

Detection of Main Barriers for Adverse Drug Reactions Reporting in The Middle East Countries: Review article

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ABSTRACT

Background: For years, specialists have been interested on the verge of documentation of adverse drug reactions because of its great importance. The countries of the Middle East have also kept pace with this mission and developed in the past years. Like any other project, this documentation process is accompanied by several problems that will negatively affect the objectives set in this area.

Objective: The aim of the current study is to know the main barriers regarding the process of adverse drug reactions in the Middle East area.

Patients and methods: In October 2022, a manual search of the literary databases PubMed and Google Scholar has done. The 102 articles were manually screened. Studies that have been published between 2012 and 2022 were eligible.

Results: From the 102 publications that underwent manual screening, 26 research articles from 12 different countries qualified for inclusion in the study. Lack of enthusiasm, a professional atmosphere for the conduct of pharmacovigilance, a general lack of knowledge and awareness concerning pharmacovigilance and not enough time for reporting are the main barriers for adverse drug reactions.

Conclusion: According to the results, the lack of knowledge or awareness of pharmacovigilance practices and the absence of mechanisms that assist recording in terms of enough time, motivation, or the environment as a whole are the two most significant causes of underreporting.

Keywords: Adverse drug reaction, Barriers, Pharmacovigilance, health care providers, Review, University of Basrah.

INTRODUCTION

The use of medicines is an inextricable part of human life and we see clearly with the development of new diseases and health problems, the indications for the use of medicines have become more important and besides, the use and discovery of therapeutic substances to be in line with the need of humans to fight these diseases. Accordingly, with the widespread use of medicines in the world, also there has been a proliferation of adverse drug reactions (ADRs) associated with the use of those drugs. World Health Organization (WHO) has provided a definition of ADR, which is as follows: "a negative, unanticipated reaction to a medicine that happens at dosages typically used in humans for illness prevention, diagnosis, treatment, or altering physiological function". Edwards⁽¹⁾.

The term of pharmacovigilance (PV) is another important concept has taken a documented association with the ADRs since years ago and it is mean: "the science and actions related to the evaluation, detection, comprehension, and prevention of negative drug-related effects or any other issues Adheed *et al.*⁽²⁾.

Due to the importance of the topic, the study of PV at the levels of knowledge, attitude and practice is very useful. To find out more about the importance of documentation of adverse drug reactions it is enough to know that ADRs appear in 10% of outpatients, causing approximately 5-10% to be admitted to hospital Aljadhey *et al.*⁽³⁾.

ADRs are regularly seen in the routine operations of pharmacies and hospitals, both privately and publicly held. The healthcare system faces financial difficulties

as a result of the numerous evident morbidities and the deaths they produce. If pharmacists and other healthcare workers pay great attention to the information on the side effects of the medications given to patients, we can prevent ADRs. Understanding ADRs helps reduce the irrational usage of unsuitable medication. Consequently, there is a critical need to raise pharmacists' and prescribers' understanding of ADRs and medication monitoring Omer *et al.*⁽⁴⁾.

Healthcare providers need to be particularly aware of pharmacovigilance. Pharmacy and medicine students must get thorough instruction on how to recognize, avoid, and report ADRs. The healthcare providers' undergraduate training is the ideal period to increase their understanding of and aptitude for pharmacovigilance Omer *et al.*⁽⁵⁾.

The under-reporting of ADRs by them, however, is a concern in many nations, including the middle-east nations. Lack of awareness and expertise of methods to recognize and report ADRs may be used to explain this. The aim of the current study is to know the main barriers regarding the process of adverse drug reactions in the Middle East area.

PATIENTS AND METHODS

Search protocol

A manual search was conducted on the literature databases PubMed and Google Scholar in October 2022, using following key terms and sentences: Pharmacovigilance, adverse drug reaction, adverse drug reactions, barriers, marries to pharmacovigilance, Middle East.