EDITORIAL OPEN ACCESS

The Use of Advanced Technology in Providing Chronic Care

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Chronic conditions such as diabetes and hypertension are the potential health threats to the ageing population, which will come in the package "ageing population with chronic conditions" (1,2). In Malaysia, the conditions are increasing (2,3,4) while the World Health Organization (WHO) introduced a "Regional Plan for Integrated Prevention and Control of Cardiovascular Disease and Diabetes for the Western Pacific Region 1998-2003" as a strategy to address combating these chronic conditions (5). Furthermore, the Malaysian government has introduced a National Strategic Plan for non-Communicable Disease (NSP-NCD) in order to address this issue (5).

"Prevention, control and management of cardiovascular disease and diabetes will be made accessible for all populations in partnership with various stakeholders and integrated into social, economic and environmental systems to establish a robust platform for effective reduction of these diseases" is a policy introduced as part of the national plan (5). In the current scenario, the booming of advanced technology has greatly affected our current population which is why it is important to address technology advancement, particularly in caring for the ageing population.

Meanwhile, in the era of industrial revolution 4.0, the advancement of technology should be used by both health care professionals and patients. The advancement of technology is capable of modifying the health care landscape although the practice of chronic care could be influenced by the local culture (6). For instance, the booming of smartphones, which have become a necessity in current life regardless of age, proves that the advancement of technology has imbued our population's lives. Hence, the health care system should move along by providing another method of service, such as mobile health apps (mhealth), e-health or telehealth apart from the conventional method. Mobile health was introduced by WHO as 'medical and public health practices supported by mobile devices such as mobile phones, patient monitoring devices, personal digital assistants, and other wireless devices (7).

The use of these technologies should be widely employed by healthcare professionals. In Malaysia for example, the MySejahtera application was developed in order to keep a record, contact tracing, and provide information related to COVID-19. Furthermore, in a primary care setting, online appointments are used for patients receiving outpatient services. However, it may be difficult for people living in remote areas that have limited internet connectivity. Therefore, a hybrid delivery of care may be emphasised focusing on the use of advanced technology and conventional methods.

Apart from that, the benefit of advanced technology (such as mhealth or e-health tools) can be used to address the shortage of healthcare professionals as a medium for providing healthcare services to a number of patients simultaneously. This is important for managing chronic conditions, especially to those in the outpatient setting (8) which provides another challenge for healthcare professionals, including nurses (9). The healthcare delivery can be tailored, which upholds the concept of personal, one to one

care and indirectly introduces the concept of virtual care. Although there are some limitations of technological advancement on the healthcare delivery system, it has a positive influence, plays a crucial part in the shaping of our healthcare delivery system and shifting the paradigm in the healthcare setting.

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