UNIVERSITI TEKNOLOGI MARA

MOBILE HEALTH APPLICATIONS IN GERIATRIC CARE FOR HEALTHCARE PROVIDERS

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TABLE OF CONTENTS

ABSTRACT

Mobile devices and applications (apps) that act as access tools in health care management, aid in improvement of clinical decision making and patient outcomes. However, the tremendous amount of mobile health (mHealth) apps available in the commercial apps store made HCPs questioned regarding the quality of the apps provided. This study aims to assess the contents and features of mHealth apps in geriatric care for HCPs use. Systemic review of previous relevant literature and quality assessment of selected mHealth apps were conducted. Twenty five mHealth apps were assessed. Medscape®, Skyscape® Medical Library and MyNAG® apps scored the highest for general geriatric care followed by Lexicomp®, Epocrates ®, MIMS®, WebMD® Health Tools and Drugs.com®. For specific geriatric disease, Alzheimer's Disease Pocketcard® and Confusion: Delirium & Dementia: A bedside guide® apps scored the highest total score for specific geriatric care which then followed by ConsultGeri: Dementia®, BSD: Behavioral Symptoms of Dementia® and BPSD Guide®. Medscape® and Skyscape® Medical Library are the most comprehensive mHealth app for general drug information, medical references, clinical score and medical calculator. Alzheimer's Disease Pocketcard® and Confusion: Delirium & Dementia: A bedside guide® apps are recommended for clinical assessment, diagnosis, drug information and management of geriatric patients with Alzheimer's Disease, delirium and dementia. More studies of mHealth apps in geriatric care are warranted to ensure the quality and reliability of the mHealth apps.

CHAPTER 1: INTRODUCTION

1.1. Overview

Over the years, mobile phones are getting more crucial in everyday life and health care (Blake, 2008). Mobile devices and applications (apps) available are beneficial to health care professionals (HCPs), possibly as an access tool in health care management, where it aids in improvement of clinical decision making and patient outcomes (Ventola, 2014). A lot of apps are built for certain users of healthcare for examples, physicians, nurses and medical assistants. These apps are incorporated with medical terms and functions, which more complicated and are not easily used by non health professionals (Boulos, Brewer, Karimkhani, Buller, & Dellavalle, 2014). According to Ventola (2014), there are abundant clinical resources are now available to HCPs since medical apps now can be downloaded in mobile devices.

HCPs found that using mobile apps in mobile devices is easy, convenient and fast access of information and resources, portable and flexible where they can use it at any time with many purposes (Ventola, 2014). Medical devices and apps serve many purposes to HCPs, such as communications and consulting, administration, health record maintenance and access, reference and gathering of informations, and medical education.

1.2. Background of Study

It is expected for males who reach the age of 65 in the year of 2015 will live for another 14.9 years, while female is 16.9 years, which has increased from 0.6 and 0.8 years respectively as compared with the year of 2010 (*Department of Statistics, DOS 2015*).