

Universiti Teknologi MARA

**A Survey on The Pharmacists' Use of Handheld Devices and Mobile Medical Apps For
Drug Information**

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Abstract

Background: Google's Android and Apple's iOS are major platforms for handheld devices such as smartphones which are able to support mobile medical applications (apps). This advancement allows users to download the apps for easy access to drug information especially pharmacists since they are major group of healthcare professionals that need rapid access to drug information. Thus, the apps are comparable to discover the content of the apps.

Aims: The current study aimed to assess the use of electronic DI resources via HHCs by pharmacists in Malaysia using the newly developed Medical Mobile Applications and Investigative Tools (MAP-IT). This study also aimed to investigate the pharmacists' perception towards the DI content and functions of mobile medical applications. In addition, this study also compare the top mobile medical applications based on three options available which are general dosage recommendations, adverse drug reactions, drug interaction (DoReADI)

Methods: A convenience sampling method was adopted to invite pharmacists (N=450) working in various sectors such as hospitals, drug approval authority, and academia to participate in this online survey. A 36-item questionnaire was administered and data were summarized and presented using descriptive statistics. Meanwhile, review of mobile apps in the leading app stores, Google play for

1. Introduction

1.1 Overview

Mobile devices such as smartphone offer a lot of advantages to healthcare professionals. In addition to the offline applications, it has become easier for the user to access web base application and website (1). The percentage of global population that covered with wireless technology has reached 96%. ‘mHealth’ is a mobile technology that support mobile healthcare (2). There is a high relationship with the availability of wireless technology and existence of ‘mHealth’ or ‘Mobile Health’.

According to the research conducted by Boulos *et al.*, it has been estimated that the number of health related apps is approximately 40 000. The large numbers of health related apps cause an arising in awareness among healthcare professional about the quality of mobile health apps, their regulation control and certificates. Based on the same research, it stated that the most popular categories of medical mobile app are for drug information (3).

Half of respondents in previous study conducted in Saudi Arabia refer to online drug information but they claimed that they still need to consult with physicians and pharmacists. Thus, healthcare professionals should choose and deliver accurate drug information to increase patients’ adherence (4). Healthcare professionals such as