Abstract

Background: Healthcare domain consists of highly sensitive and confidential

information governed by patient autonomy and privacy. Breach in confidentiality among

healthcare professionals and patients will lead to substandard treatment and ultimately

lower the quality of healthcare services. With the rapid advancements in the field of

information technology, the digital transformation of healthcare is becoming inevitable.

Apart from its vast benefits, digitalization also induces the risk of both intentional and

unintentional healthcare data breaches. The entire concentration and effort of relevant

authorities seem to be directed at controlling malicious intrusions, leaving unintentional

healthcare data breaches a topic that is totally overlooked.

Objective: To determine the awareness of patient privacy in association with electronic

medical records and potentially medically sensitive data among medical and nursing

professionals in Sri Lanka.

Method: The study followed a descriptive cross-sectional approach. Data were collected

using two separate self-administered questionnaires. A general questionnaire was given

to 200 participants including medical and nursing officers, medical and nursing

undergraduates attached to state healthcare institutions. A specific self-administered

questionnaire was used to collect data from 50 medical officers involved in health

information management systems. Process observation and secondary data gathering

provided an additional value.

Results: 43.5% of the participants admitted that their past actions have resulted in

unintentional data breaches related to potentially medically sensitive data. 61.4% have

witnessed such instances happening due to unintentional acts of their colleagues. 37.9%

claimed they did not take any specific measures to protect patients' privacy while sharing

patient data on digital platforms. 54.8% of the participants believed that unintentional

healthcare data breaches should also get the same penalties as intentional breaches.

Conclusion: Healthcare professionals have an emerging and growing understanding of

unintentional healthcare data breaches. Existing guidelines and policies in Sri Lanka do

not expressly address the unintentional aspect of a data breach. Therefore,

implementation of a national policy to address the issue of unintentional aspects of

healthcare data breaches is a timely need.

Key words: Privacy, digital health, data breach, unintentional

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