressure, cholesterol or blood glucose testing)
- Pregnancy testing
- Stop smoking service
- Stop smoking voucher service
- Supervised consumption of prescribed medicines
- Weight management service
New developments in England include:
Community Pharmacists access to the Summary Care Record
NHS England has commissioned the implementation of Summary Care Records (SCR) in community pharmacy, the RPS believes it is important that pharmacists are able to use the SCR efficiently to optimise patient care, particularly with the increasing demands on the wider healthcare system.

What is a summary care record?
The Summary Care Record (SCR) is a ‘read only’ electronic patient summary containing key clinical information. It has been created with information held by a patient's GP practice and is updated whenever there is relevant change.

As a minimum the SCR contains:
- Medicines: Acute, repeat and discontinued repeat items (discontinued items will be dependent upon the GP system which created it)
- Allergies
- Adverse reactions
- Other information may also be available on a SCR, such as diagnoses, test results etc.

When do pharmacists use the SCR?
- When dispensing an emergency supply (at the request of the patient) to verify the name, form, strength and dose of medicine previously had by the patient
- Times when you would want to ask the GP practice for medicines/allergies/adverse reaction information
- Supporting self-care for public health services and promoting healthy lifestyles
- During a medicines use review (MUR) to verify and compare medicines currently being prescribed and their allergy status, where this is not already known
- For provision of the New Medicine Service (NMS)
- When supplying medicines under a locally commissioned service, e.g. supply of medicines on NHS Patient Group Direction (PGD), during minor ailments

What are the benefits of the SCR in practice?
Patient safety:
- Reducing prescribing errors
- Reducing patient harm and therefore reducing hospital admissions
- Ensuring medication that is clinically appropriate is given to the patient
- Better understanding of patient health

Efficiency:
- Reducing the number and duration of phone calls to the prescriber
- Reducing assessment time
- Being able to access required clinical information instantly
- Reduces the number of faxes for communicating information

Effectiveness:
- Reducing patients need to visit another care setting
- Supply provided sooner
- Enhancing customer loyalty
- Improving advice given about medication
- Increasing confidence in the profession
- Improving patient convenience
- Supporting seven day services

Flu vaccinations from Community pharmacy in England
In 2015, flu vaccinations were made available on the NHS from community pharmacy to help protect adults and children at risk of flu and its complications. Flu vaccines are available free of charge through the NHS in certain people, such as:
• anyone aged 65 and over
• pregnant women
• adults with an underlying health condition

Community pharmacies now offer flu vaccination to adults (but not children) at risk of flu including pregnant women, people aged 65 and over, people with long-term health conditions and carers.

**Do pharmacists need additional training to provide these services?**

You have to be accredited to undertake most additional services. This is now tends to be done by the pharmacist completing a self-declaration of competency for each service. Within this declaration usually the pharmacist will need to show they have completed recognised training courses.

**Undergraduate education reforms**

The Government and its agencies have said that a five year science based, clinically focused degree, will be introduced as part of modernising pharmacy education. This proposed reformed education pathway identifies the way forward as combining two six month integrated work based learning and clinical teaching placements with an the academic framework. Under the proposal, the supporting infrastructure would include a quality management approach to the placements, aligned to the experience of the medical and dental profession and a national single recruitment and allocation process for the placements.

As part of the next stage, in addition to considering the five year degree, the Government is looking at the pre-registration pharmacy year in its current format. This will involve developing proposals to introduce an enhanced workplace based education infrastructure to support delivery of the pre-registration year in its current format.

**Change to continuous professional development**

Continuing professional development (CPD) is a process of continuing learning and development throughout the life of a professional practicing in the UK. It enables pharmacists and pharmacy technicians to develop in their roles and demonstrate that they are competent in their area(s) of practice. It is not just about participating in continuing education, but an ongoing process.

All pharmacists and pharmacy technicians must undertake and record CPD as a condition of their registration with the General Pharmaceutical Council (GPhC). Of reflection, planning, action and evaluation. The requirements for CPD are changing as the General Pharmaceutical Council(GPhC) have been reviewing the process for Continuing Fitness to Practice (CFtP) which includes CPD.

**What could the new CPD system look like?**

We expect the new CPD system to:
• include an element of peer review related to ‘scope of practice’
• align to existing professional development programmes (such as the RPS CPD programmes)
• require between 6-12 entries including evidence of impact
• use a continuous/spot-check model for assessment and NOT a fixed point (5 year cycle) assessment
• The RPS is producing guidance and support for members around the new requirements using out post graduate credentialing process, the RPS Faculty.

**Contributed by:**

Martin Astbury,
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Vice-President, FIP Community Pharmacy Section
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Self Care: Steam Inhalation

Steam inhalation therapy with essential oil or even with plain water is a simple and effective home remedy for: headache, sinus congestion, sinus pain and infections, respiratory ailments due to allergies, asthma, common cold, influenza, and bronchitis

How is steam inhalation done?
1. Boil water in a vessel until it steams.
2. Turn off the heat and remove the vessel using a vessel holder.
3. The same vessel can be used, or take care to slowly pour the steaming water into a large glass or ceramic bowl.
4. Place the towel over the top of your head, so that it drapes over the sides of your head.
5. Close your eyes, lean over the vessel/bowl allowing the sides of the towel to create a tent over the sides of the bowl.
6. Inhale and exhale through your nose. This could be done for a minute or two. This can be repeated several times a day.
7. These days’ electric steamers are available, in case of a steamer, the water is heated until steams, then switch off the steamer and follow the above procedure.
8. Steam can be with generated using plain water or with a few drops of essential oils added into it if required.

Caution: The water shouldn't be boiled for too long.
Since very hot water is used there is a burn risk associated with inhaling steam. Therefore ensure that the procedure is done for children and elderly strictly under supervision.
Steam inhalation is not recommended during pregnancy, for a high blood pressure patient or in any other heart condition.

Uses:
• For upper respiratory and sinus congestion.
• For head ache not relation to sinus problem, such as headache which are sharp or throbbing and may be combined with neck and shoulder tension.
• Stress headache.
• Relax mind and calm the spirit with lavender and chamomile 5 drops of each or lemongrass and chamomile 5 drops of each.

Drugs used in steam inhalation:
Vapour capsules or oils, containing one or a mixture of two or more of the following:

<table>
<thead>
<tr>
<th>Camphor</th>
<th>Essential Oils</th>
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<tbody>
<tr>
<td>Chlorothymol-Eucalyptol</td>
<td>Peppermint</td>
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<tr>
<td>Menthol-55mg terpineol</td>
<td>Eucalyptus</td>
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<td>Chamomile</td>
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<td>Lavender</td>
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<td>Lemongrass</td>
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Steam inhalation for infants:-
• Simplest way is to install a mist vaporizer or humidifier in your baby’s room.
• Create a steam room by blocking any gap that may be there in your bathroom and then turn on hot water/shower. Get a towel and wrap it around your head. Let your baby sit in your lap and spend 15 minutes in the bathroom inhaling the steam.
Mechanism of Action: Steam inhalation helps in loosen the mucus, which opens blocked airways and make breathing easier.

Types of steam inhalation:
Steam inhalation can be done using plain water or by adding few drops of essential oil to water. Steam inhalation is more effective when essential oil is added.

- Eucalyptus oil: used for cold and cough, it is an anti-viral, antibacterial, decongestant and also used for Sinus infection.
- Lavender oil: anti-viral, antibacterial, decongestant and relaxant.
- Pine Oil: good decongestant
- Tea tree oil: Anti-viral
- Peppermint oil: decongestant
- Benzoin: for dry and irritating cough.
- Camphor: cough and pain relief
- Chlorothymol: Antibacterial
- Menthol: helps in congestion and sinus problem.

References:
http://hubpages.com/health/How-to-Apply-Steam-Inhalation

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National Pharmacy Week (NPW)-2016

Dear Members,
The Indian Pharmaceutical Association has been celebrating the National Pharmacy Week every year during the third week of November. The major focus of NPW celebrations is to create awareness amongst the public, other healthcare providers and the authorities, about the NPW theme in specific and about the pharmacy profession and role of the pharmacist in general.

The theme selected for this year is:
"Pharmacists for a Healthy India: Role in Prevention and Management of Diabetes"

We look forward to receiving your innovative ideas about how NPW should be celebrated this year as well as about the educational material to be developed to make it most effective and meaningful. Your active participation is most welcome.

Please write your suggestions to ipacentre@ipapharma.org / ipacpdetimes@gmail.com
Keep checking www.ipapharma.org for more details
Pharmacists Making the Difference: 
Competition for Practising Community and 
Hospital Pharmacists: - Case Report 

1. Particulars of the patient: Mrs. PQR, 40 year old female. Housewife

2. Health problem/ medication details: The patient approached her gynaecologist with complaints of palpitations. He prescribed her tab Thyroxine 100 mcg once daily without any lab support, and told her to do serum TSH later. Next day after taking a tablet of thyroxine, she did her TSH which came as 0.010 uIU/ml (N: 0.3-5.5 uIU/ml), suggestive of hyperthyroidism. Doctor reduced the dose of thyroxine to 50 mcg once daily and told her to continue the same.

3. Action/ intervention as pharmacist: Patient came to hospital pharmacy after a few days with a prescription of thyroxine 50 mcg. As I looked into the case paper as per our hospital practice, I realized that the initial diagnosis was wrong. Patient now complained of sweating, malaise and weakness. I suggested to her to consult a different doctor and gave her his address. Two months later, she visited the doctor which I recommended. Doctor suggested to her to do T3, T4 and TSH. All reports were normal as follows---T3: 85 ng (N: 60-200 ng), T4: 10.1 mcg (N 4.5-12.0 mcg), TSH 1.66 uIU/ml). She was told to reduce thyroxine to 25 mcg od for a week and then stop altogether. She was advised to repeat T3, T4 and TSH 15 days after stopping all therapy. The patient repeated the tests after 15 days of ‘no treatment’. All reports were again within normal limits: T3: 105 ng, T4: 7.5 mcg, TSH 3.71 uIU/ml). She was advised no further therapy.

4. How intervention made a difference? This was a case of normal ‘stress / work fatigue’ as diagnosed by the second doctor. She was wrongly prescribed thyroxine 100 mcg od without lab support. Due to sudden high thyroxine dose, her initial lab report came as hyperthyroidism (very low TSH). The first doctor should have immediately stopped thyroxine as it was wrong treatment but he only reduced the dose to half. My intervention revealed the true nature of illness. It brought out the patient from false thyroxine therapy and prevented ‘drug-induced hyperthyroidism’ and the complications thereafter. With assurance and counselling from the doctor and myself, the patient is now feeling ‘normal’.

Contributed by: 
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IPA CONVENTION, July 23, 2016. Raipur, Chhattisgarh
Theme “New Horizons of Pharmacy Profession: Integrating Education, Research Industry and Pharmacy Practice”

IPA CONVENTION 2016 was hosted by IPA Chhattisgarh State Branch under the leadership of Dr. Shailendra Saraf, President, IPA Chhattisgarh State Branch. The Convention was organized at the auditorium of Pandit Ravishankar Shukla University, Raipur, Chhattisgarh, and was inaugurated by Prof Shiv Kumar Pandey, Honourable Vice Chancellor of Pandit Ravishankar Shukla University, Raipur as Chief Guest and Prof K. Chinnaswamy, Professor Emeritus, J.S.S. College of Pharmacy, Ooty as Guest of Honour. Other eminent dignitaries were Dr Rao Vadlamudi, President of IPA, Prof T. V. Narayana, Hon. Gen. Secretary, IPCA & Vice President of IPA, Mr Kaushik Desai, Hon. Gen. Secretary of IPA, Dr. Shailendra Saraf, President, IPA Chhattisgarh State Branch, Dr. Deependra Singh, Secretary, IPA Chhattisgarh State Branch, Mr. Kishor Jadwani, along with management heads Mr. Harjit Singh Hura, Columbia Institute of Pharmacy, Raipur and Mr. Toshan Chandrakar, Royal College of Pharmacy, Raipur. The inaugural ceremony was conducted by Dr Manju Singh, Joint Secretary, IPA Chhattisgarh State Branch.

The Chief Guest, Prof Pandey urged on the need of pharmaceutical industry in the State and promised to convey the deliverables of the convention to the Governor of the State to motivate entrepreneurship among students and establishment of pharmaceutical industry in the State. Dr Rao Vadlamudi, President, IPA complimented the IPA Chhattisgarh State Branch for readily coming forward to host IPA Convention 2016. It is one of the objectives of IPA to reach out to various branches with such activities. He complimented the team of State branch for the success of the convention.

The Convention had a day long deliberations on various topics of interest. Dr. Ajit Dangi delivered the IPA - AU PACT Dr M. Venkateswarlu Memorial Lecture on "Moving up the Technology curve through Innovation". This was followed by a talk on "Integrating Academic Research with Industry and Practice" by Dr Rao Vadlamudi. Dr T.V. Narayana dwelt at length about various "Career opportunities for pharmacy students". Dr. Premnath Shenoy gave an "Overview of Global Vs Local Regulatory Changes of the past one decade". Dr. Subhash Mandal discussed about "Pharmacovigilance: Effective Tools for Safe Medication".

The event was well appreciated and covered in the local T.V. channels and newspapers. The management, teachers and students of all the Pharmacy Colleges of Chhattisgarh actively participated and assisted in conducting the IPA Convention 2016 held at Raipur, Chhattisgarh for the first time.
Global pharmacy awards go to pharmacists in seven countries

Ten pharmacists and pharmaceutical scientists from seven countries were recognised for their services to pharmacy at the opening ceremony of the 76th World Congress of Pharmacy and Pharmaceutical Sciences in Buenos Aires, Argentina, today. They received awards from the International Pharmaceutical Federation (FIP) as follows:

- Distinguished Science Award to Professor Shinji Yamashita (Japan; collected by Dr Teruko Imai)
- Joseph A. Oddis Award for Exceptional Service to FIP to Dr Dieter Steinbach (Germany)
- FIP Fellowships-
  - Professor Ralph Altiere (USA)
  - Professor Michael Anisfeld (USA)
  - Professor Parisa Aslani (Australia)
  - Mr Thony Björk (Sweden)
  - Professor Timothy Chen (Australia)
  - Mrs Manjiri Gharat (India)
  - Professor Michiho Ito (Japan)
  - Ms Lindsay McClure (United Kingdom)

FIP believes it is of utmost importance to support and recognise individuals who, through their vision and commitment to their profession, are making outstanding contributions to pharmacy practice and pharmaceutical sciences, serving as examples for others. Each year it honours those who have demonstrated commendable work and dedication in areas which parallel its overall mission of advancing pharmacy practice, science and education for the betterment of global health.

About the Distinguished Science Award
The Distinguished Science Award recognises an individual or group that has made an outstanding contribution to pharmaceutical science and is awarded every two years.

About the Joseph A. Oddis Award
The Joseph A. Oddis Award is given on an ad-hoc basis to officers or individuals who have rendered exceptional service to FIP.

About FIP Fellowships
An FIP Fellowship recognises individual members of FIP who have exhibited strong leadership internationally, who have distinguished themselves in pharmacy practice or the pharmaceutical sciences, who have contributed to the advancement of the practice of pharmacy or pharmaceutical sciences, and who have served FIP. FIP Fellows may use the designation “FFIP”.  

Mrs Manjiri Gharat receiving the FIP Fellow Award at the hands of President of FIP, Dr Carmen Pena

FIP Fellows
76th FIP World Congress of Pharmacy and Pharmaceutical Sciences Buenos Aires, Argentina

76th FIP World Congress of Pharmacy and Pharmaceutical Sciences was held in Buenos Aires, Argentina from 28th August till 1st September, 2016. Along with FIP, it was hosted by Confederacion Farmaceutica Argentina (COFA). 2300 delegates from 93 countries participated in this global event. The theme of the congress was “Reducing the global burden of disease: Rising to the Challenge.” The congress was as always a rich and enjoyable experience with brainstorming scientific sessions and various social events such as welcome reception, section dinners, Fun Run and many more. From India, Mrs Manjiri Gharat, Dr. N Udupa, Mr. Pradeep Mishra, Ms Ismeet Kaur participated in the congress. Mrs Manjiri represented Indian Pharmaceutical Association (IPA) at the congress. Ms Ismeet received FIP Travel Grant to attend the conference. Here we bring you some pictures from the Congress.
25th September: Pharmacists Day 2016 Celebrations

Visakhapatnam (Andhra Pradesh)  
Ulhasnagar (Maharashtra)

Dehradun (Uttarakhand)

Kalyan (Maharashtra)  
Navi Mumbai (Maharashtra)

Deesa (Gujarat)  
Solapur (Maharashtra)
Results of Pharmacists Day Competition 2016 for Practicing Pharmacists/Teacher Practitioners

IPA had organized a “Case Study Competition” on the occasion of the WPD and it got an excellent response from community and hospital/clinical pharmacists, pharmacy teacher practitioners and students.

Each case showed the proactive and caring approach of the pharmacist and the intervention made a positive difference in the life of a patient indicating how true the WPD theme “Pharmacist: Caring for You” is. Congratulations to each and every pharmacist for the participation and it was a tough job for the Judges to select few entries as winners. The cases were judged based on the type of intervention, its impact on patient’s life, skill and proactiveness of pharmacist, correctness of intervention and presentation of the case. We received more than 50 cases for this competition.

Winners

Mrs. Vandita Kotkar, Assonora, Goa
Mr. Mukesh Diwakar, Mumbai, Maharashtra
Dr. M. Sanjay Samanth, Visakhapatnam, Andhra Pradesh

Special Appreciation Prize

Mrs. Madhur Kulkarni, Mr Devendra Khot, Mr Deepesh Shah, Mr Sanjay Chougule

We thank the judges
Prof. Guru Prasad Mohanta, Department of Pharmacy Practice, Annamalai University, Dr. Seeba Zachariah, Raghavendra Institute of Pharmaceutical Education & Research, Anantapuram, AP, Mr. Sunil Chavan, Prin. K.M. Kundnani Pharmacy Polytechnic, Ulhasnagar, Mr. Mahadev Patel, Patel Medical, Mulund, Maharashtra for their valuable help in judging this competition.

All participants will soon receive a participation e-certificate. One winner entry will be published each time in eTimes starting with this issue.

Indian Pharmaceutical Association
www.ipapharma.org
68th INDIAN PHARMACEUTICAL CONGRESS - 2016
16 - 18 (Friday - Sunday) December
www.68ipc.com

Venue:
University College of Pharmaceutical Sciences,
Andhra University,
Visakhapatnam, AP - 530003

Organised by
Indian Pharmaceutical Congress Association
Bangalore

Host
Indian Pharmaceutical Association - Mumbai

Theme
Quality Pharmaceuticals and Patient Welfare

Supported by
- Indian Pharmacists' Association
- Pharmexcil
- Indian Drug Manufacturers' Association
- OPPI (Organization of Pharmaceutical Producers of India)

Exhibition Partner:
Orbit Laboratories Pvt. Ltd.

Media Partners:
- Pharma Times
- Express Pharma
- Indian Pharmacist
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World Health Days

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<td>International Day of Older Persons</td>
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<tr>
<td>1st-31st Oct</td>
<td>Breast Cancer Awareness Month</td>
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<td>10th Oct</td>
<td>World Mental Health Day</td>
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<td>24th Oct</td>
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Forthcoming Events and Meeting

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<tr>
<td>Dec 16-18th (2016)</td>
<td>68th IPC Visakhapatnam, Andhra Pradesh., <a href="http://www.ipapharma.org/">www.ipapharma.org/</a></td>
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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.

IPA CPD Editorial Team
Manjiri Gharat • Raj Vaidya • Dixon Thomas • Pradeep Mishra
Editorial Assistants: Amruta Deshpande, Vidya Peter, Manisha Mendon

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.

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