

Chapter 26

The Importance of Information and Communication Technologies in Establishing Healthcare Services with a Universal Coverage

Davuthan Günaydin

Namık Kemal University, Turkey

Hakan Cavlak

Namık Kemal University, Turkey

GamzeYıldız Şeren

Namık Kemal University, Turkey

Korhan Arun

Namık Kemal University, Turkey

ABSTRACT

One of the most important challenges faced by the healthcare system is the organization of healthcare services to cope with the increase in population and aging of citizens. Especially in developing countries, demographic movements of the population, regional disparities, political concerns, and increasing expectations of health services have led to a search for new ways to serve all of the population with healthcare services. With traditional methods, it is not possible to increase the supply of health services because of inadequate infrastructure and shortcomings in quantity and quality of healthcare staff. This new health system called e-health and uses all of the possibilities provided by information and communication technologies that aim to improve public health. In this chapter, the effects of e-health practices on the quality and accessibility of healthcare services are assessed and the extent of e-health practices in Turkey are evaluated.

INTRODUCTION

One of the most important problems occurring in offering healthcare services is that the organization of healthcare services becomes difficult due to increase in population and aging effect. Espe-

cially in the developing countries, such reasons as demographical waves in population, geographical distribution of population, regional development differences and political concerns and increase in expectation from the healthcare services have lead developing countries into looking for ways

DOI: 10.4018/978-1-4666-6635-1.ch026

of re-structuring the healthcare services to include everybody. In reality, these countries don't have an established healthcare services system and this structure is not possible due to increasing demand of healthcare services via traditional methods, inefficient health infrastructure, and lack of qualified healthcare staff and inefficient funds of these countries.

At this point, technological developments present new solutions offering to meet the mentioned inefficiencies. The use of information and communication technology, which is rapidly developing especially since the beginning of the 21st century in the field of healthcare services, helped eliminate many problems related to the offering of healthcare services and also enabled people living in the developing countries to reach healthcare services. Communication opportunities provided by these technologies have important functions in eliminating the disadvantages resulting from geographical distances, regional development differences and health infrastructure. Especially the increased use of mobile telephones and internet in the last decade resulted in the healthcare services being re-organized via using these technological infrastructures. This increase has also enabled governments and non-governmental organizations to reach disadvantaged regions and people living in these regions via using these opportunities of information and communication technologies.

The new understanding of healthcare services, referred to as e-health, aims to improve individual and public health by means of using all the opportunities provided by the information and communication technologies. Especially the applications of tele-medicine and m-health increase the quality of healthcare services in the developed countries and also these applications are presenting a role model to realize a universal healthcare system in the case of developing countries.

UNIVERSALISM IN HEALTHCARE SERVICES

The most important issue discussed in the field of healthcare services is whether it is possible to develop a system from which every person is able to benefit. Especially, in many of the developing countries, which do not have an established healthcare system, a significant rate of the population cannot reach the healthcare services or they have to pay for the use of healthcare services due to not having efficient social security. This situation causes the poor and disadvantaged people to be deprived of the healthcare services and also harms public consensus.

The main equity principle for the use of healthcare services is to enable all the citizens to access the healthcare services equally through the existent health institutes (public and private) of the country (NERA, 2009, p. 8). The concept of health is of equal importance for all people. The fact that people are poor or rich and they live in rural or urban area does not create a difference in their needs of health services. However, especially in the developing countries people living in urban areas with a high financial ability benefit from healthcare services much further compared to people living in the rural areas. People living in urban areas also know the procedure to reach the healthcare services better and so they can easily reach both public and private healthcare services. In fact, low cost investments on basic healthcare services made by governments can increase the general healthcare conditions and healthcare development of the country. However, especially in the developing countries, it has been seen that already limited health funds are used mostly for expensive technologies and urban areas (Akin & Ferranti, 1988, p.2).

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/the-importance-of-information-and-communication-technologies-in-establishing-healthcare-services-with-a-universal-coverage/121374

Related Content

Women and Tourism: Case of Sikkim, India

Supriya Dam (2023). *Perspectives on the Transition Toward Green and Climate Neutral Economies in Asia* (pp. 366-378).

www.irma-international.org/chapter/women-and-tourism/327271

Using Sensor-Based Measurement Technology to Reduce the Environmental Impact of Perishable Goods

Alexander Ilic, Thorsten Staake and Elgar Fleisch (2014). *Sustainable Practices: Concepts, Methodologies, Tools, and Applications* (pp. 731-747).

www.irma-international.org/chapter/using-sensor-based-measurement-technology-to-reduce-the-environmental-impact-of-perishable-goods/94963

Paradigm Change in Tourist Preferences Towards Evolving New Normal Tourism and Travel Trends

Velu Narmadha and A. Anuradha (2022). *Handbook of Research on Changing Dynamics in Responsible and Sustainable Business in the Post-COVID-19 Era* (pp. 406-418).

www.irma-international.org/chapter/paradigm-change-in-tourist-preferences-towards-evolving-new-normal-tourism-and-travel-trends/294429

A Study for Identifying Reasons for Low Preference of Priority Sector Lending of Indian Commercial Banks

Neha Goyal, Rachna Agrawal and Renu Aggarwal (2016). *International Journal of Sustainable Economies Management* (pp. 21-34).

www.irma-international.org/article/a-study-for-identifying-reasons-for-low-preference-of-priority-sector-lending-of-indian-commercial-banks/166554

The Political Marketing Strategy of Dealing With the COVID-19 Pandemic: A Case Study for the Countries of the Balkan and the Black Sea Regions

Theodore Chadjipadelis, Georgia Panagiotidou and Sofia Magopoulou (2023). *Handbook of Research on Socio-Economic Sustainability in the Post-Pandemic Era* (pp. 158-176).

www.irma-international.org/chapter/the-political-marketing-strategy-of-dealing-with-the-covid-19-pandemic/328804