

Acta HealthMedica (ISSN: 2414-6528) http://www.ActaHealthMedica.com

Volume: 2, Issue: 1, January-March 2017, Pages: 121, DOI: http://dx.doi.org/10.19082/ah121

SECURITY CHALLENGES OF HEALTH INFORMATION SYSTEMS: A SYSTEMATIC REVIEW

Haleh Ayatollahi¹, Esmaeil Mehraeen², Maryam Ahmadi³

- 1: Assistant Professor, Department of Health Information Management, Iran University of Medical Sciences, Tehran, Iran.
- 2: PhD Student of Health Information Management, School of Allied Medical Sciences, Tehran University of Medical Sciences, Tehran, Iran.
- 3: Professor, Department of Health Information Management, Iran University of Medical Sciences, Tehran, Iran.

Correspondence:

Esmaeil Mehraeen, E-mail: es.mehraeen@gmail.com, Tel: +98-9381926911, Fax: +98-21-88982905

TYPE OF ARTICLE: CONFERENCE ABSTRACT

ABSTRACT

Introduction: Because a huge amount of health information is stored and transferred using information technology, the issue of information security is of high importance. The aim of this study was to review security challenges in health information systems. The main focus was on managerial aspects of information security in health information systems.

Methods: This was an organized review of 104 full-text articles published between 2000 and 2016. A systematic literature review was conducted using databases PubMed, Science Direct, Scopus, and Web of Knowledge. Only studies published in English, research or review papers with the keywords in the title or the abstract were selected.

Results: In total, 26 papers were selected according to the inclusion criteria. The main point reported in these studies included the need for an information security policy with practical solutions. It means that, to improve privacy and security of health information, not only technical aspects, but also nontechnical issues need to be addressed

Conclusion: To improve health information security, the technical solutions should be supported by the managerial strategies. Among the risks and threats to information security, unauthorized access to the information is the most challenging issue. Therefore, apart from the technical solutions, it is necessary to develop an information security culture to protect information and information systems.

KEYWORDS: Security challenges, Health information system, Information technology

Abstracts of First National Congress of Medical Informatics, Mashhad, Iran, February 2017

© 2017 The Authors. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.