Chapter 34

ICT in Healthcare Management, Developments, and Applications in Turkish Health Sector

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ABSTRACT

Information and communication technologies are radically changing the way that healthcare is delivered with the development of e-Health among the most remarkable changes. It plays an increasingly important role in delivering healthcare. Information and communication technology has the potential to effectively support the complexities involved in the communication that takes place both amongst healthcare professionals and their patients in the developed and developing countries. The aim of the chapter is to analyze the recent situation in healthcare management and information communication technology applications in the health industry. This chapter examines the challenges involved in human interaction and a clinical information system and allows for richer communication between the patient and those involved in their health.

INTRODUCTION

The delivery of healthcare has always been influenced by technological developments and innovations (Kluge, 2011). The development of Information and Communication Technology (ICT), make contribution to services for the decision-making process and skilled healthcare professionals. Comprehensive knowledge of patients/clients is essential contributors to the health projects (Kouri, Karjalainen-Jurvelin, & Kinnunen, 2005). In integrated healthcare, professionals from different organizations work together in a team-oriented way to provide high quality care for a patient (Hägglund, Scandurra, & Koch, 2010). This situation requires high quality of collaborative working relationships, clarity and commonality of objectives, frequent communication among team members, a clear understanding and respect of individual roles and skills within the team, and general flexibility of practitio-
ICT and Global Healthcare

ICT has the potential to impact upon almost every aspect of the health sector. Several terms referring to telecommunication have been used during the years as the technology and applications have developed. The information age has made profound changes in society and is slowly entering the healthcare field. Telecommunications technologies and the Internet offer a revolution in management of global healthcare systems and sustainable development. These technologies may contribute significantly to improve global healthcare system performance and to manage diversity and to reduce the inequities that separate the industrialized nations from the developing world. Millions of physicians, healthcare providers, and patients are accessing the Web daily for patient information, consultation, and distant learning. There are many issues which have been raised, such as access to the information, the security of the information, and the quality of the content on the Web. Global electronic health (e-health) has been used for some time as a conceptual term. But the convergence of three recent developments - globalization, global health and, and the network age - has allowed global e-health to emerge as a new reality that has been defined (Scott, Jennett, & Yeo, 2004). The term e-Health encompasses all electronic health data exchange. Applications of e-health to the management of healthcare include the Telehealth, Telemedicine, Telecare, Medical Informatics, Nursing Informatics, and Consumer Health Informatics. Telehealth and telemedicine practices generally fall under the banner of e-Health in a hierarchical-type fashion as shown in Figure 1.

Telehealth is the use of communication, diagnostic and IT when patients and healthcare provid-