



# **DPC NEWSLETTER**

## **VOLUME 5:**

### **FEBRUARY ISSUE**

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*Congratulations*

***To all the winners and participants who made us proud in the premier Pharmaceutical and Technology event DUPHAT \* 2015!***  
[\*Dubai International Pharmaceuticals and Technologies Conference and Exhibition Conference, Dubai – United Arab Emirates 8 - 10 March, 2015]

***Prof. Saeed Ahmad Khan***  
***Dean, Dubai Pharmacy College***

*PS: More details will be published in the March issue.*

Delegates from India relating to the pharmacy field visited DPC to interact with the faculty and share experience

NAMES	DESIGNATION
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Dr. YALAVARTHY PRAMEELA DEVI, M.Sc,Ph.D.,M.Ed.,LLB Patent law. prameladeviy@yahoo.co.in	Professor, Department of Zoology, Kakatiya University, Warangal, INDIA. Teaching Experience: 30 years Research Experience: 35 years. Research Publications: 95 Research Papers in various National and International Journals of repute.

**Delegates visit DPC**

DPC celebrates  
'World Arabic Language Day '  
– 18<sup>th</sup> December



*Organized by the Writing Club in coordination with the Science Club*



# “Walk for Education 2015”

Students and staff from Dubai Pharmacy College and Dubai Medical College along with SS Lootah participated in the **“Walk For Education 2015”** an initiative by Dubai Cares, a philanthropic organization in aid to support the education system in the developing countries. All the proceeds from the charity will be provided for the education of the needy children.



*Education is the most powerful weapon which you can use to change the world.*

*-Nelson Mandela*

*Special thanks to the organizers:*

*DPC- Nabeerah*

*DMC- Sumayya*

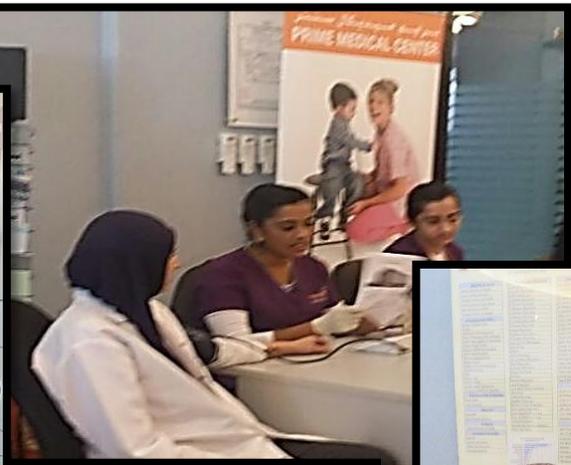
*SS Lootah Audentia- Alka*

# “Health Awareness Day”

DPC in collaboration with the Professional Regulatory Affairs Community arranged a Health Awareness day in the college premises on the 26<sup>th</sup> of February 2015 to mark the importance of setting utmost importance to a healthy life to attain success and prosperity in one’s life.

<b>Companies contributing to the awareness</b>	<i>Super vision opticals</i>	<i>Seba med</i>
	<i>Prime Medical Center</i>	<i>Al Madar Medical Center Group</i>
	<i>Chuck-e-Cheese</i>	<i>Areen East &amp; West LLC</i>
	<i>Prime Hospital</i>	<i>Fruitful Occasion</i>
	<i>Al Falaj Water</i>	<i>Royal Retreat Saloon beauty and Spa</i>
	<i>Karisma Ladies Center</i>	<i>VLCC</i>
<b>No of attendees</b>	<i>Approx 300 members</i>	





*Special thanks to Suad Ahmed  
(In-charge ,Dean's Office)*



## PAINKILLERS KILLS THE PAIN OR KILLS THE PERSON?



It is a well-known fact that the illegal drugs kill people. Shockingly, now, the new targeted legal drugs are killing people if not taken as advised by the health care professionals.

Millions of people throughout the world are getting addicted to OTC and prescription painkillers that too astonishingly more than addition of illegal drugs. The addiction of pain killers are little bit tricky as it starts with the prescription by the doctor then are used continuously and become dependent on it without even realizing that they are addicted to it.

Painkillers works by interacting with the receptors of the brain resulting in the decrease in the perception of pain that can easily lead to physical dependence and addiction. Inability to cope up with the pain and frequent use of painkillers develop risk of addiction.

Painkillers like morphine, codeine, oxycodone, hydrocodone, ibuprofen, paracetamol, acetaminophen and fentanyl are one of the most commonly abused drug classes. These drugs are not only addictive, they can lead to slowed breathing and death if too much is taken. Once these drugs are taken it sets off a cascade of reactions in the body that make it extremely difficult to stop. Continuous use of painkillers wears off effectiveness, and patients typically report getting only about 30% pain relief, compared with when they started. Even more concerning, a subgroup of these patients develop a condition known as hyperalgesia, an increased sensitivity to pain. This leads to overdose of the painkillers and ultimately kills the people.

People addicted to painkillers often ends with lack of energy, physical changes, sleeplessness, a drop off in performance, lack of interest in activities and relationships. **Addiction to prescription pain relievers is like being hooked on heroin** and the withdrawal isn't much different: bone and muscle pain, diarrhea, vomiting, cold flashes and insomnia.





Painkillers are safe and effective when used as directed. However, misuse of these products can be extremely harmful and even deadly. Person who take pain relief medications must follow their health care professional's instructions carefully.

Pharmacist can play an important role in medication management and rational use of medications. Pharmacist is the last person with whom the patient meets and collect the medication before leaving the health care institutions.

Make awareness among general population about the use of painkillers and its consequences.

Always educate the patients that painkiller doses should not be changed or continued without the consultation of health care professionals.

Patients should be advised not to share their painkillers with any of the family members or friends.

Here are other key points to remember:

**With acetaminophen:** Taking a higher dose than recommended will not provide more relief and can be dangerous. Too much can lead to liver damage and death. Precautions has to be taken when acetaminophen is given to the children.

**With NSAIDs:** Too much can cause stomach bleeding and kidney damage. The risk increases in people who are over 60 years of age, taking prescription blood thinners, taking steroids, have a history of stomach bleeding or ulcers. Taking a diuretic, have high blood pressure, heart disease, increases the risk of kidney disease.

**With opioids:** Use of opioids can lead to drowsiness. Driving or working with machineries should be avoided while on opioid containing medications.

Prof. Mirza Baig  
Department of Clinical Pharmacy and Pharmacy Practice  
Dubai Pharmacy College



## *Nuclear pharmacy: Beyond the looking glass*

- Sara Kamal (Alumni)

Nuclear pharmacy is a specialized pharmacy practice that deals with the compounding and the dispensing of radioactive pharmaceuticals utilized in various nuclear medicine procedures. In order to broaden our knowledge about this specialized field that is similar yet unique from traditional pharmacy practice, I met Professor Suleyman Kutlan Ozker, who is the Consultant Radiochemist, Medical Physics Section – Dubai Hospital.

Professor Ozker is an expert in the field of nuclear pharmacy having been involved in it for the past 40 years since the early days, when it was beginning to evolve into a specialty. He has spent 36 years in the USA of which 20 years in the University of Wisconsin as a Radiopharmacist in the research department.

*Please describe a typical day at work;*

Every work day is hectic and one has to be on the toes at all times during work hours. Here, we import radiopharmaceuticals from Europe, and carry out tests to assess their specificity and content. We also use the  $^{99}\text{Tc}$  generator to prepare radiopharmaceuticals. Radiopharmaceuticals are used mostly for diagnostic procedures mainly in the case of malignant tumors and cancers and for functional studies. Patients are scheduled and accordingly, the necessary radioactive pharmaceuticals prepared. An average of 15 – 16 patients per day is seen.

*As a radiopharmacist, what is the extent of interaction with the patients directly?*

The amount of interaction involved with patients directly is minimal or none at all. We receive the blood samples or body fluids of the patients in order to carry out diagnosis. The sample is made radioactive and injected into the patient's body again to determine the presence of tumors, cancers, the extent of malignancy, aggressiveness, etc. Although we have complete information regarding patients, it is the physicians who administer the radioactive chemicals.

*What is the difference between the imaging obtained by techniques using radioactive substances and other scans such as the MRI and CT?*

MRI and CT scans can be used to visualize areas but techniques such as PET (Positron Emission Tomography) are used for functional imaging. They give an idea about living physiology and behavior of the cells, macromolecules, etc. They can also be used for the staging of tumors. Nowadays, PET and CT scans are taken together to give an idea regarding the anatomy and physiology.

*What are the health risks of working with radioactive compounds on a daily basis?*

The risks are actually lesser than those involved in a chemical plant or in other pharmacy practice sectors. But this is on the criteria that the individual is well trained and possesses the necessary knowledge of safety precautions which minimizes the exposure to the radiations. Otherwise, exposure to radioactive substances will lead to harm to both self and the other people around the radiopharmacist, including the patients.

*What inspired you to choose this field as your specialization?*

I did not graduate as a radiopharmacist; in fact I graduated as a radiochemist in 1969. After graduation, I worked in the radioisotopes department in a nuclear research center. My interest in this field was sparked during my days there. And as I learnt about the use of radioisotopes in the seemingly implausible field of medicine and with rapid developments going on in this area, I found my true calling.

*How has radiopharmacy as a specialty evolved through the years?*

Back in 1972 in America, when radioactive chemicals were being used in the field of medicine, the concept of a specialty as radiopharmacy had not come into being yet. No regulations were made to monitor their use. It was after 1975 that the FDA implemented NDA (New Drug Application) for radioactive chemicals and made the licensing of all radioactive chemicals being used in pharmaceutical care a necessity. Now they have become a part of conventional pharmaceutical care.

*What is the current status of radiopharmaceuticals in today's healthcare and how do you see it changing?*

Today most of their use, nearly 90% is in diagnostic procedures where they have immense value. But in the near future, they will play a more prominent role in therapeutics including possibly of malignant tumors, cancerous tumors, the treatment of which still presents a challenge. They will provide a specific means of irradiating the cancerous tissues internally, reducing the damage to nearby normal tissues.

*What are the challenges that have to be overcome before radioactive chemicals can be used for therapeutics?*

They are in use in therapeutics nowadays but their use is limited by many problems, the foremost being nephrotoxicity. When radiopharmaceuticals are used for diagnostic procedures, they are used in such small amounts that they do not cause adverse drug reactions, side effects and do not have any pharmacological actions. But they are regarded as drugs since they are injected intravenously. The whole scenario changes when they are used for therapeutic purposes as larger amounts are used. Most of them are eliminated by the kidneys and lead to renal damage. Also when used in larger amounts, factors such as adverse drug reactions, side effects, etc come into play. Researches are being carried out to overcome these problems and results are promising.

*Your advice to the students:*

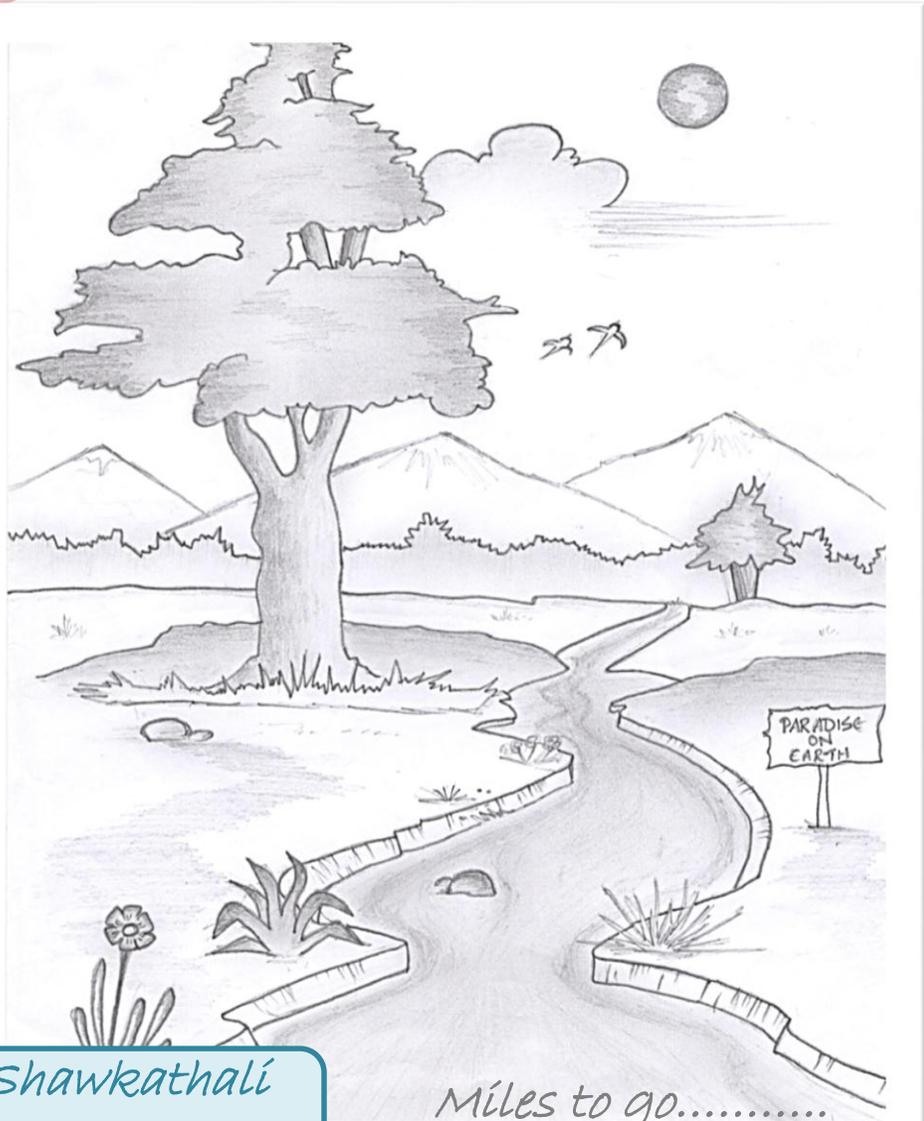
Radiopharmacy is an excellent specialty with rapid growth and continuous development. It is a dynamic field, which is highly competitive and the margin for mistakes is very small. It is ideal for hardworking students who want to achieve intellectual satisfaction. There is good financial compensation as well with the average pay being higher than that of the other areas of pharmacy practice. I would also suggest the field of Molecular Imaging and Treatment as it is promising.

*Interview by : Sara Kamal*

*Alumni*

*Batch 13*

*Reprint*



Nasreen Shawkathali  
Batch 23

Lubna Daud (Alumni)



Dream Float.....after  
graduation

