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## Quality improvement project: Reducing the medication errors using electronic prescriptions



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**Statement of the Problem:** Interventions by the pharmacists in prescribing process have always been considered as a valuable input by the health care community in the patient care process by reducing the medication errors and rationalizing the therapy. Researchers have reported that introduction of electronic prescription system clearly reduces medication prescription errors. However, the clinical benefits of clinical design support system (CDSS) with electronic prescriptions have been previously studied and proofed to improve the quality of prescribing. The purpose of this study was to describe the experience of using electronic prescriptions without CDSS and to show the importance of pharmacist intervention and CDSS as added prevention layers for medication errors.

**Methodology & Theoretical Orientation:** It is retrospective chart review about the pharmacist's interventions over the period of one year. All the data is generated in the computer. Simple random sampling technique was used, and the sample size was 592 prescriptions. Data gathered electronically and analyzed using SPSS version 21 to categorize the medication prescribing errors and related factors.

**Findings:** The benefit of using electronic prescribing system was limited to enhance the prescribing process but not improving the quality of prescribing pattern entirely. The pharmacist play an important role as additional prevention layer for any prescribing error by catching medication errors mainly as a result of lack of knowledge of the prescribers.

**Conclusion & Significance:** Electronic prescribing system is a worthy system to be used to reduce the medication prescribing errors. However, CDSS should be implemented in this system because it is an integral part to ensure patient safety and improve the prescribing service.

### Biography

Meshari Mohammed Alrayees has his expertise in pharmaceutical care in improving the patient safety and quality of service in Healthcare system. He has built his knowledge after years of experience in research and administration work in tertiary hospital and education institutions. His educational background includes Master of Pharmaceutical Science from University of Tasmania in Australia and Bachelor of Pharmaceutical Science from King Saud University in KSA as well as graduated JCI Diploma. He is the Director of Continuous Quality Improvement and Patient Safety in King Salman Armed Forces Hospital in North Western Region in KSA and a former Department Head of Pharmacy in this tertiary hospital. He is interested in the field of improving the patient safety and quality of service provided.

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