ROLE OF HEALTH INFORMATION TECHNOLOGY IN MEDICAL EDUCATION

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ABSTRACT:
Health Information Technology (HIT) is health technology, particularly information technology, applied to health and health care. It supports health information management across computerized systems and the secure exchange of health information between consumers, providers, payers, and quality monitors. This cross-sectional study was conducted among medical students of different institutes. A predefined questionnaire was served to the medical students and different questions about usage of health information technology were asked. A total of 109 medical students participated in this study. Out of these, only 87 students returned the questionnaire after completion. The response rate was 79.81%. Out of these 87 students, 56 were males and 31 were females. All the students (100%) responded that they have some knowledge about health information technology being used in health appliances, machines, and devices.

Keywords: Health information technology
INTRODUCTION:
Health Information Technology (HIT) is health technology, particularly information technology, applied to health and health care. It supports health information management across computerized systems and the secure exchange of health information between consumers, providers, payers, and quality monitors. Based on a report on a small series of studies conducted at four sites that provide ambulatory care – three U.S. medical centers and one in the Netherlands – the use of electronic health records (EHRs) was viewed as the most promising tool for improving the overall quality, safety and efficiency of the health delivery system. According to a 2006 report by the Agency for Healthcare Research and Quality, broad and consistent utilization of HIT will improve health care quality or effectiveness, increase health care productivity or efficiency, prevent medical errors and increase health care accuracy and procedural correctness, reduce health care costs, increase administrative efficiencies and healthcare work processes, decrease paperwork and unproductive or idle work time, extend real-time communications of health informatics among health care professionals and expand access to affordable care.

Information technology has been pivotal in transforming the face of modern health care. Healthcare information technology (HCIT) is a term used to describe the use of computers in a clinical setting. HCIT's benefits include, but are not limited to: written electronic patient records, increased delivery of guideline-based care, easier access to investigation results, reduction of medical errors, and decreased rates of administration of potentially inappropriate care. HCIT generally forms a part of everyday practice across all specialties, with computer systems now heavily integrated into many clinical encounters. One of the rapidly growing areas of health care...
innovation lies in the advanced use of data science and machine learning. The key opportunities are health monitoring and diagnosis, medical treatment and patient care, pharmaceutical research and development and clinic performance optimization (1-3).

The purpose of this study was to understand the role of health information technology in the medical education in current settings.

**Material of Methods:**
This cross-sectional study was conducted among medical students of different institutes. A predefined questionnaire was served to the medical students and different questions about usage of health information technology were asked. The secrecy of the respondents was assured. All the data was entered and analyzed in SPSS ver. 23. The qualitative variables were presented as frequency and percentages. The quantitative variables were presented as mean and standard deviation.

**RESULTS:**
A total of 109 medical students participated in this study. Out of these, only 87 students returned the questionnaire after completion. The response rate was 79.81%. Out of these 87 students, 56 were males and 31 were females. All the students (100%) responded that they have some knowledge about health information technology being used in health appliances, machines, and devices. They had knowledge about concept of tele-medicine, usage of different softwares in clinics, hospitals, pharmacies, and laboratories.

**DISCUSSION:**
eHealth (also written e-health) is a relatively recent healthcare practice supported by electronic processes and communication, dating back to at least 1999. Usage of the term varies as it just not covers the "Internet medicine" as it was
conceived during that time, but also covers "virtually everything related to computers and medicine". A study in 2005 found 51 unique definitions. Some argue that it is interchangeable with health informatics with a broad definition covering electronic/digital processes in health while others use it in the narrower sense of healthcare practice using the Internet. It can also include health applications and links on mobile phones, referred to as mHealth or m-Health.

eHealth literacy is defined as "the ability to seek, find, understand and appraise health information from electronic sources and apply knowledge gained to addressing or solving a health problem." According to this definition, eHealth literacy encompasses six types of literacy: traditional (literacy and numeracy), information, media, health, computer, and scientific. Of these, media and computer literacies are unique to the Internet context, with eHealth media literacy being the awareness of media bias or perspective, the ability to discern both explicit and implicit meaning from media messages, and to derive meaning from media messages. The literature includes other definitions of perceived media capability or efficacy, but these were not specific to health information on the Internet.

Having the composite skills of eHealth literacy allows health consumers to achieve positive outcomes from using the Internet for health purposes. eHealth literacy has the potential to both protect consumers from harm and empower them to fully participate in informed health-related decision making. People with high levels of eHealth literacy are also more aware of the risk of encountering unreliable information on the Internet. On the other hand, the extension of digital resources to the health domain in the form of eHealth literacy can also create new gaps between health consumers. eHealth literacy hinges not on the mere access to technology,
but rather on the skill to apply the accessed knowledge (4-6).

REFERENCES:


