EDITORIAL

e-Health in Public Health Care: Challenges and Opportunities

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Introduction and Issues in Health Care:

The role of Health Informatics is becoming significantly crucial in every part of the health sector. With rapid advancement in information technology during last decades, it is mandatory to the contribution of health informatics in improving various aspects of health care including patients care as well as public health care.[1] The main issues in providing patients care arise from an incomplete information, wasting time in collecting the information and duplicating investigations and treatment activities. Often care has to be manually coordinated with other health care providers and then exchanging the information which is inefficient and incomplete. There is a limited ability to interact with patients who reside remotely. In addition to above there are lot of difficulties in monitoring of adherence or response to treatment and medication.[1]

WHO Goals of Electronic Health Care Information:

Keeping this in view World Health Organization (WHO) has set goals for health care information to be achieved by 2012. These are to have integrated and complete -patient information at point of care, multi–disciplinary health care providers be electronically connected. sharing of information in a timely and secure manner across different locations and all parts of the health sector, facility to access to data that allows to monitor and evaluate service delivery outcomes more effectively, order tests, prescribe medications and refer individuals to other providers electronically and finally interaction electronically with patients regardless of location.[2]

Role of Information and Technology in Health Care – e-Health:

The question is whether Information and Technology can improve Health Care Issues in Patients Care and Public Health field as well. The answer is in affirmative but of course with few Challenges as it usually happens in adapting the newer horizons. We are all surrounded by the technology which provides more opportunities with few challenges. The e-Health components includes Electronic Medical Records (EHR), Electronic Health Records (HER), Electronic Personal Health Records (PHR), Tele health, telemedicine, m-health i.e. use of mobile smart i-phone apps for health purposes and e-learning.[3,4]

Impact of e-Health on stakeholders:

In Public Health practice the impact of e-health is many folds and may be amazing as e-health enables personalized care, makes health care services available at home, at work or in school – not just the healthcare settings. To add further the Public Health Practice paradigm changes from typical medical care may bring the focuses more on prevention, health promotion, health education and self-management of minor ailments. Definitely the e-Health will facilitates reaching out to peers for advice and support to the community in a big way. The impact of e-Health on healthcare settings and Public Health practice is that healthcare settings will become a virtual network of all healthcare providers, preventive, promotive, curative and rehabilitative as well, who are connecting at all levels, monitors the patients and community care. This will definitely improve the quality of health care and patients safety by reducing the medical errors, avoiding duplication of tests and investigations, saving time and proper follow up of medications.[5] The patient's healthcare data and information

may be accessed and reached out across the globe as and when needed. Further a new chapter also opens up for the newer opportunities for all type of the medical research whether it is basic research or applied research or operational public health research. This can happen by developing a strong local, national and international collaboration research centers and by sharing the information by use of cloud computing technology. The health care researchers can get access to recent current, highly specialized and accredited proven knowledge for medical care, research and public health; open free access to research data, articles and electronic databases. This makes it a high-quality distance learning platform for basic and continuing professional medical education. e-Health might facilitate research and development departments of governments and business industry to develop and manufacture of new cost effective technological health products and services to improve the individual and population health. e-Health delivers a rapid timely reporting on all aspects of public health issues. As "health" is central to all government related policies in all sectors, including country economy, internal security, foreign affairs and international relationships, e-health provides evidences to develop evidence based policies by the different Governments.[6] E-health assign newer roles for stakeholders, government, healthcare providers, health authorities, community, patients and others. Population health perspectives tremendously improve by identifying trends of risk factors for ill health and diseases; by analyzing the demographic, health and socio economic data and modeling the diseases in the populations.

Global issues and International Scenario:

There are few cross-border concerns about Public Health relating to environmental exposures, disease outbreaks, food and drug safety events, growth of online health information, services and immigration/movement of population at an International level. Agencies are considering the Role of e-Health in addressing these issues which requires common regional and global approaches.[6]

Australia started a national electronic health record implementation project called as "Health Connect" in 2002, one of the largest initiatives estimated to save Australian

$300 million by reducing medical errors. Canada started a major initiative for e-Health and HER by establishing an Advisory council in the Minister of Health. United States (US)- In 1999, Institute of Medicine reported a shocking number of deaths due to medical errors which could have been prevented. US then established an Office of National Coordinator (ONC) to call for action and to establish strategic framework to deal with this issue. The e-Health Strategy and Plan of Action (2012-2017) is in place in health care. Most European countries are using the EMR. The countries with largest proportions of General Practitioners- Sweden (90%), Netherlands (88%), Denmark (62%), UK (58%), Finland (56%) and Austria (55%) are using e-Health in Health Care. Rest of the world, Middle East and India e-Health is still in Infancy Stage. Though private and corporate hospitals have started using e-Health in Health care services and Government Sector National Program initiated the program mainly in the form many telemedicine projects in different parts of the country to benefit the rural and under privileged population but still a long journey to go to achieve WHO Goals set.[7]

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