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Letter to the Editor

Lessons learnt from the 1st International Conference of Clinical Pharmacy, 15–17 February 2015, Oassim, KSA



The three-day conference covered five major topics in clinical pharmacy: leadership in clinical pharmacy, updates in therapeutics, medication safety, postgraduate opportunities, and formulary management. The conference was attended by nearly 600 participants, featured numerous lectures and three major workshops, and included the presentation of over 30 posters. This report highlights information from selected lectures that discussed updates in therapeutics, medication safety issues, innovation in pharmacy education, and formulary management with the goal of ensuring that each patient receives the best possible therapy to achieve optimal health outcomes.

Advances in cardiovascular therapeutics

Robert Talbert (USA) presented an overview of new and investigational drugs in treating hypercholesterolemia and heart failure. Two new drugs for the treatment of hypercholesterolemia have just entered the market. Mipomersan is an antisense oligonucleotide that targets apo B-100 and inhibits translation of apo B-100. It is FDA approved to treat homozygous familial hypercholesterolemia (HoFH). It reduces LDL-C, non-HDL-C, and apolipoprotein B. During a 26-week trial, LDL was decreased by 25%. This drug is very expensive (\$176,000/year). The FDA decided on a boxed warning for liver toxicity and requires certification by the prescriber and pharmacist. Mipomersan is in category B for pregnancy.

Lomitapride, the second new drug for hypercholesterolemia, inhibits microsomal triglycerides transfer protein (MTP) and prevents the assembly of apo B-100. It has a boxed warning for hepatotoxicity, and may interfere with fat-soluble vitamin absorption. It is contraindicated with strong CYP3A4 inhibitors. Lomitapride is in pregnancy category X.

Angiotensin-Neprilysin inhibition versus Enalapril was discussed. The results of different clinical trials, including PARADIGN-HF, RELAX-1, and RELAX-2, in addition to

other ongoing studies,² have shown that agents such as Serelexin may have some positive effects on some primary endpoints of patients with acute heart failure. A panel of advisers to the FDA unanimously recommended against the approval of Serelexin on March 27, 2015. The panel said in a March 25 report that they found insufficient evidence that serelaxin will benefit patients. The manufacturing company said it will expedite a program of clinical trials to gather more evidence.

Medication safety issues

An overview of a system for the reporting and review of medication errors in England was presented by a team of consultant pharmacists and drug safety officers. Gillian Cavell laid out the national reporting system available in England and Wales and described how they can link their local reporting data to the national system. Catherine Alice Oborne provided a brief overview of the factors affecting patient safety and then moved to the strategies needed to improve current policy, including leadership, safety culture, motivators for adverse drug events (ADE) reporting, prospective risk assessment, and planning and implementing preventive measures to prevent errors. The lectures provided many tools that can be used by practicing pharmacists and drug safety officers to implement these strategies. Dalia Al-Ghamdi (KSA) provided a local example of adopting a culture of safety in Prince Sultan Medical Military City in Riyadh, KSA. The talk involved a working day of a drug safety office and numerous examples of safety measures that were implemented in the medical city.

Innovation in pharmacy education

Many speakers have tackled different experiences related to pharmacy education, Abdul Malik Al-Katheri of King Saud Bin Abdulaziz University for Health Sciences (KSAU-HS) provided a presentation on his first day with a focus on

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the history of pharmacy education and the evolution of pharmacy education over the years through revised curricula and enhanced professional training.³ The talk provided an innovative approach that is reflected in the KSAU-HS experience. Abdullah Al-Ghasham (KSA) of Qassim University presented the university's experience in using progress tests for monitoring the effectiveness of the curriculum. Dr. Al-Ghasham called for a unified pharmacy curriculum that will concentrate the efforts of educators and standardize pharmacy education in the kingdom of Saudi Arabia. There was a distinguished contribution by Joseph DiPiro (USA) with regard to postgraduate education opportunities in clinical pharmacy. He explained the different avenues that pharmacy graduates can follow for more specialized opportunities ranging from non-traditional pharm D programs to residencies to fellowships and board certifications.

Formulary management

Many experiences were presented on this topic. Ahmed Al-Jedai (KSA) spoke about the challenges faced at King Faisal Specialist Hospital and Research Centre (KFSHRC) with regard to formulary management. The talk provided a history of the development of formulary management in the centre over the years until it became paperless. The presentation also included a step-by-step module of the formulary management process, hierarchy, and a tutorial of the use of the software developed in-house for that purpose. Roger Lander (USA) provided an overview of formulary management and strategies to maximize its positive impact on the institution and the practicing prescribers.

Recommendations and lessons learned

The conference was a great opportunity for clinical pharmacists, educators, administrators, and decision makers from the kingdom of Saudi Arabia to gather with their peers from the United States and the United Kingdom. All participants have agreed on the following recommendations:

- Implement modern methods and global standards to ensure the safe use of medications and reduce medication errors, especially with high-risk medications.
- Apply the recommended global health quality organizations' standards to ensure the highest quality in the field of pharmaceutical care.
- Support scientific research in universities and research centres to adopt new ideas in the field of clinical pharmacy.
- Promote the involvement of different scientific research disciplines in everyday clinical pharmacy practice.
- Build a strong professional cooperation between colleges of pharmacy and patient care institutions, including hospitals and long-term care facilities.
- Enforce the role of clinical pharmacists in conducting medication and treatment reviews and providing drug education.
- Reassess of the means of clinical pharmacy education and pharmacy curricula in the Saudi colleges of pharmacy.

- Introduce a database of all pharmacy courses and continuously evaluate it to keep pace with the continuous development of the profession of pharmacy.
- Support the development of applied pharmacy research in the field of pharmacy services to improve the prevention and treatment of diseases, especially chronic ones.
- Ensure continuous development of clinical pharmacy practitioners' skills through continuing education and training.
- Implement international standards for pharmacy residency programs in the Kingdom and seek recognition by international accreditation organizations.
- Increase the number of clinical pharmacy fellowship and residency programs available in the Kingdom to keep pace with the labor market need for these qualifications.
- Periodically review the evidence supporting the pharmaceutical protocols in Saudi health institutions. This should be done by all clinicians, including pharmacists, to improve the quality of clinical practice.
- Apply modern theories in pharmacy administration, which effectively contribute to the development of quality of pharmaceutical services and reduce operating costs and drug waste.

The talks were enriched with perspectives from the Middle East, the US, and the UK. There was a chance to share different guidelines, strategies, and experiences. It provided a great environment for learning and exchanging knowledge. We look forward to the 2nd International Conference of Clinical Pharmacy in Saudi Arabia, although the date and the location have not been determined yet.

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