

**PHARMACOINFORMATICS COURSE FOR
BACHELOR AND MASTER OF PHARMACY
DEGREES: ASSESSMENT OF TOPICS RELEVANCE**

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ABSTRACT

Objective

To assess the level of importance of the suggested topics for pharmacoinformatics course for Bachelor and Master of pharmacy degrees. Besides that, this study serves to provide review on new subjects or topics for pharmacoinformatics course.

Methods

A questionnaire-based survey was conducted from March until May 2014. Survey participants were lecturers in pharmacy practice department and pharmacists work in a hospital from each state in Malaysia. The validated and pilot-tested questionnaire consisted of two parts: demographic data and potential topics deemed important to be included in pharmacoinformatics course. The data obtain was analysed descriptively using SPSS version 17.0.

Key findings

Altogether 300 questionnaires were distributed, and 190 returned (response rate: 63.3%). For B.Pharm program, 18 of the proposed topics were found to be moderately required while 4 topics found to be highly required. “*Handling of drug information request (documentation, analysis and response)*” was found to be the most highly required topic with percentage of 64.7%. Among the moderately required topics, “*Understanding prescribing and dispensing of medications via internet/Online pharmacy*” was rated with the least percentage of 43.2%. For M.Pharm program, all 23 proposed topics were found to be highly required. “*Critical evaluation of drug information (evidence based medicine)*” was found to be the most

CHAPTER 1

INTRODUCTION

In the era of science and technology, the use of information technology (IT) has been used widely in various sectors. Health sector is one of the sectors that integrate the application of IT into their services. A survey on the adoption of pharmacoinformatics in United States hospitals stated that informatics was broadly applied in all phases of medication use process (1). Examples of the informatics system adopted include the use of electronic medical record (EMR), computerized prescriber order entry (CPOE) with decision support, the usage of bar code in medication administration and also automated dispensing cabinet (1). All these adoption of IT systems in the hospital setting showed that there is a clear and significant role of pharmacist in pharmacy informatics (1).

The traditional practice of paper-based system in managing medical records was no longer relevant and the current healthcare system would be less manageable without the application of IT systems (2). This was due to the nature of complexity, cross-setting care and increasing workload of today's healthcare environment (2). With the advent of health informatics, there is a huge potential for role expansion of pharmacists in this area (3, 4).