

PHARM D STUDENTS' GRADUATION RESEARCH PROJECTS 2019/2020

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EPIDEMIOLOGICAL RESEARCH

Trends in Opioid Prescriptions and Utilization in a Riyadh Health Cluster: A Multi-Center Cross-Sectional Study

Background: Opioids are widely prescribed for managing pain. Given their established addictive potential, major concerns regarding their over-prescription and inappropriate use in clinical practice have emerged. Therefore, this issue appears to exert a significant economic burden on society.

Aims: This study aimed to define and assess trends in opioid prescriptions in a group of hospitals (Al Emam Alfaisal, Al Eman and AlNaqaha hospital) affiliated with the Riyadh's first health cluster - Ministry of Health (MOH), Saudi Arabia.

Methods: A cross-sectional study, where data on opioid prescribing patterns were gathered from patients' electronic medical record (EMR) in the three hospitals for 2019. A series of descriptive analyses including patient's demographics, admitting diagnoses, prescriber specialty, number and type of opioids prescribed, number of refills, and the discharge on opioids status.

Results: A total of 1,810 patients with opioid prescriptions were identified, which 1,730 of them met the study's inclusion criteria. Surgeries followed by respiratory diseases were the most prevalent diagnoses for which opioids were prescribed. Compared to other specialties, intensive care unit (ICU) physicians prescribed relatively higher number opioids. Among the opioids prescribed, fentanyl 500 µg (42%) followed by fentanyl 100 µg (17%) were frequently encountered.

Conclusions: In the selected hospitals, opioids are heavily prescribed for surgeries, respiratory diseases and for intensive care settings. There is a notable reliance on fentanyl prescribing, an opioids that is 100 times more potent than morphine, and is therefore endowed with higher addictive potential. Further analysis is required to assess if the trends identified in this study were mirrored by strict adherence to the standard guidelines of opioid prescribing.