

Adverse Drug Reactions (ADRs) Experience at Al-Karak Teaching Hospital in Jordan

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Introduction: Adverse drug reactions (ADRs) represent a major health care problem. It can cause significant morbidity, mortality and increase the cost of health care provision. Several epidemiological studies have been conducted worldwide highlighting the impact of ADRs. However, few such studies were conducted regarding ADRs in the Arab world.

Aims: The aim of this study was to assess the incidence, severity, preventability and severity of ADRs reported to Al-Karak teaching hospital.

Methods: A prospective observational study was carried out from January 2013 to November 2013 at Al-karak teaching hospital, in Jordan. Reports with incomplete or missing information were excluded. The Naranjo probability scale was used to evaluate the causality relationship between a likely ADE (1). Preventability was determined by applying using criteria adopted from Schumock and Thornton scale (2). The severity of the reaction as mild, moderate and severe was determined according to Hartwig Scale (3).

Results: Between January and November 2013, a total of 64 completed ADRs reports were submitted to the Al-Karak hospital pharmacovigilance centre. The most common drug classes associated with ADRs were: antibiotics (32.8%), NSAIDs (25.0%), vaccines (9.4%), and antiepileptics (6.3%). Overall, the most frequently reported adverse drug events were gastrointestinal (34.3 %) and skin/ subcutaneous tissues (18.5%) The most common events types were: abdominal pain, skin rash, shortness of breath, fever, upper gastrointestinal bleeding, and vomiting. Collectively they comprised 37% of ADRs identified.

Around 62% of the reported ADRs were type A. The majority of ADRs (92.2%) were assessed as probable in its causality and 65.6% of the ADRs were mild in severity. Most of the reported ADRs were common (59.4%).Of the reported ADRs, 25% were considered preventable and 27% resulted in hospital admission.

Conclusions: Healthcare providers should be aware about the importance of detecting and reporting ADRs. Awareness among health care professional through implementing strategies that reduce the incidence and severity of ADEs especially in hospitalized patients are essential to improve the outcomes

1. Naranjo et al (1981). *Clin Pharmacol Ther* **80**: 289-295

2. Schumock GT and Thornton JP (1992). *Am J Hosp Pharm* **27**: 538

3. Hartwing SC et al (1992). *J Hosp Pharm* **49**: 2229-2232