

Assessment of Drug Interactions and their Associated Factors among Patients with Cardiovascular Diseases: A Cross Sectional Study from Palestine

Students:

Lama Aldabe

Lina Alhaj-Asaad

Mai Thaher

Supervisor:

Dr. Samah Jabi

Abstract:

Objectives:To assess the prevalence, types and factors associated with DDI among patients with cardiovascular diseases.

Methods:The study was a cross-sectional study that was conducted at two hospitals (Al-Watani Governmental Hospital and An-Najah National University Hospital) in the West Bank, Palestine, between October 2016 and February 2017. Data collection was completed by reviewing patient's medical records and interviewing them when needed. Potential DDI were identified using Lexi Comp interaction checker. And the data was analyzed using SPSS version 16.

Results: The study included 400 patients with cardiovascular diseases, potential DDI were identified in 93.8% of the patients. Patients were prescribed 1-16 medications on discharge with a mean (\pm SD) of 7.08 ± 2.76 . Aspirin was the most frequently prescribed medication. The most frequent potential DDI was furosemide - aspirin occurring in 148 (37%) of patients, followed by ACEI - aspirin and Statins - PPIs occurring in 131 (32.8%) and 129 (32.2%) cases, respectively. The patients in this study had a mean (\pm SD) of 3.14 ± 1.41 diseases. The most common comorbid disease was diabetes mellitus (DM) affecting 205 (51.2%) patients, followed by chronic kidney disease (CKD) in 56 (14%) patients. Univariate analysis revealed that the number of pDDIs were associated with the number of diseases, total number of discharge medications and the length of hospital stay (pvalue < 0.001 for each).

Conclusion: The prevalence of potential DDI among patients with cardiovascular diseases is very high. These interactions were associated with the number of diseases patients have, the number of medications prescribed and the length of hospital stay.