Editorial on Emerging Trends and Technologies in Healthcare in conjunction to the 1st International Saudi Health Informatics Conference held in Riyadh, 12–14 April, 2016

The current special issue of the *Journal of Infection and Public Health* has been produced subsequent to the first ever international Saudi Scientific Health Informatics Conference (ISHIC), organized by The Research Chair of Health Informatics and Promotion (RCHIP).

Medical informatics can be defined as the science concerned with the theoretical and practical aspects of biomedical data, information and knowledge manipulation and utilization for decision making, and problem solving in medical care, research, and education [1]. It is apparent that the revolution in information technology and the rapid advances in computer systems can be effectively utilized to enhance and improve medical services and patient care. Healthcare will depend heavily on medical informatics applications and methods, and soon it will be very difficult to distinguish medical informatics applications within routine clinical practice; that is, telemedicine, teleradiology, and clinical decision support applications will become integral parts of clinical practice. Furthermore, recent studies have shown that high quality healthcare services can only be delivered when relevant patient information is easily and electronically accessible to clinicians [2]. The Internet and social media are becoming essential sources of health information for the public [3]. Previous studies showed the influence of the Internet on the patients’ health status, as a way to deliver valuable information related to their health [4,5].

New trends in medical informatics, such as bioinformatics, personalized medicine, mobile health, and consumer health informatics are expected to be applied more often in medical and healthcare services, and these applications would be more visible in the near future.

Currently, more than 10 degrees are offered by several universities in this country, both at the under and postgraduate levels, in medical informatics, public health informatics, health information management, and others. Further, there are more than 8 colleges of health informatics and public health nationwide. In addition, medical informatics courses are offered to medical students at the undergraduate level in many medical colleges across the country, and the College of Medicine, at King Saud University, was the first in KSA to offer medical informatics courses to medical students at the undergraduate level in 2004.

ISHIC received more than 115 abstracts, of which 36 (32%) were accepted for oral presentations, and 28 confirmed and presented at ISHIC. The conference also comprised a project forum, best poster competition, and best project competition.
The conference had more than 600 delegate registrations, more than 30 keynote speakers, more than half of who were from the USA, Canada, the UK, Malaysia, and other countries. One main landmark was that the conference conducted 12 pre and post conference workshops, offered by both local and international experts in areas like Medical Informatics, Bioinformatics, Clinical Informatics, EBM, Big Data, Six Sigma, and other related topics.

Upon completion of ISHIC, oral presentation abstracts were invited to submit a complete paper for this issue. After reviewing, editing, and correspondence with authors, 12 manuscripts have been finally accepted and published in this special issue. The studies published in this issue cover a wide spectrum of areas pertaining to medical informatics and applications, such as mobile health, informatics quality issues, social media for chronic diseases, imaging informatics, telemedicine, HIS adoption, data mining, health analytics, and change management.

References