

POLITEKNIK KESEHATAN KEMENKES PALANGKA RAYA: HEALTH FORUM AND INTERNATIONAL SEMINAR THE NEW NORMAL : Creating a Pleasant Virtual Communication

# Online Health Information-Seeking Behaviour: Trends, Influencing Factors, eHealth Literacy Skills, Benefits, and Potential Harms

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DOI: [10.35898/ghmj-51592](https://doi.org/10.35898/ghmj-51592)

*Selection and peer-review under responsibility of the scientific committee and the editorial board of the Annual Health Forum and International Seminar of the Politeknik Kesehatan Kemenkes Palangka Raya*

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The number of internet users has increased rapidly in line with internet technology developments around the world. The internet's accessibility allows the wider community to get information about various things quickly and in a variety of ways (Wong and Cheung, 2019).

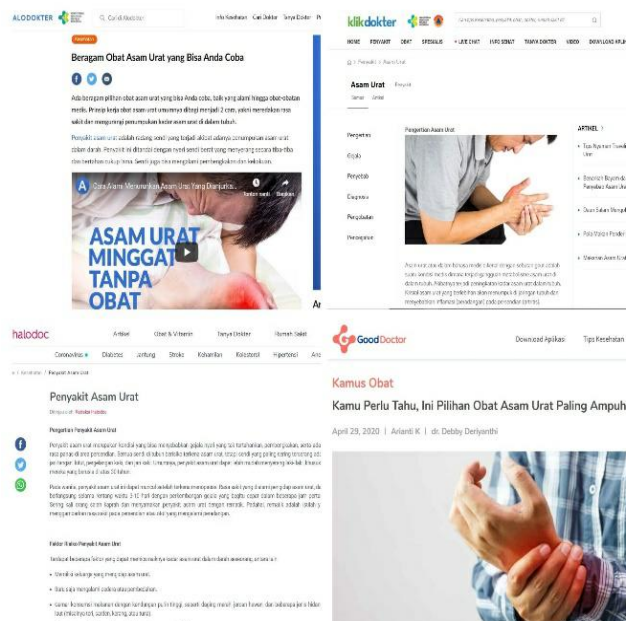
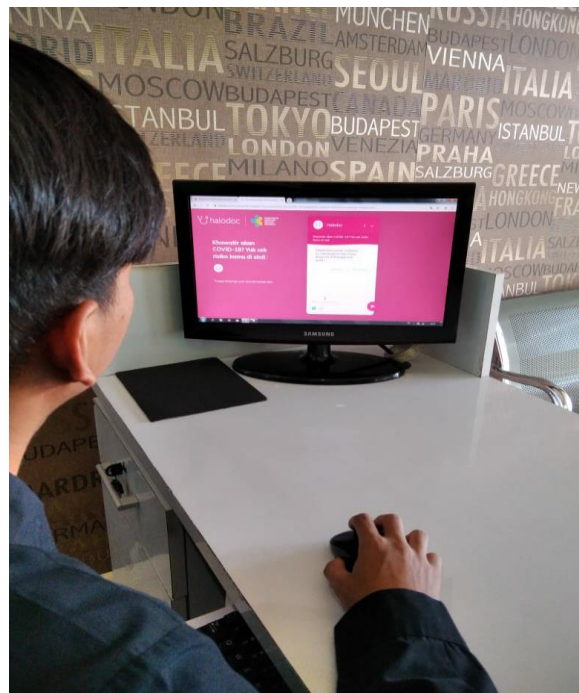


Figure 1. Health-related sites are increasingly in demand

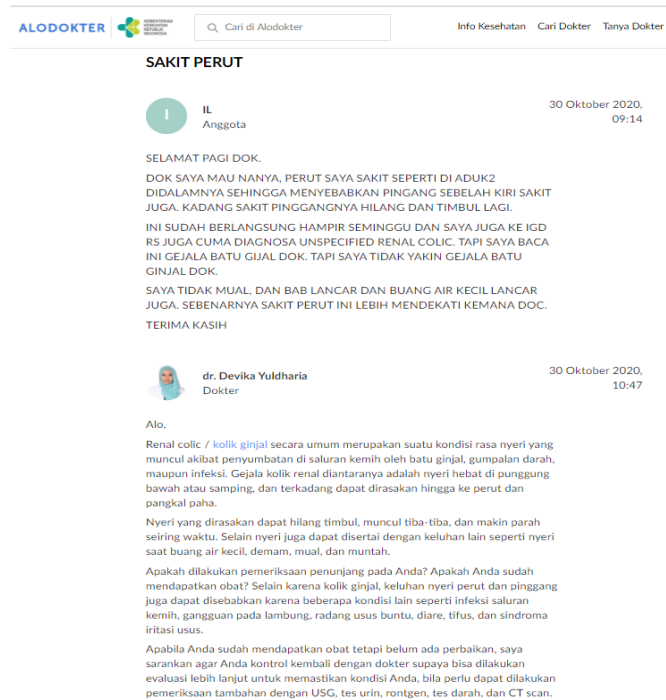
In past years in the health sector, patients only received health information passively from the treating doctors. The internet provides the opportunity for patients to get information actively from various sources through search engines. Health-related sites are increasingly in demand because patients and their families are increasingly aware of information available on the internet providing many alternatives in dealing with the health problems they face (Barry et al., 2011).

Research conducted in the United States found that of the people who owned a gadget, 36% had mHealth app on their smartphone. Of those who had the application, 60% stated that the mHealth application helped in achieving health behaviour targets, 35% stated that application helped solve health problems, and 38% reported that it was useful in improving the quality of discussions with doctors and seeking second opinions (Bhuyan et al., 2016). The use of the internet is related to the communicative health literacy domain; patients have relatively better communication with related doctors to get explanations and information (Xu et al., 2018).



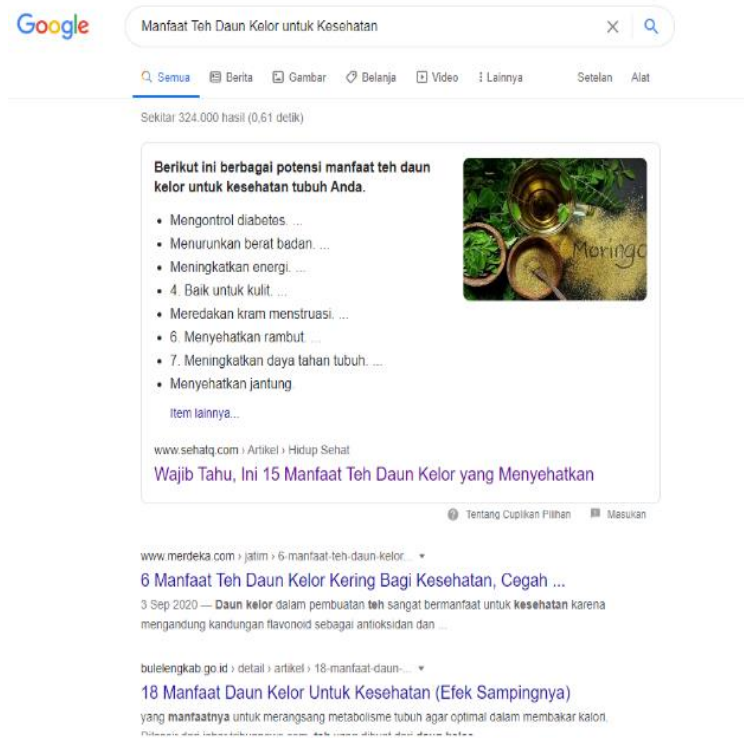
**Figure 2. Demographic factors for OHISB i.e., men, younger, more educated, earn more, and have high-speed internet access**

Online health information-seeking behaviour (OHISB) correlates with several factors, such as demographic components, cognitive factors, internal factors, and external factors. Based on demographic elements in the last decade, men have been found to be more likely to look for health information online than women. Online health seekers tend to be younger, more educated, earn more, and have high-speed internet access at home and work. Cognitive factors that affect OHISB are perceived benefits, perceived usefulness, perceived ease of use, and perceived behavioral control. Meanwhile, influential internal factors include self-efficacy, experience using the internet, and trust. Both factors have a positive and moderate effect. The external factor that plays the biggest role is the subjective norm. Of the factors mentioned, the one with the largest effect size is the subjective norm, followed by perceived usefulness and attitude (Wang, Xiu, and Shahzad, 2019).



**Figure 3. The general public seeking information for disease identification based on symptoms and expressing doubts about the information, thus seeking a second opinion.**

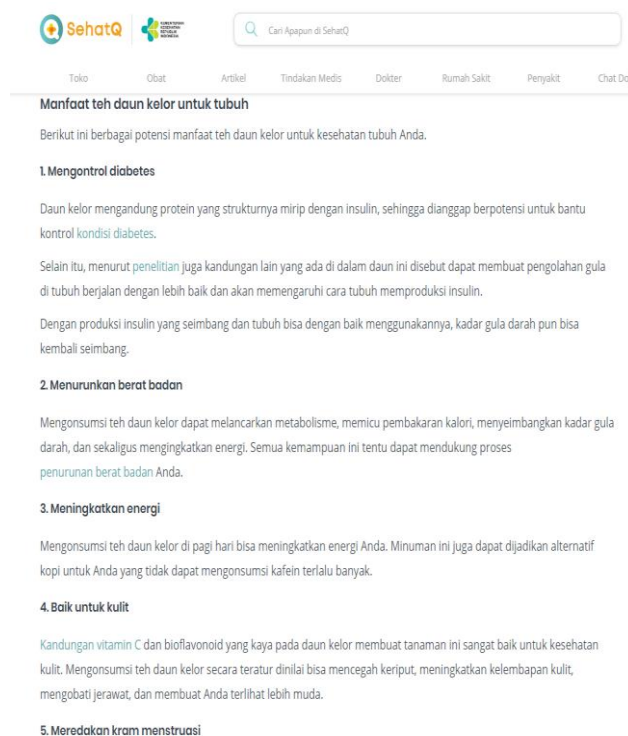
The reasons for OHISB are to gather general information, to be active in personal healthcare, to research treatments or medication options, to self-diagnose, to identify people with similar experiences, and to find a doctor (Kyriacou and Sherratt, 2019). According to the results of a survey conducted by the World Health Organization (WHO) on eHealth, 29% of online health information-seekers used information obtained online to decide whether to see a doctor or come to an appointment at a regular consultation session. (Barry et al., 2011).



**Figure 4. People reading health articles on the internet, OHISB need eHealth literacy**

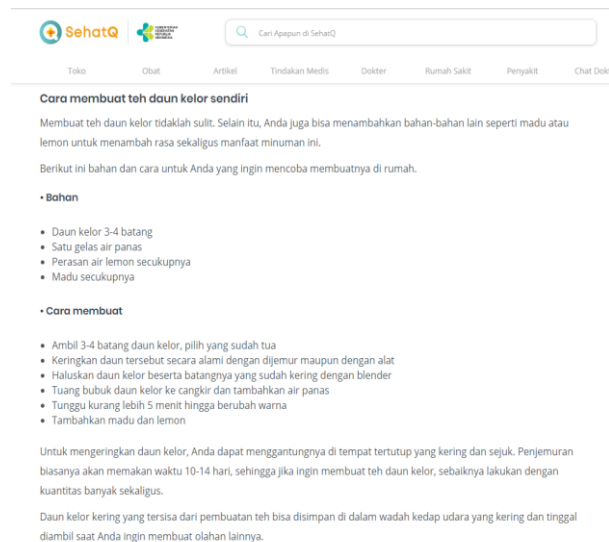
eHealth literacy is one of the supporting internal factors for OHISB along with using the internet and trust. According to Valizadeh-Haghi and Rahmatizadeh (2018), eHealth literacy (health literacy) is the ability to search, find, understand, and use health information available from the internet and process it into knowledge to take into consideration in making decisions. In eHealth literacy, there are six supporting components.

First, traditional literacy is essential literacy skills such as reading text, understanding written text, speaking, and writing. Second is, information literacy, meaning a person can seek, obtain, and process the information acquired and transform it into knowledge. Third, media literacy as a means of thinking critically about media content and considering issues such as the market, audience relations, and how the media want to convey messages. Fourth, health literacy, which consists of the characteristics of patients who have adequate health literacy skills. This means being able to read and understand follow-up information services received in order to obtain the expected health outcomes. Fifth is computer literacy, which is the ability to operate a computer or smartphone to solve problems. The last supporting component is scientific literacy, which requires one to put forward findings based on measurable and scientific research (Norman and Skinner, 2006).



**Figure. 5 Choosing a website reliable for health information on the internet, requiring literacy skills such as media literacy, scientific literacy, and health literacy**

OHISB has both benefits and potential dangers. In terms of advantages, OHISB can promote a better understanding of health information, active patient involvement in health care, and a proactive patient response to health challenges. However, OHISB also raises concerns about potential dangers that may occur such as inaccurate, inadequate, or misleading online information. OHISB could spark the idea of starting an ineffective or potentially dangerous self-medication regimen. Self-diagnosis and self-medication can also be triggered by OHISB. One of the things related to this issue is herbal product use (Iverson, Howard, and Penney, 2008). Research in Iran showed that 54.5% of respondents had low digital health literacy scores. These low scores were found in recognizing the quality of health information circulating on the internet and using this information to make decisions (KHademian, Montazer, and Aslani, 2020). Another study revealed that although respondents did not have sufficient knowledge and skills to assess the quality of digital information, more than half of the respondents not only received information but also shared or recommended it to others (Zhang et al., 2021).



**Cara membuat teh daun kelor sendiri**

Membuat teh daun kelor tidaklah sulit. Selain itu, Anda juga bisa menambahkan bahan-bahan lain seperti madu atau lemon untuk menambah rasa sekaligus manfaat minuman ini.

Berikut ini bahan dan cara untuk Anda yang ingin mencoba membuatnya di rumah.

**• Bahan**

- Daun kelor 3-4 batang
- Satu gelas air panas
- Perasan air lemon secukupnya
- Madu secukupnya

**• Cara membuat**

- Ambil 3-4 batang daun kelor, pilih yang sudah tua
- Keringkan daun tersebut secara alami dengan dijemur maupun dengan alat
- Haluskan daun kelor beserta batangnya yang sudah kering dengan blender
- Tuang bubuk daun kelor ke cangkir dan tambahkan air panas
- Tunggu kurang lebih 5 menit hingga berubah warna
- Tambahkan madu dan lemon

Untuk mengeringkan daun kelor, Anda dapat menggantungnya di tempat tertutup yang kering dan sejuk. Penjemuran biasanya akan memakan waktu 10-14 hari, sehingga jika ingin membuat teh daun kelor, sebaiknya lakukan dengan kuantitas banyak sekaligus.

Daun kelor kering yang tersisa dari pembuatan teh bisa disimpan di dalam wadah kedap udara yang kering dan tinggal diambil saat Anda ingin membuat olahan lainnya.

**Figure 6. Various information including alternative processing of herbal medicines, such as Moringa leaf tea in the Internet**



**Figure 7. Moringa leaf tea processing method found in the internet**

## Consent

The participants have given us consent to use their photos in this study.

## Conflict of Interest

None

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**Cite this article as:**

Putri FRW, Dewi IK. Online Health Information-Seeking Behaviour: Trends, Influencing Factors, eHealth Literacy Skills, Benefits, and Potential Harms. *GHMJ (Global Health Management Journal)*. 2022; 5(1):10-15. [doi:10.35898/ghmj-51592](https://doi.org/10.35898/ghmj-51592)