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ORIGINAL RESEARCH ARTICLE

Attitudes and knowledge of community pharmacy professionals regarding the spontaneous reporting of adverse drug reactions: a preliminary study in Coimbra, Portugal

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Abstract

Background Spontaneous reporting of adverse drug reactions (ADRs) remains one of the most efficient methods to detect new, unusual, and severe ADRs. Community pharmacy professionals (CPPs) play a fundamental role in the reporting of spontaneous ADRs. The aim of this study was to describe the attitudes and knowledge of different CPP groups regarding the spontaneous reporting of ADRs and to identify the factors that can influence ADR under-reporting.

Methods A cross-sectional descriptive study was conducted in CPPs (156 pharmacists and 40 pharmacy technicians) working in 49 pharmacies in Coimbra, Portugal. A survey of the knowledge and attitudes of CPPs towards reporting ADRs and the factors that encourage and discourage ADR reporting was constructed and personally delivered to the pharmacies.

Results The response rate was 82.0%. The seriousness and the unusualness of the reaction were the most important motives to report ADRs (98.0 and 97.4% of respondents, respectively). CPPs also considered ADR reporting to be a professional obligation (96.4%), but "don't feel the need to report well-known ADRs" (54.1%). Other attitudes associated with under-reporting were lack of time (50.0%), method of reporting (38.3%), and fear of legal liability (29.6%).

Conclusions CPPs' knowledge and behavior play a significant role in ADR reporting. Despite the differences in their educational syllabus, there were no statistical differences between pharmacists and pharmacy technicians with regard to their perception of the importance of ADR reports or the factors that affect their reporting. It may be possible to reduce the under-reporting of ADRs by introducing educational interventions based on the attitudes related to under-reporting that have been identified in this study.

Introduction

Adverse drug reactions (ADRs) are a public health problem and have a significant clinical impact related to morbidity and mortality, resulting in an increased use of health services in developed countries [1, 2]. ADRs, many of which are preventable, are responsible for ≈6.5% of all hospital admissions [2, 3], with ≈2–3% of patients admitted with an ADR dying as a result of the ADR [2, 4]. Furthermore, ADRs may occur in 6–20% of patients admitted to hospitals, which increases the hospitalization period and, thereby, healthcare costs [5]. The average treatment cost associated with a single ADR may be up to several thousand euros [2]. This cost would be even greater if other costs are considered, such as hospitalization length of stay, and patient-related economic, social, and psychological costs [6].

Because not all ADRs of a product are known when marketing authorization is granted, pharmacovigilance is needed to learn more about possible harmful effects of a drug. Pharmacovigilance plays a vital role in ensuring that

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