Chapter 3
Teaching and Learning Methods for Drug Information

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ABSTRACT

Healthcare professionals, especially pharmacists, are constantly involved with drug information and should be able to properly select resources and keep updated on new literature and new tools to address a variety of drug information requests. The provision of accurate in-depth drug information requires the development of drug information skills through both didactic and experiential training programs. Considering the complexity of the drug information field and the expanding roles of pharmacists as information resources, this chapter will briefly introduce the main concepts of drug information and discuss the potential methods and challenges for teaching this subject while matching the variety of learning styles.

DOI: 10.4018/978-1-7998-4486-0.ch003

INTRODUCTION

The Role of the Pharmacist in Drug Information

The concept of 'information' is used in almost every scientific discipline within its own different contexts. In healthcare, 'information' may be defined as the provision of unbiased, evidence-based, and critically evaluated data and experiences (Bernknopf et al., 2009; Mononen et al., 2018).

The access to the most relevant, updated, user-specific, and objective information is paramount to make appropriate decisions (e.g. prescription, dispensing, and use of drugs), and to inform, underpin, or shape scientific research (Sharp, Bodenreider, & Wacholder, 2008).

In the early 1960s, the combination of terms 'drug information', 'center', and 'specialist' was first employed to describe a distinct practice area of Pharmacy (Malone, Kier, Stanovich, & Malone, 2014; Walton, 2006). The University of Kentucky in the United States of America set the first 'drug information center', aiming at providing patient-specific drug information, assess adverse drug reaction information, and guide student and healthcare professionals education and training (Rosenberg, Koumis, Nathan, Cicero, & McGuire, 2004; Tietze, 2012).

The pharmacist was usually considered the 'drug information specialist' or 'drug consultant' that had enough expertise and knowledge to retrieve, select, evaluate, and disseminate information towards a specific drug-related question.

This continuous support of rational therapeutic selections contributed towards better patient care and allowed the pharmacist to further integrate the multidisciplinary healthcare team (Amerson & Wallingford, 1983; Malone, et al., 2014).

Shortly after, several other 'drug information centers' were created in the United States of America, with more than 50 pharmacist-operated centers during the 1970s (Amerson & Wallingford, 1983; Rosenberg, et al., 2004). At this time, different approaches were developed to provide drug information services, including hospitals' decentralized pharmacists, clinical consultation services, and regional center for a specific geographic area (Amundstuen Reppe, Spigset, & Schjott, 2016).

Consequently, there was significant growth in the 'clinical pharmacy movement', mostly because of the acceptance of the clinical pharmacist role in patients care, the need for quick access to drug information, and the perceived ability of pharmacists to interpret conflicting therapeutic information (American Pharmacists Association, 2007).

However, in recent years, health systems in both developed and developing countries faced the challenges of financial constraints, a high prevalence of non-communicable diseases, and an increase in problems related to pharmacotherapy and morbidity and mortality associated with drug use.