

IMPACT OF INFORMATION TECHNOLOGY ON EFFICIENCY OF EVIDENCE-BASED MEDICINE: A SYSTEMATIC REVIEW

Zahra Ebrahimi,¹ Zakieh Piri,² Afsaneh mehdikhani,³ RouhAllah Khara⁴.

¹Undergraduate student, health information technology, Tabriz University of medical science, Tabriz, Iran; ²Associate Professor, health information management, Tabriz University of medical science, Tabriz, Iran; ³Undergraduate student, health information technology, Tabriz University of medical science, Tabriz, Iran; ⁴PHD student, health information management, Tabriz University of medical science, Tabriz, Iran

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Background and aims: Evidence-based medicine (EBM) is a systematic process of searching, evaluating and using the best evidence available for clinical decision that this evidence obtained from clinical research consciously. Information technology refers to any technology using for receiving, storing, processing, transmission and presentation of information. This technology in EBM led to the release, evaluation and critique of the medical research evidence. The aim of this study was to exploring the impact and benefits of information technology in evidence-based medicine.

Methods: The search was conducted in main databases include WOS, PubMed, Scopus, ProQuest using keywords such as “health information technology”, “social network”, “decision support system”, “effects”, “benefits”, “information technology”, “internet”, “evidence based medicine” and “practice based medicine” until the end of 2016. The results were analyzed using qualitative content analysis.

Results: Finally, 40 Paper was included in this study. The results showed increasing usage of information technology in EBM. Information technology improves patient safety, quality of care and reduces Medication errors, through clinical supervision and increase adherence to the preventive care guidelines. Internet, social networks, decision support systems, Artificial intelligence and neural network are some of the technologies that used in EBM.

Conclusion: Using information technology facilitates the evidence-based medicine processes are extremely effective. So that Internet has easy access via links to information and specialized evidence-based clinical guidelines, that can be used for improved decision-making and facilitate communication and dissemination of information. Any technology that can to facilitate collection, storage, process and retrieve information for health staff it can also have a positive impact in improving EBM. In general, EBM is a dream without the use of technologies and policymakers should seriously plan to use more IT.