EDITORIAL

Electronic Health Records – The Ethical and Legal Issues

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Health records may contain information about a patient's history, clinical examination findings, laboratory and radiological investigations, management outcomes, and complications. While the majority of health records in the continent are manual paper-based systems, there has been a shift to digitize these records in a move to improve primary healthcare delivery in Africa. This trend has particularly been favoured by international collaborations with African institutions stemming from the efforts to enhance HIV/AIDS management and the diversification of this approach in other clinical and surgical areas. Digitization results in faster access to information, which has the potential to improve patient care, enhance access to care, facilitate research and reduce the cost of healthcare. In this regard, Kirengo describes a cost -effective method of converting analog clinical videos to digital form. This makes the information easy to view, edit, and analyze, underpinning the great potential in recording patient data in digital form(1). Electronic health records (EHR) are, however, prone to various legal and ethical issues. Expectedly, while it gives into enhancing primary healthcare, measures should be taken to ensure the principles of biomedical ethics remain upheld.

As the records are readily accessible, privacy remains the greatest concern and so is patient autonomy. While health records may need to be shared in various clinical encounters, they are sensitive and remain confidential and should only be released with the consent of the patient, legal guardian, or as prescribed by the law. Downstream, a lack of confidence in the security of patient data may consequentially lead to misdiagnosis or missed diagnosis when patients fail to observe full disclosure of their symptoms due to their mistrust in the EHR systems(2). Despite patient data being held by surgeons and health institutions, patients retain autonomy and can choose who can access their data. As the data is readily available to surgeons, we must be careful to follow all the ethical guidelines before we use the data for teaching and research. Surgeons should ensure that the health records are used to provide the best care possible to our patients with the least possible harm. We should only share with other parties, data that will not only result in improved care for our patients, but also that which causes the least harm. In a normal surgical practice, different players need different levels of access to patient data. The receptionist, the accountant and the nurse may all need patient data but at varying levels. The

system should be set up in such a manner that these different players only access the information necessary to perform their tasks. To achieve fidelity, surgeons should ensure that the promise of confidentiality is kept to the best of our ability and patient data is not unnecessarily put at risk of inadvertent disclosure, theft or destruction. When surgeons engage in discussions in various platforms, they should be aware of the potential ethical pitfalls. An analysis of the technology used, the data stored in various devices and the risk of interception should be performed. For example, the use of instant messaging services like WhatsApp while quick may raise ethical issues(3). According to the United Nations Conference on Trade and Development, of the 54 countries in Africa, 33 have enacted legislation on data protection and privacy while another 6 have Draft Legislation in various stages of enactment(4). Surgeons need to be aware of the laws on data security in their countries and to take steps to ensure that they and their institutions are in compliance.

The systems that provide EHR should also be set up in a manner that ensures accuracy of data. In its outset, EHRs are designed to reduce healthcare errors, and disparities, however, this capacity heavily relies on the reliability of the data entry into the electronic record. While "'cut and paste'" options may be convenient, they may open avenues for inaccurate data entry. Another avenue for inaccurate data entry is the use of restrictive drop-down menus. As an example, most EHR systems encountered in Nairobi do not allow for direct text entry of a diagnosis despite missing certain common conditions, for example, Plantar Fasciitis. This results in the surgeon, entering an incorrect diagnosis, compromising on the quality of the data. The presence of such inaccuracies ultimately compromises on the beneficence on which EHRs are largely centered on.

As EHR makes available all the patients' data with just a few clicks, surgeons must strive to achieve quality healthcare to all their patients irrespective of the patients personal or socio-economic attributes. Compromise on justice in EHRs usage arises mainly from the inequity in internet access and electronic resources as well as the potential public disclosure of patient data among minority and disadvantaged groups. Additionally, with advancing in age especially above 65 years, capacity to access and utilize online health information afforded to by EHRs becomes limited. This observation is equally seen in the disabled, illiterate and those experiencing language barriers(5). We should continuously strive to enhance equity in the utility of EHRs despite our patients having different access and understanding of technology. This will ensure justice and the delivery of equitable health services.

Conclusively, the benefits afforded to by utilization of EHRs are limitless especially in appealing towards beneficence in patient care, however, concerns still exist with other ethical principles especially regarding autonomy. Surgeons should therefore ensure that the systems they use are in compliance with the ethical principles of autonomy, confidentiality, beneficence, fidelity and justice. As the continent embraces EHR, let us adapt the systems to ensure compliance with all legal and ethical principles.

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