

12<sup>TH</sup> ANNUAL PHARMA MIDDLE EAST CONGRESS

September 25-26, 2017 Dubai, UAE

**The experience of using an automated dispensing system to improve medication safety and management at King Abdulaziz University Hospital****Bayan M Darwesh, Sabo Yusuf Machado and Shiney John**  
King Abdulaziz University Hospital, KSA

The use of automated dispensing systems has been lauded for improving patient safety within the processes of healthcare. Adverse drug events, for example, are a common manifestation of faults in the service delivery of a pharmacy department that endanger patient safety. Even though automation may reduce the occurrence of such errors, concerns have been raised about the efficiency and safety of the automated systems since a large number of patients still suffer medication associated injuries. Though the use of these systems is common in some developed countries, there is paucity of safety and efficacy data from the Arab nations. We therefore report our experience using automated dispensing systems in all our units at the KAUH following a successful pilot run of this technology. We installed the automated dispensing system and monitored the number of controlled and uncontrolled medications used before and after the automation, the incidence of wrong bin opening and the number of IV medication preparations after the installation of the system. The number of controlled and uncontrolled medications dispensed in KAUH generally reduced. The decrease in the number of uncontrolled medication was statistically significant,  $p$  value=0.004. We also observed an increase in the number of IV medication preparations consequent to reduced workload and improvement in staff utilization. After installation of the automated dispensing system there was a high incidence of wrong bin opening, which reduced gradually after the first two months.

**Biography**

Bayan M Darwesh has completed her PharmD from King Abdulaziz University in Jeddah. She is the Director of Pharmacy Department at King Abdulaziz University Hospital in Jeddah, KSA. She is responsible to initiate pharmacy automation projects to streamline and modernize the daily routine workflow in line with international standards.

dr.darwesh@hotmail.com

**Notes:**