Will Health Informatics Gain its Rightful Place for Ushering in Digital India?

Sir,

Technology is enhancing all spheres of our activities and health care is not exempt. The International Medical Informatics Association's recommendations[1] focus on educational needs for biomedical/health informatics professionals to acquire knowledge and skills in information processing and information and communication technology in health care. In India, the need for medical informatics was advocated as early as 1995.[2]

Digital India initiatives were launched in 2014.[3] The initiatives include technology for health (e-Healthcare) that includes (i) online medical consultation, (ii) online medical records, (iii) online medicine supply, and (iv) Pan-India exchange for patient information. Globally, the broad scope of digital health includes categories such as mobile health (mHealth), health information technology (IT), wearable devices, telehealth and telemedicine, and personalized medicine.[4] Digital health is about electronically connecting up the points of care so that health information can be shared securely. This is the first step to understanding how digital health can help deliver safer, better quality health care.[5]

I[6,7] have been advocating the incorporation of medical/health informatics in making health-care delivery more informed in India. Even for achieving universal health coverage, like the National Health Protection Scheme, announced in the 2018 Budget, the role of public health informatics cannot be overemphasized. However, the realization that there is a need for capacity building in health informatics in India seems to have been unusually prolonged. There is an urgent requirement for the augmentation of current health professional educational curriculum with concepts and awareness of health informatics. Health informatics classes have to be embedded within the health professional curriculum to prepare the future health-care providers who will invariably face digital information explosion. Health informaticians will be necessary to manage patient documentation during health-care delivery, while health information managers will manage the data between the hospital admissions or encounters.

The Ministry of Health and Family Welfare realized the potential of health information management and brought out a model curriculum in 2015.[8] Earlier they had formed the Centre for Health Informatics, headed by me, that had developed the National Health Portal, which hosted a helpdesk for electronic health record (EHR) standards that had been notified[9] by the ministry.

The National Health Policy-2017[10] advocates extensive deployment of digital tools for improving the efficiency and outcome of the health-care system. The policy aims at an integrated health information platform or system which serves the needs of all stakeholders and improves efficiency, transparency, and citizen experience. Delivery of better health outcomes in terms of access, quality, affordability, lowering of disease burden, and efficient monitoring of health entitlements to citizens is the goal. Establishing federated national health information architecture, to roll-out and link systems across public and private health providers at state and national levels consistent with Metadata and Data Standards and EHR standards,[9] will be supported by this policy. The policy suggests exploring the use of "Aadhaar" (Unique ID or UID) for identification. Creation of registries (i.e., patients, provider, service, diseases, document, and event) for enhanced public health/big data analytics, creation of health information exchange platform and national health information network, use of National Optical Fiber Network, and use of smart phones/tablets for capturing real-time data are key strategies of the National Health Information Architecture. The policy advocates scaling of various initiatives in the area of teleconsultation which will entail linking tertiary care institutions (medical colleges) to district and subdistrict hospitals which provide secondary care facilities, for the purpose of specialist consultations. The policy will promote utilization of National Knowledge Network for teleeducation, tele-CME, and teleconsultations and access to digital library.

The National Health Policy 2017 of India[10] states that recognizing the integral role of technology (eHealth, mHealth, Cloud, Internet of Things or IoT, and Wearables) in the health-care delivery, a National Digital Health Authority (NDHA) will be set up to regulate, develop, and deploy digital health across the continuum of care. The first task that the proposed NDHA will need to carry out is the formulation of a robust National Digital Health Strategy, in consultation with all the stakeholders, for smooth adoption of digital health throughout India.

Therefore, time now seems ripe to acknowledge and encourage health informatics as an academic discipline that will decide the success or failure of health-care delivery in Digital India through capacity building of professionally qualified health informaticians.

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Conflicts of interest

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