

## Series of seminars organized by the Department of Pharmacy

In the year 2014, the Department of Pharmacy successfully organized a series of six seminars with the cooperation of BUPS (BRAC University Pharma Society). The main objectives of the seminars were to provide core knowledge about the different sectors of pharmaceutical industry, to make students familiar with the career opportunities in this field, to provide practical skills related to this field and to make them aware of different diseases and their remedies etc. The six seminars organized are as follows.

The first seminar 'Scope of Pharmacy' was conducted by M. Azizul Huq, Managing Director, GlaxoSmithKline Bangladesh Ltd. In the seminar he mainly focused on different job opportunities in this field. The next seminar was conducted by Dr. Sayma Ali, Head of Manufacturing, Renata Limited. In her talk she discussed about Cross Contamination during the manufacturing process in pharmaceutical

industries and how it can be prevented. Prof. A.B.M. Faroque, Ex-Dean, Faculty of Pharmacy, University of Dhaka was also invited to conduct a seminar on food adulteration in our country. A seminar titled 'Evaluation of Lead in Meconium: A



study in UK infants of South Asian origin' was conducted by Dr. Sharmind Neelotpol, Assistant Professor of Department of Pharmacy, BRAC University. Another seminar was arranged on "Current perspective of Pharmaceutical Marketing in Bangladesh", where Mr. M Mosaddek Hossain, Managing Director, UniMed & UniHealth Manufacturers Limited was the speaker. A seminar on Hepatitis B was also organized as part of disease awareness program with GlaxoSmithKline Bangladesh Limited. These seminars enriched the knowledge of students. All respective faculties, Chairperson, university authority, and students worked in collaboration for the success of the programs. The Department of Pharmacy along with the cooperation of BUPS aims to organize more seminars in future.

By Sauda Binte Sunjida

## Fun Events of the Year

The Department of Pharmacy started this year with the colorful celebration of "Pahela Falgun" followed by the annual picnic. The first day of spring was welcomed through a colorful cultural programme on the 13<sup>th</sup> of February that included singing, dance performances, poem recitation, drama and fashion show which were performed by the students and food stalls

were set up that served contemporary Bangladeshi foods like fuchka, lassi, seasonal fruit salad etc. An annual picnic was organized on 6<sup>th</sup> March at "Nuhash Polli".



Nuhash Palli is a place where the eminent writer Humayun Ahmed has built a retreat unlike any other. It is a picnic spot and also his burial place. The teacher and students of the department immensely enjoyed the natural beauty of the place. A cultural program was also organized along with events like game show, raffle draw which made the event more joyous. These two events were two of the most enjoyable and festive events of the year.

By Anika Tasnim Chowdhury

## Making a Difference in the Therapy of Osteoporosis

Beximco Pharmaceuticals Limited was the first to introduce "Calorate Kit" in Bangladesh in the year 2013. The Kit contains a monthly calendar strip containing one film coated tablet of Ibandronate Monosodium Monohydrate INN equivalent to 150 mg of Ibandronic Acid and 60 film coated tablets of Calcium Orotate INN 400mg. This kit is designed to be patient compliant along with complete treatment of osteoporosis.

Osteoporosis is becoming alarmingly evident amongst both males and females (especially post menopausal women) after crossing the age of 50, regardless of race and region. Osteoporosis is a progressive bone disease that decreases the normal bone density due to increase in bone resorption than bone formation.



This slows the healing of bones and makes them weak and brittle, thus more prone to fractures. Other than protein and calcium rich diet and hormonal therapy for post menopausal women, the first line therapy for osteoporosis has been considered to be biphosphonate and calcium. The sole administration of biphosphonate reduces bone resorption and facilitates bone mineralization, and calcium is required for bone deposition. Therefore, to provide optimum therapy to patients, formulation of ibandronic acid, a biphosphonate and calcium orotate has been introduced. Calcium orotate provides maximum therapeutic effect of ibandronic acid and acts as a unique calcium supplement

with the functional amino acid chelating ligand orotic acid. The orotic acid and amino acid help in the transport of calcium through cellular membranes increasing the uptake of calcium mainly by osteocytes.

By Nausheen Syeera

## Global Race to cure Ebola outbreak

The alarming news of current outbreak of the very lethal viral infection Ebola in West Africa is dominating all the headlines globally. This year Ebola attack was first reported in March and so far killed more than any other known Ebola outbreaks in the history. According to reports updated by WHO, epidemic Ebola took a heavy toll of human lives in countries like Guinea, Liberia, Mali, Sierra Leone, Nigeria, Senegal. Unfortunately, health care workers who are giving so much effort to cure the patients have become the victims themselves and a good number of these people are also undergoing treatment. Government and World Health Organization

(WHO) are trying hard to alleviate the suffering of the victims through symptomatic treatment and preventive

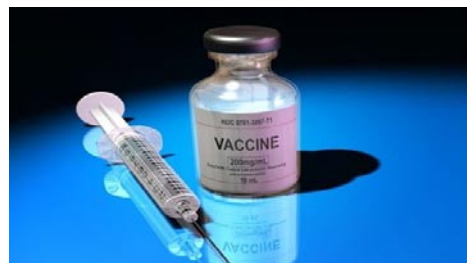
measures have also been taken up to stop further spreading of the disease. Many pharmaceutical companies have fully geared themselves with a hope of developing a drug that is capable of eradicating the lethal virus. Much progress has been observed since the outbreak of Ebola on the development of vaccines and anti-viral drugs, although all are still under trial and are yet not FDA approved. The first vaccine introduced after the outbreak of Ebola in West Africa is a mixture of three monoclonal antibodies from genetically engineering tobacco plants called ZMapp developed by Mapp Biopharmaceutical Inc. that has been reportedly successful in saving lives of few Ebola-infected patients. US National Institutes of Health and GlaxoSmithKline have also developed a vaccine named Okairo AG from a modified chimpanzee-cold virus and an Ebola protein. In addition, to combat the Ebola virus, few anti-viral drugs developed by various pharmaceuticals are undergoing clinical trials. The Canadian company Tekmira has been developing the drug TKM which was given to a patient in Nebraska who survived after taking the drug. According



to the company Tekmira, it successfully completed Phase I clinical trial in human volunteers in May 2014. BioCryst is working to develop their antiviral drug BCX4430 that is expected to begin Phase 1 testing later this year with the support of the National Institute of Health. Hence, it is expected that the epidemic Ebola will be soon defeated by the breakthrough discovery of a drug against the deadly Ebola virus.

By Tanisha Tabassum Sayka Khan

## Trumentaba -The Miracle in the Form of Vaccine



Are we aware of the life-threatening bacteria, *Neisseria meningitidis*, which has been identified in 2012 by Centre for disease Control (CDC) amongst 500 cases in U.S.A.? On the basis of epidemiological studies carried out by the World Health Organization and the European Centre for Disease Control and Prevention, the morbidity of *N.meningitidis* is 1.2 million people and around 1,50,000 population have died of the lethal infection. The bacteria exist in environment in five serological types (A, B, C, Y and W). Till now, no treatment has been discovered against serotype B. In few educational institutes in U.S. clinical information from FDA has suggested that about 10-15% patients of meningococcal infections do not survive whereas 12-20% has to bear a perpetual damage, such as, defects in brain or amputation. The miraculous solution to this catastrophe has been brought by Wyeth, a subsidiary of Pfizer in U.S.A. who has recently launched the vaccine against *N. meningitidis* (serological type-B) named as Trumenba. The drug product has been randomly trialed on approximately 2600 teenagers in United States and European countries where it showed up 82% success rate with minor adverse effects, for example, headache, muscle pain, joint pain, fatigue, chills. Due to the prominently positive outcomes on the basis of safety and efficacy, this drug has attained its approval from FDA within a brief period of time of 8 months.

By Kasfia Tasnim Humaira

## MONTHLY UPDATES

- The very first batch of students graduating from the Department of Pharmacy was awarded with their certificates at the 9<sup>th</sup> Convocation Ceremony of BRACU held on the 20<sup>th</sup> of November 2014 at the Army Stadium, Dhaka Cantonment. The Department of Pharmacy is proud to announce that Wasif Bin Ahmed received the Vice Chancellor's Gold Medal.
- With the cooperation of BUPS, the Department of Pharmacy recently raised an awareness program on the epidemic "silent killer" Hepatitis B.
- World Diabetes Day jointly introduced by the World Health Organization (WHO) and the International Diabetes Federation (IDF) is celebrated worldwide every year on 14<sup>th</sup> November to increase awareness about diabetes.
- A daylong seminar on "Present Trend in Pharma Processing Technologies" was organized by ACG Pharma Technologies on the 12<sup>th</sup> of November, 2014 at The Westin, Dhaka where several international pharmaceutical industrial experts gave presentations on topics such as "Importance of Uniformity in Film Coated Products, New Applications in Fluid Bed Processing, Particle Coating in Fluid Bed Systems, etc. Dr. Eva Rahman Kabir, Associate Professor and Shahana Sharmin, Senior Lecturer, Department of Pharmacy, BRAC University attended the seminar on the invitation of Mr. Ishtiaq Ahmed, Head of Plant, Ispahani Alliance Pharmaceuticals Ltd.