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Systematic Review

COVID-19 and Health Information-Seeking Behavior: A Scoping Review

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Abstract

Introduction: Access to timely, accurate, and appropriate health information during outbreaks such as COVID-19 can reduce the spread of the disease. For this purpose, the present review explores individuals' COVID-19-related health information-seeking behavior.

Methods: The present study is a scoping review, in which the data were collected by seeking the WoS, PubMed, and Scopus databases up to January 1, 2022. Inclusion criteria included papers in the English language in line with the study's objective.

Results: The results of the study showed that the most important objectives of COVID-19-related health information seeking are categorized according to the symptoms and causes of the disease, disease control and prevention methods, treatment, economic and social issues, and pandemic-related news and information, as well as governments' programs. The most important searched resources are also categorized into "mass media", "social media", "internet", "official and government website", and "friends and relatives".

Conclusion: During the COVID-19 pandemic, people with different objectives seek various resources to acquire information and increase their knowledge about the disease. Given the importance of health information and information acquisition from reliable sources, different social classes must be trained to acquire reliable health information from accurate sources and methods. Accordingly, health institutions and organizations should provide purposive educational programs to improve health information literacy among different social classes.

Keywords: Health, Information, Seeking Behavior, COVID-19

Introduction

Several factors such as specific disease epidemics, inadequate knowledge, and limited time spent by health care practitioners can motivate patients to seek health information individually from formal care centers.[3] Health information-seeking behavior is now considered a widespread process of gathering information about health, disease, health promotion, and health-threatening hazards.[1] Health information-seeking behavior covers purposeful activities such as seeking information in specific conditions as well as disease prevention and treatment information to fulfill health information requirements.[4,5] Health information-seeking behaviors include seeking medical and health measures for people at risk of disease or symptoms.[6] In addition, information-seeking behavior can be defined as a set of activities performed by an individual that is mainly aimed at satisfying information needs.[7] The health information needs and contents have also increased globally in the last decade, and this information has often modified health-related behaviors and decisions.[8,9] Updated information on specific diseases and threats and preventive measures play an effective role in minimizing their adverse effects.[10,11] Furthermore, timely access to high-quality health care information during infectious disease outbreaks can effectively help mitigate anxiety and the incidence of the disease as well.[12,13]

According to the literature, people with a specified disease and even their caregivers and companions use sources other than physicians for health information seeking.[14] During the COVID-19 pandemic, people mostly looked for information on preventing and controlling the disease, and the Internet, social media platforms, and online news media were the most important information-seeking sources.[15,16] Rosario et

al.[17] also found that users frequently applied search engines, including Google, Wikipedia, social media, and corporate websites, during the COVID-19 pandemic. Zhao[18] also suggested that quarantine requirements have made it impossible to seek support and assistance from other family members physically. Accordingly, the Internet has been a significant source of seeking COVID-19-related health information in China, where many female users were seeking health-care information for their parents or the elderly at home. "Access to medical treatment," "self-quarantine management," and "online and offline support" are among the most searched information.[18] Li and Zhang[19] also indicated that the COVID-19 information seeking is mostly performed to prevent this disease.

A proper perception of the concepts of information needs and health information-seeking behavior is further required today with the advent and development of new information and communication technologies and also the more complex nature of information in the present era to achieve the right strategies to find and manage appropriate health information in demand by individuals.[20,21] Early diagnosis and treatment without delay are essential for infectious diseases such as COVID-19; otherwise, not only the patient becomes infected, but also the risk of transmission and spread of the disease is also significantly increased.[22] Delay in seeking identified care also leads to increased morbidity, mortality, and adverse health outcomes among patients.[23] In addition, the World Health Organization (WHO) declared that prudent health information-seeking behaviors during the COVID-19 pandemic help reduce anxiety and distress among people.[24] Accordingly, the proper health information-seeking behavior is very important for society. Therefore, this review addressed and described health information-seeking behaviors during the COVID-19 pandemic.

Materials and Methods

This scoping review was conducted using the Arksey and O'Malley[25] framework. Scoping review is one of the popular approaches for identifying, selecting, and analyzing published information and providing an integrated picture of selected literature, in which it is possible to create knowledge based on the collected evidence, but the quality of the articles is not evaluated in detail. In this approach, studies on the selected topic are analyzed in response to predetermined questions.[25,26] The PRISMA diagram is also used to assess and display reviews.[27]

Search Strategy and Selection of Articles

PubMed, Scopus, and Web of Science databases were searched up to January 1, 2022, without a time limit. The search strategy presented in Table 1.

Table 1. Search Strategy in Scientific Databases (Pubmed, Web of science, and Scopus)

PubMed	(Health information[Title] OR Information seeking[Title] OR Information Behavior[Title] OR Information Searching[Title]) AND ("covid19"[All Fields])
Web of science	TITLE: ((Health information) OR (Information seeking) OR (Information Behavior) OR (Information Searching)) AND TOPIC: ((COVID 19) OR (SARS-CoV-2) OR (SARS CoV 2) OR (SARS-CoV-2) OR (2019 Novel Coronavirus) OR (2019-nCoV) OR (2019 nCoV) OR (2019-nCoV) OR (COVID-19 Virus) OR (COVID 19 Virus) OR (Coronavirus Disease 2019) OR (Coronavirus Disease-19) OR (Coronavirus Disease 19) OR (Severe Acute Respiratory Syndrome Coronavirus 2) OR (SARS Coronavirus 2) OR (COVID-19) OR (COVID19))
Scopus	TITLE (health AND information) OR (information AND seeking) OR (information AND behavior) OR (information AND searching) AND TITLE-ABS-KEY ((covid 19) OR (sars-cov-2) OR (sars AND cov 2) OR (sars-cov-2) OR (2019 novel AND coronavirus) OR (2019-ncov) OR (2019 ncov) OR (2019-ncov) OR (covid-19 AND virus) OR (covid 19 virus) OR (coronavirus AND disease 2019) OR (coronavirus AND disease-19) OR (coronavirus AND disease 19) OR (severe AND acute AND respiratory AND syndrome AND coronavirus 2) OR (sars AND coronavirus 2) OR (covid-19) OR (covid19)))

Inclusion and Exclusion Criteria

The inclusion criteria were 1) original research articles, 2) full-text, 3) published, and 4) peer reviewed, 5) which investigated the role of e-health literacy in preventive behaviors for COVID-19. The exclusion criteria were 1) Studies of non-peer reviewed investigations, including conference proceedings with no full text available, theses and dissertations, and unpublished trials, 2) non original articles, including commentaries and editorials, letters to the editor, and 3) studies not reported in English, and 4) no available full versions for any reason. Data were collected using a data extraction form based on the research objectives after selecting the studies according to the inclusion and exclusion criteria.

Results

The characteristics and results of the included articles

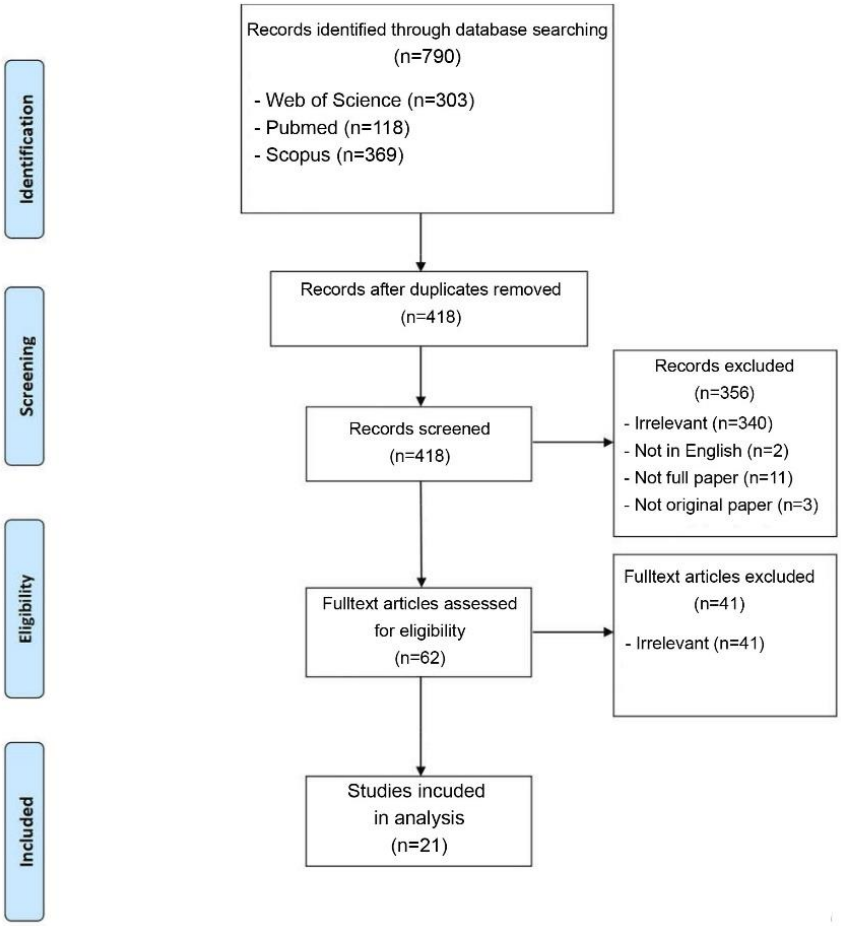

Figure 1. Study Identification Flow Diagram.

in this study are listed in Table 1. According to Table 1, the population of these studies was from Nigeria (3 studies), Iran (3 studies), Ghana, India (2 studies, a joint study with the United States), China, German-speaking countries, Italy, Ethiopia, Sudan, Spain, Germany, Indonesia, Egypt, Greece, Philippines, Slovenia, and Pakistan. The population of these studies also included librarians and information specialists, students (6 studies), school students, health workers and physicians (2 studies), adults (2 studies), people and citizens aged 16-65, 18-80, 18-60, 18-75, 13-61, 17-40, and over 60 years old as well as young people. The sample size also varied from 24 to 3066.

Health Information Sources

Table 1 illustrates that multiple studies have highlighted the dominance of digital platforms as primary sources of health information during the COVID-19 pandemic. Social media platforms, including Facebook, Twitter, and WhatsApp, emerged as widely utilized resources by individuals across various countries. For instance, in Nigeria, Adomi & Oyovwe-Tinuoye (2021) and Omosekejimi et al. (2021) emphasized the extensive use of social media by the population.[28,38] Similarly, in India, Chauhan et al. (2021), and in Iran, Jalilian et al. (2021), underscored the role of social media as a key source for health information-seeking.[30,34]

Online news websites also served as frequent sources of information, as confirmed by studies conducted in China,[31] Austria,[32] and Italy.[33]

Traditional media, including television and radio, remained significant sources of information, particularly in countries with limited internet access or among older populations. This importance was noted in studies from USA and India,[35] Spain,[37] and Nigeria.[39] Additionally, search engines like Google were widely used for retrieving general information.[47,48] In addition to digital platforms, interpersonal sources also played a crucial role in users' information-seeking behaviors. Friends, family, and healthcare workers were consulted, especially in communities with limited digital literacy

Table 1. Characteristics and Results of the Included Studies

Authors	Country	Samole Size	Sources used for health searching and Purposes of Health information seeking about COVID-19
Adomi and Oyovwe-Tinuoye, 2021[28]	Nigeria	167 library and information science professionals	**Purposes:** Alternative herbal or traditional Treatments(4.05) (mean)), cures or treatments(4.05), preventive measures(4.05), symptoms(4.02), Causes of the virus(4.01), preventive and safety devices(4.01), Users' safety (3.98), Staff safety (3.98), How to provide library services to users(3.97), transmition(3.94), intervention measures or Initiatives(3.85), Drugs or vaccines for treatment(3.83), Government policies, measures and pronouncements(3.81), Age group most vulnerable (3.76), When the library will open physically to users(3.69), Movement restrictions or curfews(3.68), test procedures(3.62), Palliatives(3.50), Isolation procedures for patients(3.50) **Sources:** Internet (4.38 (mean)), Social media (4.37), Television (4.26), Radio (3.85), Nigeria Centre for Disease Control Website (3.80), World Health Organization website (3.68), Friends, colleagues, family members, Neighbors (3.58), Magazines (3.57), Government health workers (3.55), Journals (3.44)
Ankamah and et al., 2021 [29]	Ghana	128 Library users	**Purposes:** understanding of the causes, severity, and prognosis(67%), general information on healthy lifestyle (46.6%), search for medical information for academic purposes (44.3%), find information on disease, treatment and drugs/medication (42%), risk of getting a particular disease (25%), understanding about my illness (2.3%) **Sources:** Internet (75%), Medical databases (46.6%), Social media (37.5%), Radio/TV, Family/Friends (15.9%), Library (12.5%)
Chauhan et al., 2021 [30]	India	159 ordinary people aged between 16 and 65	**Purposes:** Signs and symptoms(100%), Causes and treatments(100%), the standard advice(93.71%), Prevention and control(93.08%), seeking treatment of suspected patients(89.31%), Information about the proper procedure for washing hand and using sanitizer(89.31%), infected cases (87.42%), medicines and vaccination(86.16%), hot-spot areas in the country(83.02%), The updated list of coronavirus affected cities(80.50%), protection products and their availability(77.99%), vulnerable groups and the level of risk(73.58%), Controversies about the political agenda of coronavirus outbreak (72.33%), Government plan for preventing (70.44%), number of fatalities and recoveries (64.78%) **Sources:** Social Media (WhatsApp, Facebook, Instagram, YouTube, Twitter, Telegram, LinkedIn (21%), Dedicated websites of Corona Virus (20.01%) Family Members/Friends/Colleagues (13.08%), Medical Staff (13.2%), News websites (11.3%)
Chen et al., 2021 [31]	China	1902 residents aged between 18 and 80 in the urban and rural areas	**Sources:** WeChat (61.17%), TV/radio/newspapers (61.15%), News websites/Apps (60.25%), Weibo (39.17%), Short video Apps (36.90%), Community radio/high-pitched speakers (25.20%), Friends and relatives (22.98%), QQ (22.35%), Knowledge sharing websites (16.24%)
Dreisiebner et al. 2021 [32]	German-speaking countries	308 people aged between 18 and 60	**Purposes:** general situation (95.78%), economic and social aspects (80.19%), movement and travel restrictions (69.81%), avoiding infection (59.09%), concern for the health of close relatives belonging (50.65%), personal health concern (39.61%), helping others (15.91%) **Sources:** National newspaper (offline and online (5.13 (mean)), Instagram (5.08), Twitter (4.93), Facebook (4.85), Music streaming, Podcasts (4.68), YouTube (4.42), Physical meetings and Discussions (3.74), International sources (radio, broadcast, newspaper (3.24), Local newspaper (offline and online (3.06), Public organizations (3.02), National newspaper (offline and online (2.51), Online communication with acquaintances and friends (2.16)
Gallegati et al. 2021 [33]	Italy	The 1003 people aged 18 and over 75	**Sources:** online newspapers (61.2%), TV/radio (54.6%), journals or websites of medicine, health, and wellness (50%), social media (e.g., Facebook

			Instagram, you tube, …) (41.7%), Family Doctor/ Other Doctor/ Chemist (32.08%), Friends and relative (27.2%), Blog or forum (11.2%)
Jalilian et al. 2021 [34]	Iran	258 young people	**Purposes:** prevention (43.42%), Managing health (22.49%), symptoms (13.17%), Lifestyle changes (12.01%), Diagnosing a health problem (4.65%), Answering a specific question (3.1%), Health knowledge (1.16%) **Sources:** more frequently used virtual social media, watching TV, and searching the internet as the main resources for accessing information related to COVID-19.
Kalayou et al. 2020 [35]	Ethiopia-Sudan	291 Health Professionals	**Purposes:** Prevention methods (49.8%), case reports (49.5%), transmission (47.1%), death reports (39.9%), diagnosis (38.8%), treatment (34.4%) **Sources:** WHO website (59.5%), Ethiopian Ministry of Health (EMOH) website (47.2%) CDC website (48.5%), Social media (like Facebook and Twitter (25.1%) Religious organizations (18.6%), Newspaper and magazine (15.8%), Family members (14.1%)
Lund and Maurya 2021 [36]	USA and India	60 older adults	**Purposes:** Health-related Information: USA (33.33%) India (76.47%), Daily Life/Functioning: USA (26.66%) India (5.87%), Lockdown Information: USA (0) India (8.8%1), Political and Economic Issues: USA (36.66) India (2.95), Transportation: USA (3.33 %l) India= (6.9%) **Sources:** Social Media: USA (8.33%) India (15%), Websites: USA (30.55%) India (13.33%) Search Engine: USA (16.66%) India (3.33%), Family: USA (13.88%) India (1.66%), Television: USA (5.55%) India (28.33%), Newspaper: USA (25%) India (23.33%), Other People: USA (0) India (8.33%), Radio: USA (0) India (1.66%), Health Worker: USA (0) India (5%)
Moreno et al. 2020 [37]	Spain	1216 adult	**Sources:** Television(86.2%), WhatsApp(77.6%), Online newspapers(75.0%), Radio(42.6%), Webs/Blogs of public institutions(41.9%), Twitter(40.2%), Facebook(36.6%), Instagram(34.9%), Health Webs/Blogs(26.1%), Scientific Webs/Blogs(20.2%), Print newspapers(17.8%), YouTube(16.8%), Magazines(7.4%), Telegram(5.7%), Alternative therapies Webs/Blogs(4.6%)
Omosekejimi and et al., 2021 [38]	Nigeria	864 adults	**Purposes:** symptoms (100%), spread (100%), preventive measures (100%), causes of the virus (100%), medical attention (100%), drug dosage for treatment (70%), drugs combination for self-treatment (61%), quarantine procedures (40%), self-isolation procedure(38%), government regulation (58%) **Sources:** Friends and family at the camp (100%), Social Media e.g Facebook and WhatsApp (84%), Radio (81%), Internet (70%), Health workers i.e., doctors and nurses (51%), WHO and NCDC websites (40%), Television (39%), newspapers (24%)
Oyovwe-Tinuoye and Ademola Ferdinand, 2020 [39]	Nigeria	146 trained and volunteer doctors	**Purposes:** causes of the virus (100%), Symptoms (100%), test procedures (100%), spread/transmission levels (100%), preventive measures (100%), cures (100%), age groups more vulnerable (100%), patients' isolation procedures (100%), drug combination (100%), drug dosage (100%) **Sources:** Internet (100%), World Health Organization (WHO) websites (100%,) Daily newspapers (100%), Nigerian Centre for Diseases Control (NCDC) website (100%), Network News (100%), Social Media (16%), Colleagues in other States (61%), Books from Libraries (0), Libraries, Journals (0), Medical Bulletins (0)
Rayani et al., 2021 [40]	Iran	319 students	**Sources:** Social networks (35%), Internet (30%), National media (25%), International media (17%), Family/ friends (15%), Print media (6%), Health care staff (5%)
Roselina et al., [41]	Indonesia	278 senior high school	**Purposes:** Curiosity (71.1%), Following the updated information (56.5%), transmission (48.6%), School/college assignments (24.9%), Filling the free time (20%) **Sources:** Social Media (78.3%), Online News Website (55.3%), Health Website

			(41.9%), Indonesian Government Website (37.5%), Television (35.6)
Schдfer and et al., 2021 [42]	Germany	3066 students	**Sources (Online Sources):** Online news site (86.6%), Search engine (62.2%), Social media (50.5%), Video platform (e.g. YouTube) (40.4%), Online radio, audio streaming & podcast (32.1%), Website of health organization independent patient or self-health organization (21.8%), Wikipedia and other online encolopedia(17.3%), Health portal (13.2%), Online tv & video streaming (13.1%), Blogs and health and disease (7.7%), Health forums and and communities specialized on health and disease issues (6.7%), Online Pharmacies (4.3%), Comparison portals for searching doctors, hospitals, and nursing home (2.4%), Service communities: (1.7%)
Shehata, 2020 [43]	Egypt	161 students	**Sources:** The Ministry of Health website(4.08 (mean)), Social media (4.08), Online news sites (3.93), Family (3.55), Friends (3.22), Newspapers (2.66), Other sources (2.58) Magazines (2.20)
Skarpa, 2021 [44]	Greek	776 people aged between 13 and over 61	**Sources:** **Information Source** Television (5 (Median)), Electronic press (e.g., electronic newspapers) (5), News websites (e.g., websites with news content) (5), Valid websites (e.g., Ministry of Health, Civil Protection) (4), Internet (e.g., general blogs, personal pages) (4), Facebook (4), Radio (2), Twitter (1), Instagram(1), YouTube(1), Reddit(1), Pinterest(1), WhatsApp(1), Newspapers/ magazines (printed press) (1) **additional information** Family (4), Friends (4), Information scientists (4), Health workers (3), Pharmacist (3) **official information** National Public Health Organization (3), Ministry of Health (3), Civil Protection (3), WHO (3), National Public Health Organization) that I can contact (2), European C.D.C(2), Scientific journals (2), Open electronic, digital Libraries (1), Johns Hopkins University (1), Libraries that offer information on COVID-19(1)
Soleymani et al., 2021 [45]	Iran	24 citizens in Isfahan aged between 17 and over 40	**Purposes:** The nature of the disease, Symptoms, Viral transmission modes, Effective medication and treatments, specific hospitals News on the patients, the recovered and the deceased, Instructions for preparing and using disinfectants **Sources:** Medical staff and specialist physicians, Reputable organizations' websites and phone counselling systems, Social media, Foreign TV channels, National radio and television, Printed and electronic information resources
Superio et al., 2021 [46]	Philippine	228 students	**Sources:** **Primary Source** Mass media (55.3%), Social media (32%), Interpersonal channels (12.7%) **Most Believable Source** Mass media (78.9%), Interpersonal channels (17.1%), Social media (3.9%) **3. Most Believable Interpersonal Channels** Medical personnel (74.1%), Local government unit officers (23.7%), Family members (1.8%), Teachers (0.4%) **4. Most Believable Mass Media Channels** Television (70.2%), Internet (20.2%), Radio (9.6%) **5. Most Believable Social Media Channels** Facebook (41.7%), Twitter (21.5%), Blogs (18.0%), YouTube or Vlogs (16.2%), Instagram (2.6%) **6. Preferred Sources** Television (85.5%), Medical personnel (82.0%), Local government unit (81.6%), Facebook (67.5%), Internet (66.7%), Radio (62.7%), Family members (55.3%), Twitter (35.1%), Friends or classmates (33.3%), YouTube or vlogs (31.1%), Teachers (27.2%), Blogs (25.4%), Instagram (16.2%)
Vrdelja et al., 2021 [47]	Slovenia	3621 students	**Sources:** Search engines (84.8%), websites of public bodies (69.7%), and media portals (66.9%), websites of doctors or health insurance companies (14.2%), online consultation (6%), blogs on health topics (9.4%)
Zakar et al.,	Pakistan	1747 students	**Purposes:**

2021 [48]	Current spread (57.5%), Symptoms (15.1%), Transmission routes (5.9%), Individual measures to protect (5.2%), Economic and social consequences (3.2 %), Current situation assessments and recommendations (2.7%), Dealing with psychological stress (2.2%), Hygiene regulations (1.5%), Restrictions (1.5 %) **Sources:** Search engines (43.8%), social media (39.9%), YouTube (39.7%) and news portals (36.7%), doctors/ pharmaceutical websites (34.6%), health portals (31.1%). national websites (26.5%), Wikipedia and other online encyclopedias (26.1%), and multiple health blogs (29.4%). guidebook communities (35.6%),

or low trust in online sources.[35,36,46]

Purposes of Health Information-Seeking

Based on the data from Table 1, the main purposes of health information-seeking during the pandemic were:

Understanding the Disease

Individuals sought information about the causes, symptoms, transmission routes, and preventive measures for COVID-19. This objective was highlighted in studies from Nigeria,[28,38,39] Ghana,[29] India.[30]

Health Management

Seeking information about treatment options, medications, and personal care was another primary objective for users. This was examined in studies from Ghana,[29] Iran,[34] and Ethiopia.[35]

Addressing Concerns about Personal and Community Health

Individuals looked for information regarding the impact of COVID-19 on their daily lives, including economic and social implications, as well as the health of their loved ones. This was the focus of studies from Austria,[32] Nepal,[36] and Pakistan.[48]

Awareness of Government Policies and Guidelines

Users sought updates on government-imposed restrictions, quarantine procedures, and health recommendations. This objective was reported in studies from Nigeria.[28,38,39]

Discussion

This review aimed to investigate people's health information-seeking behaviors during the COVID-19 pandemic. For this purpose, 21 studies were selected, in which the objectives of health information seeking and sources for that information during the COVID-19 pandemic were reviewed. The results of this study show that people during the pandemic are more likely to seek information about COVID-19 to find out the causes and symptoms of the disease, prevention, and treatment. According to the literature, self-care and treatment[49] and decision-making on dealing with diseases[50] were important objectives in health information seeking. Klankesh et al.[51] also suggested that the most vital information needs the inclusion of disease prevention methods and general health knowledge, while Bento et al.[52] found that the symptoms and treatments of COVID-19, disinfectants, and laboratory tests were among the most important factors searched by Internet users. In addition, Ravetta and Bhagavathula[53] reported that the keywords "Face masks", "amuchina", "symptoms of the novel coronavirus", "health bulletins", and "vaccines for coronavirus" had the most seeking rate during the COVID-19 pandemic. Springer et al.[54] indicated that the most significant interest was on acquiring general knowledge about the disease and its symptoms and prevention, respectively. Badell-Grau et al.[55] found a positive correlation between mortality caused by COVID-19 and users' online searching. It means that the peak of online searches coincided with the increase in deaths caused by COVID-19 in March 2020. However, studies in this regard indicate that a high searching rate on the disease was more due to advertisements and its widespread publication in the media than the burden of the disease itself.[56,57] Moreover, the online information-seeking about COVID-19 has decreased over time due to the increased dissemination of information from various print, electronic, and social media, resulting in users' fatigue and information apathy.[57] Access to information on a health issue significantly affects an individual's level of knowledge,[58] which significantly affects an individual's protective measures.[59]

According to the results of this study, mass media, the Internet, and social media were the most important sources of information referred to by people. Mass

media are known as the main source of information and are considered the most reliable source because they are more reliable and can provide timely information.[60] According to the literature, television is particularly the most preferred source of COVID-19 information among other sources because it is the most extensively applied and trusted way.[46]

Atarodi et al.[61] found that individuals use mass media and social networks to obtain information about COVID-19, both of which have a significant role in altering individuals' self-care behavior.[61] Another study during the COVID-19 pandemic revealed that the media, such as newspapers and television, were the mainstream of communication and information exchange and were the most widely used sources of information among participants.[62]

The Internet was another source of health information during the COVID-19 pandemic, with millions of Internet searches for COVID-19 worldwide.[53] People access COVID-19 information easily through the Internet, particularly those who stay indoors due to the pandemic. In this regard, the official websites of health agencies provide the highest quality online information about COVID-19 and how to prevent it for all people.[63] However, unknown and unreliable websites can spread false information about the disease.

Social media and networks have also been among the most important sources of health information for COVID-19, in which studies found that individual activities in social networks have increased with the outbreak of the COVID-19 crisis. Twitter, Facebook, YouTube, and Instagram, are among the most important networks used among users.[64,65] Gao et al.[66] found that providing services and information through online social networks in health care was helpful in providing distance health services to prevent the spread of the disease. Other studies showed that using social media also helps provide safer information and health services to patients with COVID-19 and to be aware of existing procedures and conditions.[67] Social media are used to disseminate information during the COVID-19 crisis, leading to changes in individuals' behavior in society.[68]

Although there are many advantages in using social media to obtain health information, the problem of disseminating incorrect information during COVID-19 disease was a major concern among users.[68-70] Incorrect medical information, unreliable content, and sometimes even misinformation as evidence-based information about the global COVID-19 pandemic are spreading on social media with alarming speed, leading to incorrect information on home treatment.[71,72]

Farooq et al.[73] also suggested that the application of social media as a source of information for COVID-19 results in information overload,[73] which does not allow accurate understanding of the current situation and leads to uncertainty.[74]

Conclusion

Information-seeking behavior in crisis situations is influenced by various factors, through which people with different purposes utilize different sources to acquire health information. Since easy access to online information resources on the Internet and social media to obtain health information has become increasingly common among people during the COVID-19 pandemic, a variety of individuals and users, including citizens, professionals, students, and patients, regularly use these resources to seek information and make health decisions. Information acquisition has a significant impact on people's self-care and prevention behaviors. Moreover, due to the importance of health information and information acquisition from reliable sources, it is required for all people to receive the needed training in obtaining valid health information from accurate sources and methods. Accordingly, health institutions and organizations should provide purposeful educational programs to promote health information literacy to all different individuals in society.

Conflict of Interest

The authors declare no conflicts of interest.

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