

QIP 2:

Theme: **Natural Products and Disease Management- An Update**

9 to 23 June 2012

**09-06-2012:** Formulation of drug combinations is a challenging task. Dr. Shaila Lewis (Associate Professor) gave a detailed account of making such combinations in her lecture, "Development of combination dosage forms." Nanotechnology is set to change the way drugs are going to be formulated and administered. Dr. Srinivas Mutalik (Associate Professor) gave an overview of "Nanopharmaceuticals." In the afternoon Mr. Lalit Kumar (Lecturer) and Ms. Pallavi (Research Scholar) gave a demonstration of the working of SPF analyzer.

**11-06-2012:** On the subject of nanotechnology there was another talk this time from Dr. Usha Y Nayak (Lecturer), who began the day's proceedings. She spoke on "Nanocrystal Technology: perspectives and opportunities." There was a lecture from Mr. Anup Naha (Lecturer) on "Natural Products for SEDDS).

Plagiarism is a much-debated topic in science circles. Many instances of plagiarism have been widely reported in the visual and print media lately. Hence, a demonstration on the tools available to detect plagiarism was held between 2.00 and 4.30 pm. Mr. Arun B J (iGroup Infotech India Ltd) conducted the demonstration with the help of appropriate software.

**12-06-2012:** Mr. Girish K Pai's talk titled "Ocular Drug Delivery- challenges and way ahead" was the first event of this day. He spoke at length about the problems in preparing formulations for topical application in the eye. Thereafter Mr. Vamsi Krishna (lecturer) delivered a talk on DOTs. In the afternoon Dr. Sreenivasa Reddy (Professor and HOD) along with Lalit Kumar, Rupesh K Shirodkar, Om Prakash Ranjan, Pallavi and Muthukumar demonstrated the Zetasizer, Homogenizer and SFC techniques.

### **13- 18 June: Department of Pharmacognosy**

**13-06-2012:** Department of Pharmacognosy assumed the responsibility of conducting the AICTE sponsored Quality improvement program on the theme, "Herbal Products & Disease Management – An Update". Dr. C S Shreedhara, head of the department formally welcomed the participants and briefed them about program schedule and about the departmental activities. Dr. T. Shridhara Bairy, Prof. Dept of Dravyaguna SDM College & Hospital of Ayurveda, Kuthpady, opened the lecture session with his talk on "My Experience with Natural Products – As an Ayurvedic Physician". He shared his rich experience with natural products in the management of various diseases with the participants, which was highly appreciated. Thereafter, Dr. Sathyanarayana B, Principal, Muniyal Institute of Ayurveda Medical Sciences, Manipal deliberated on the topic, "Natural Products in the Management of Obesity – An Ayurvedic Perspective". The lecture was well received and appreciated. Later in the afternoon, the participants were divided into 4 batches and each batch was given a

demonstration on HPLC, HPTLC, auto analyser or on quantitative microscopy (which includes leaf drug evaluation) on rotation basis by the faculty of the department.

**14-06-2012:** The lecture session was resumed with a lecture on “Evaluation of Genotoxicity of Drugs” by Prof. PM Gopinath, Professor, Manipal Life Sciences, Manipal, which was followed by a talk on “An Overview of Phytosomes as NDDS” by Dr. H.N. Aswatha Ram, an associate professor in the organizing department. In the afternoon the batches were rotated and the demonstrations were continued.

**15-06-2012:** Dr. Smitha Hegde, Prof and Head Dept. of Biotechnology St. Aloysius College, Mangalore delivered a talk on “Plant Tissue culture – an Alternative Source in Preservation of Natural Resources”. She discussed the importance of tissue culture in the conservation of endangered species, which was applauded. Following which, Mr. Saleemulla Khan, a senior lecturer in the department of Pharmacognosy, deliberated on “Postmenopausal Osteoporosis and Natural Products”. The lectures were highly appreciated by the participants. Later in the afternoon, the demonstrations were continued.

**16-06-2012:** On 16<sup>th</sup> June Dr. M Manjunath Setty, an associate professor in the department, delivered a talk on “Doctrine of Signatures” which was well received. The lecture was followed by the demonstrations. All the illustrations and demonstrations were very well received and highly appreciated.

**18-06-2012:** The delegates were let off on Sunday the 17<sup>th</sup> June and on 18<sup>th</sup> they were ushered to visit to Shobavan, a medicinal plant garden at Mijar, about 45 km from Manipal, which is maintained by Alva’s Pharmacy. The garden is equipped with more than 250 species of medicinal plants maintained in the traditional Ayurvedic style. Alva’s Pharmacy manufactures more than 25 Ayurvedic formulations, the delegates were shown the manufacturing facilities of the unit. SDM College & Hospital of Ayurveda at Kuthpady near Manipal, is a well-known Ayurvedic teaching hospital in the region. The Institution has an ISO certified Ayurvedic Pharmacy where many Ayurvedic formulations are manufactured. The QIP delegates were taken to visit Ayurvedic pharmacy after Mijar. The delegates enjoyed the entire program with great zeal to learn and appreciated the department for the well-planned QIP program

### **19-23 June 2012: Department of Pharmacy Practice**

**19-06-2012:** Mr. Ragavendra Kamath, Senior Pharmacist, Kasturba Hospital, Manipal delivered a talk on “Role of Pharmacist in a tertiary care teaching hospital – realities”. The QIP participants were oriented with the various activities of the Pharmacy Practice Department at Kasturba Hospital. Dr. Manohar Bairy, Assistant Professor, Dept. of Nephrology, KMC, Manipal spoke on “ESAs in chronic Kidney disease: current perspectives” He stressed the utilization of Erythropoietin in kidney failure patients and its implications in other co-morbid conditions.

**20-06-2012:** Dr. D. Sreedhar, Associate Professor, Dept. of Pharmaceutical Management delivered a talk on “Fixed Dose Combinations – When and Why”. He spoke on the rationality and availability of various fixed drug combinations and its repercussions. Dr. Arun, Associate Professor and Head, Department of Virology,

Manipal University gave a picture on “advances in viral vaccines”. He also stressed on the importance of vaccines in the current scenario of disease management and various challenges faced. There was a Pharmacokinetic lab training using WinNonlin® software conducted in the afternoon for the QIP participants.

**21-06-2012:** The third day started with a talk by Dr MK Unnikrishnan, Professor and Head, Department of Pharmacy Practice, MCOPS, Manipal on “Trading old disease with new” where he enlightened the participants on man’s quest for treating newer diseases with irrational antibiotic usage paving the way for microbial resistance and disorder in the symbiosis of man and microbes.

Dr. Manu Mohan. K, Associate Professor of Pulmonary Medicine, KMC, Manipal spoke on “Recent development in the management of Respiratory disorders”. He discussed on Pharmacotherapeutical updates on respiratory disorders plaguing various strata of the population and on newer drugs and devices used in pulmonary medicine and existing treatment guidelines.

A dept visit to Manipal Acunova was scheduled for the QIP participants to orient on the various aspects of Clinical research.

**22-06-2012:** An accomplished speaker Dr. Gopal Marathe, Professor, Dept of Biochemistry, Mysore University who has contributed to LDL research spoke on “Fishing the dirtiest among dirt – New findings from LDL research”. He shared his research outcomes on lipoproteins and its implications in therapeutic possibilities in managing hyperlipidemia in man.

Dr. Elisa Ladd, Associate Professor, from MGH Institute of health professions, Boston, USA, spoke on status of priorities of Pharmaceutical Industry in the US and how healthcare policy and treatment guidelines can be influenced by the industry and other stakeholders.

**23-06-2012:** The fifth and final day of the QIP began by a talk rendered by Dr. Arun T.S. Manager, Quality Assurance, Ecron Acunova on “Bioequivalence studies: Practical issues”. He outlined the quality objectives in carrying out a bioequivalence study with emphases on infrastructure requirements and subjects’ recruitment and their safety parameters.

A presentation on “Advances in pharmacokinetic studies: Role in drug development” was given by Dr. Surulivel Rajan, Assistant Professor, Dept of Pharmacy Practice, MCOPS, Manipal with a broad insight on population pharmacokinetics and its application for modeling in drug dose evaluation and therapeutic optimization

***Report: Dr. N Gopalan Kutty, Mr. Saleemulla Khan and Dr. Sreedharan Nair***