

HEALTH INFORMATION: INFORMATIVE GUIDANCE FOR THE USERS

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ABSTRACT

People can search any information in internet through platform such as Google search, Bing and many more. The health information technology made patient become the producer of their own health because it enables them to access their health information anywhere. Furthermore, there are many people search their medical information on the internet not only for themselves but sometimes also for their family members or friends. There are thousands of medical websites and some provide health information which are may or may not up to date and reliable. Therefore, this study attempts to explore on how to choose the reliable website especially those who interested on looking their health information. People including patients and consumers need to be noted where there are pros and cons of the health information that available on web. Choosing the reliable websites is the first step in gathering online health information. Next, people must get to know the person who wrote the information and the reviews. Besides, the health information must be written or reviewed by healthcare professionals. Many sources can be used by internet's user to seek on health information which not only come from the internet but also on printed sources such as magazine and newspapers. Electronic health record (EHR) is now been used widely in order to record patient information in online basis as well as one of tools whereby it is deliberately used by users on looking into their health condition.

Keywords: Health Information; Medical Websites; Healthcare Professionals; EHR.

1. INTRODUCTION

Today the all information widely available in the internet. People can search any information in internet through platform such as Google search, Bing and many more. There is various information that are available in the any website in the internet. Besides, people search information on web for news, educational article, social trend, gossips, and not to be missed also health information. The health information technology or sometimes refer as informatization of medicine made patient become the producer of their own health because it enables them to access their health information anywhere at any time [8]. Furthermore, there are many people search their medical information on the internet not only for themselves but sometimes also for their family members or friends. Despite of many information that are available online people should be aware and not easily trust everything through reading information online. A study conducted by [9] stated that over 110 million Americans obtain their health information from Web-based sources and this is due the revolution of information technology has led to a thriving movement within the health care system and the medical culture. There are thousands of medical websites and some provide health information which are may or may not up to date and reliable so, it is important to carefully choose an authorized website to gather any health information [7]. People should be able to differentiate which kind of website to be trusted and which are should not be trusted. This is because if the health information on web come from unknown source and not educational people the information may not be accurate and unreliable. Apart from that it also will create bad affect to the patient or people.

People including patients and consumers need to be informed where there are pros and cons of the health information that available on web [10]. Table 1 illustrated the pros and cons of health information website.

Table 1. Pros and Cons of Health Websites

Pros	Cons
Health Websites Can Help You Identify and Understand Your Medical Condition	Nothing Beats Personalized Advice and Treatment from Your Doctor
Online Health Forums Offer Emotional Support	Online Health Research Can Lead to Unnecessary Anxiety It Can Be Hard to Identify “Fake News”

The factor that make people rely on the Internet to find the basic information about their medical condition is because online medical sources provide general, understandable

information about symptoms, treatment options, and also common outcome [7]. Other than that, people can save time and also be able to search for health information anywhere they are and at any time. Although information can be search online through website and other online resources, the best option to give almost the best solution to the treatment or advices to the patient is still the educated doctor. Besides, the online health information can be outdated inaccurate or biased.

2. TRUSTWORTHINESS OF THE INFORMATION

Choosing the reliable websites is the first step in gathering online health information. The question is “Is the information that available online is reliable?”. How can people get to know which sources that they can trust? Firstly, people must know who sponsors or host of the website. Money is needed to build and update the websites so the source of funding must be clear [7]. URL or website address can useful to know types of the websites.

Next, people must get to know the person who wrote the information and the reviews. Besides, the health information must be written or reviewed by healthcare professionals. Dependable websites will provide information about where their health information come from and how it was reviewed. Furthermore, trusted website will provide contact information on their web. Usually at the bottom of the page with tag “About us” or “Contact Us”. The website will provide information such as phone number, email address and mailing address. If this kind of information available on the website it means that they are reachable so, people can contact the authors or site’s sponsor if they have any inquiries.

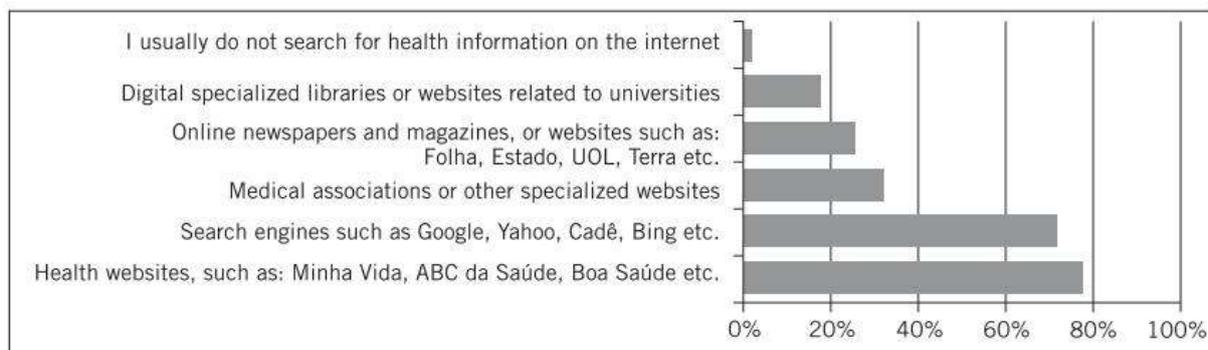
3. HEALTH RECORD THREATS

There are few types of threat can affect the privacy of health record which affected the online and offline health record. Based on study by [3] threats to health records can be categorized under three headings:

- i. Human threats, such as from employees or hackers. Man-made disasters may be intentional for example, a terrorist act or unintentional.
- ii. Natural and environmental disasters, such as flood, earthquakes, hurricanes and fires
- iii. Technology failures such as computer system crashes. A disaster recovery planning can protect health records, that is a series of steps to restore and protect the information technology infrastructure in the event of a disaster.

Hospitals and clinics nowadays have adopted electronic medical records to store the patient's health data then, healthcare data are stored in computer and transmitted through internet [3]. Besides, some health information is stored in cloud storage so, they must apply protection because data that uploaded online may be leak by others. There are some ways to protect patient's data and privacy. Firstly, is by user authentication. User authentication techniques have been widely deployed in various applications, such as remote login, withdrawals from automatic teller machines, and physical entry to restricted areas.

Many sources can be used by internet's user to seek on health information which not only come from the internet but also on printed sources such as magazine and newspapers. According to [5], there were other sources where people searched for health information can be illustrated in Figure 1.



Source: (Moretti et al., 2012)

Fig.1. Percentage of people searched for health information

Based on the study conducted by [5] online activities related to health was listed as below:

- i. reading of journal articles
- ii. search for self-diagnosis
- iii. video viewing
- iv. blog reading
- v. search for quality of life and diet
- vi. search for supplementary information after medical advices
- vii. search for information after feeling any symptom
- viii. search for alternative therapies

4. CRITERIA FOR EVALUATING HEALTH INFORMATION WEBSITES

A study conducted by [4], the huge volume of health information resources available on the internet has great potential to improve health, but it is increasingly difficult to know which resources are accurate or appropriate for internet users. This is because of the potential for harm from misleading and inaccurate health information make many organizations and individuals have published or implemented criteria for evaluating the appropriateness or quality of these resource [4].

According to [1] the criteria for evaluating health information websites is listed in the Table 2.

Table 2. Health Information Criteria

Criteria	Explanation
Credibility	<ul style="list-style-type: none"> – Source quality and credibility – Currency date displayed – Relevance – Review process described person who reviewed the website
Content	<ul style="list-style-type: none"> – Accuracy Clinical or scientific evidence should be clearly stated. – Disclaimer Website should have a disclaimer describing the limitations, purpose, scope, authority and currency of the information. – Completeness Make sure that the information complete and the information balance.
Disclosure	Disclosure requires that a site inform users about any collection of data about them while at the site, and how that data will be used. Example of websites: Mayo Clinic Health Oasis and CVS Pharmacy.
Bias/Objectivity	Objective and point of view of the websites

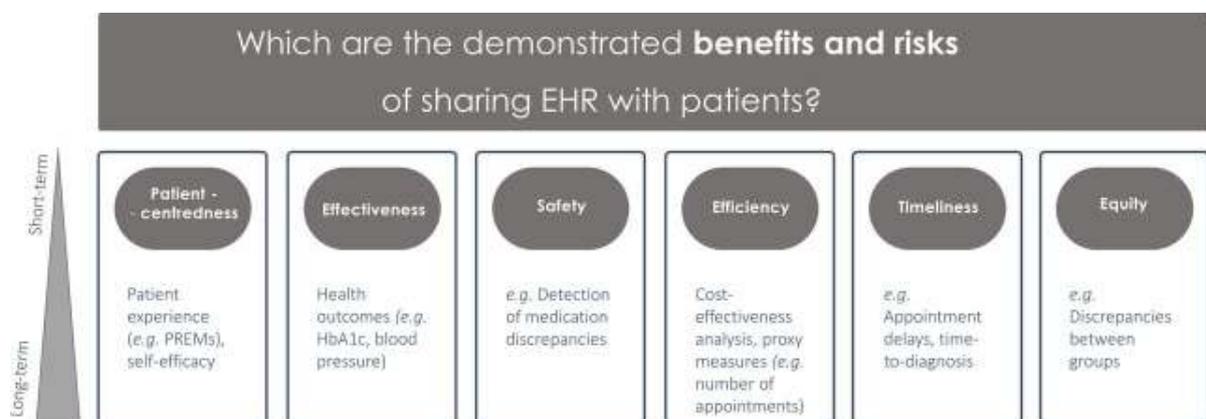
5. ELECTRONIC HEALTH RECORD AS MEDIUM OF HEALTH INFORMATION

Electronic health record (EHR) is now been used to record patient information online this is due the growing of information technology to help the healthcare faced their challenges in handling data [2]. The medical record that available online should be protected by privacy law

as stated by [11] which detail new requirements for how they collect, store and transfer medical information.

There are some impact and issues of having one's medical record online such as the record may be violated by other people if the data is not protected with privacy policy. Besides, data that available online will have the probabilities to hack by hacker or cracker that may modify and steal data from the system.

The issues that come out is that the protection of privacy of the medical record online. If there are privacy policies included and does the record of patient be handle by an authorized person. In addition, the EHR that being shared with patients also will have benefits and also risks [6]. Figure 2 showed the mapping of demonstrated benefits and risks of sharing EHR with patients across the six domains of quality of care.



Source [6]

Fig. 2. The mapping of demonstrated benefits and risks of sharing EHR with patients across the six domains of quality of care.

6. CONCLUSION AND RECOMMENDATIONS

As the conclusion, people should be able to look out on each information the search wisely. Besides, people should get to know which type of website is reliable to search their health information online. One should not just trust anything that have been written in the websites without actually know from what source are the information came from. This is because if people just trust anything that available online, there will be bad effect that come after that especially if it is a health-related information. The availability of having medical information online also will affect the medical care of the person so, the person in charge of handling the data must keep the privacy of the patient by not easily give the information to others.

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