



A Multidimensional Analysis of Digital Health Literacy and Preventive Health Behavior in Post-Pandemic Communities

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ABSTRACT

The accelerated development of digital technologies has significantly changed how people obtain, assess, interpret, and apply health-related information. Consequently, digital health literacy has become an increasingly important capability in post-pandemic societies. This study examines the multidimensional association between digital health literacy and preventive health practices within post-pandemic communities, while also identifying the primary factors that shape this relationship. A Systematic Literature Review was conducted in accordance with the PRISMA 2020 framework. Relevant publications issued between 2020 and 2025 were retrieved from Scopus, Web of Science, PubMed, ScienceDirect, and Google Scholar. Of the 247 records initially identified, 10 empirical studies fulfilled the eligibility requirements and were included in the qualitative synthesis. The review indicates that digital health literacy encompasses several interrelated competencies, including the ability to access health information, understand digital content, critically assess its credibility, communicate health-related knowledge, and apply reliable information when making health decisions. Across the reviewed studies, individuals with stronger digital health literacy generally demonstrated greater engagement in preventive health practices, including actively seeking health information, receiving vaccinations, participating in health screenings, and complying with public health guidance. Nevertheless, unequal access to digital resources and differences in age, educational attainment, socioeconomic conditions, and technological skills remain major barriers to meaningful engagement with digital health information. These findings highlight the importance of strengthening digital health literacy through inclusive and accessible interventions to foster healthier, more resilient, and digitally empowered communities

INTRODUCTION

Digital innovation has substantially reshaped how people obtain, interpret, and apply health-related knowledge. Since the COVID-19 pandemic, communities have become increasingly dependent on websites, social networks, mobile health applications, and telemedicine platforms for health guidance and access to healthcare services. This growing reliance on digital resources has made digital health literacy an essential capability for navigating contemporary healthcare environments. It enables individuals not only to locate relevant information but also to judge its quality and use it appropriately when making health-related decisions (Norman & Skinner, 2006; Ban et al., 2024; Yuen et al., 2024). Therefore, digital health literacy should not be understood merely as proficiency in operating digital devices. It also involves analytical competencies that allow users to determine whether online health content is credible, accurate, and applicable to their personal circumstances (Ban et al., 2024; Collet et al., 2024).

The importance of these competencies became particularly evident during the COVID-19 crisis. Digital media served as a major channel for disseminating information about infection prevention, vaccination, disease control, and remotely delivered healthcare. At the same time, users were confronted with an unprecedented volume of conflicting, incomplete, and sometimes misleading content. The World Health Organization described this phenomenon as an “infodemic,” emphasizing that the availability of information does not necessarily lead to informed decisions when users lack the capacity to verify its accuracy and relevance (World Health Organization, 2021; Ban et al., 2024). People with inadequate digital health literacy may consequently face greater difficulty distinguishing evidence-based recommendations from misinformation. This limitation can reduce their willingness or ability to participate in appropriate preventive health practices (Ban et al., 2024; Wiener & Abuhalmeh, 2025).

Preventive behavior is a central component of efforts to reduce disease burden and maintain population health. It encompasses a broad range of actions, including adopting healthy dietary habits, exercising regularly, receiving recommended vaccinations, participating in routine screenings, using preventive healthcare services, and following scientifically supported health advice (Glanz et al., 2015; Nutbeam, 2008). Evidence from previous research suggests that people who possess stronger digital health literacy tend to search for health information more actively, demonstrate greater confidence in health decision-making, and show higher levels of participation in disease-prevention activities. In contrast, individuals with weaker digital competencies may experience greater uncertainty when interpreting health messages or deciding how to respond to them (Ji et al., 2024; Collet et al., 2024; Yuen et al., 2024). Digital health literacy may therefore function as an important pathway through which access to online information is translated into beneficial health action.

However, opportunities to develop and exercise digital health literacy are not distributed evenly. Differences in age, formal education, financial resources, technological access, and previous experience with digital tools shape individuals' ability to engage with online health environments. These inequalities contribute to the digital divide, in which certain population groups benefit more readily from digital healthcare developments than others (Paige et al., 2023; Yuen et al., 2024). People who have limited access to technology or insufficient digital skills may struggle to locate trustworthy information, communicate with healthcare providers through online systems, or use telehealth and other technology-supported services effectively (Paige et al., 2023; Ji et al., 2024). As health systems continue to adopt digital modes of service delivery, these differences may reinforce existing social and health inequalities.

A broader investigation of digital health literacy is therefore needed, particularly in relation to preventive behavior in communities adjusting to post-pandemic conditions. Digital health literacy comprises several interrelated capacities, such as locating information, understanding health messages, assessing source credibility, communicating through digital channels, and applying acquired knowledge in everyday life. These dimensions may not contribute equally to preventive action. Identifying the competencies with the greatest behavioral influence is important for the design of interventions that are both effective and responsive to the needs of diverse populations. Improving digital health literacy may also support wider public health objectives by reducing unequal access to reliable information and increasing communities' preparedness for future health emergencies (Ban et al., 2024; Wiener & Abuhlimeh, 2025).

Existing evidence generally indicates that digital health literacy is associated with beneficial health outcomes, although the focus and context of individual studies vary. Among rural communities in China, Ji et al. (2024) observed that both digital literacy and health literacy contributed to healthier patterns of digital health engagement. Collet et al. (2024) found that individuals with stronger eHealth literacy were better equipped to assess internet-based health content and convert relevant information into health-supporting practices. A rapid review by Yuen et al. (2024) similarly identified associations between digital health literacy, healthcare resource use, and favorable health outcomes. In Indonesia, Algifari et al. (2024) reported that demographic conditions and access to technology shaped differences in digital health literacy. Although these findings provide valuable insights, much of the available literature examines individual outcomes or isolated associations. A more integrated analysis of how multiple digital health literacy dimensions interact with preventive behavior in post-pandemic communities remains underdeveloped.

Accordingly, this study examines the relationship between digital health literacy and preventive health behavior from a multidimensional perspective. It seeks to determine which digital health literacy competencies are most relevant to preventive action, identify the social and technological conditions that strengthen or weaken this relationship, and formulate conceptual directions for inclusive and sustainable digital health interventions. By synthesizing evidence

across different populations and settings, the study is expected to support the development of public health strategies that improve preventive engagement, reduce digital inequalities, and strengthen communities' capacity to make informed health decisions.

LITERATURE REVIEW

Digital Health Literacy

Digital health literacy can be understood as the capacity to locate, interpret, critically assess, and use health-related information delivered through digital media. According to Norman and Skinner (2006), eHealth literacy is formed through the integration of several competencies, including basic literacy, health literacy, information literacy, media literacy, computer literacy, and scientific literacy. These competencies have become increasingly relevant in the post-pandemic period, as individuals now depend more heavily on websites, social networking platforms, mobile health applications, and telemedicine services to obtain health guidance and access healthcare resources.

This concept extends beyond the ability to operate digital devices or navigate online platforms. It also requires individuals to determine whether digital health content is reliable, relevant to their needs, and supported by credible evidence. Ban et al. (2024) describe digital health literacy as a multidimensional capability involving the search for health information, comprehension of digital content, critical appraisal of information sources, communication of health-related knowledge, and application of reliable information in everyday decision-making. Thus, strong digital health literacy enables individuals to navigate complex online health environments more effectively and make health choices based on accurate and trustworthy information.

Preventive Health Behavior

Preventive health behavior refers to actions taken by individuals to prevent disease and maintain health. These behaviors include seeking reliable health information, receiving vaccinations, participating in routine health screening, following public health recommendations, maintaining a healthy lifestyle, and using preventive healthcare services. Glanz et al. (2015) explain that health behavior is influenced by knowledge, perceived risk, perceived benefits, and access to health resources.

In the post-pandemic context, preventive health behavior has become more closely connected to digital information. People often use digital platforms to learn about disease prevention, vaccination programs, healthy lifestyles, and healthcare services. Nutbeam (2008) emphasizes that health literacy helps individuals understand health information and use it to improve their health. Therefore, individuals with better digital health literacy tend to be more prepared to engage in preventive health behavior.

Dimensions of Digital Health Literacy

Digital health literacy encompasses a range of interconnected competencies rather than a single technical skill. These competencies include locating relevant health information, interpreting content presented through digital media, judging the credibility of online sources, exchanging health-related information, and incorporating reliable knowledge into everyday health

practices. Ban et al. (2024) argue that each of these dimensions is necessary for individuals to engage effectively and responsibly with digital health systems.

Evidence presented by Collet et al. (2024) further indicates that individuals with stronger digital health literacy are better able to critically examine online health information and convert credible findings into health-promoting actions. Accordingly, digital health literacy serves a broader function than simply facilitating access to information. It enables users to distinguish relevant and evidence-based content from unreliable or misleading material. Through this evaluative and practical process, digital health literacy contributes to more informed, appropriate, and effective health-related decision-making.

Relationship Between Digital Health Literacy and Preventive Health Behavior

Existing research generally indicates that digital health literacy is positively associated with engagement in preventive health practices. Ji et al. (2024), for example, reported that both digital literacy and health literacy significantly shaped digital health behavior among rural communities in China. Individuals with stronger competencies in these areas were more inclined to search for relevant health information, recognize potential health risks, and comply with recommended preventive measures.

Comparable findings were reported by Nguyen et al. (2023), who identified digital health literacy as a positive predictor of preventive behavior and confidence in health information obtained online among adults in Southeast Asia. Collet et al. (2024) likewise observed that people with higher digital health literacy were better able to use online health information as a basis for adopting healthier practices. Taken together, these studies suggest that digital health literacy functions not merely as a means of accessing information, but also as a mechanism that enables individuals to interpret digital content and translate credible health knowledge into concrete preventive action.

Determinants of Digital Health Literacy

Digital health literacy is influenced by several demographic and socioeconomic factors. Paige et al. (2023) identified age, education, socioeconomic status, and digital access as important determinants of digital health literacy. People with higher education and better access to digital technology usually have stronger digital health literacy skills. Meanwhile, older adults and disadvantaged groups often face more difficulties in accessing and evaluating digital health information.

In Indonesia, Algifari et al. (2024) found that digital health literacy levels vary based on demographic characteristics and access to digital technology. This shows that digital health literacy is not evenly distributed in society. Limited access to technology, low educational background, and lack of digital experience may reduce an individual's ability to use digital health information effectively.

Digital Divide and Health Inequality

The digital divide remains a major issue in digital health literacy. The digital divide refers to unequal access to digital technology and unequal ability to use digital resources. Paige et al. (2023) explain that differences in age, education, income, and technology access can affect people's ability to benefit from digital health services. This condition may widen existing health inequalities.

People with limited digital health literacy may struggle to find reliable health information, use telemedicine services, or understand public health messages. As a result, they may be less likely to engage in preventive health behavior. Therefore, improving digital health literacy is important not only for individual health but also for reducing health disparities in post-pandemic communities.

Misinformation and Digital Health Engagement

Misinformation is one of the main challenges in digital health environments. During the COVID-19 pandemic, the public was exposed to a large amount of health information from many digital sources. World Health Organization (2021) describes this condition as an infodemic, where excessive information, including false or misleading information, makes it difficult for people to find accurate guidance.

Bittlingmayer et al. (2022) found that limited digital health literacy increases vulnerability to misinformation. Individuals with low digital health literacy may find it difficult to identify credible sources and may be more likely to believe inaccurate health claims. This can negatively affect preventive health behavior, such as vaccine acceptance, adherence to health protocols, and trust in healthcare recommendations.

Synthesis of Literature

Based on the reviewed literature, digital health literacy is a key factor that supports preventive health behavior in post-pandemic communities. It includes the ability to access, understand, evaluate, communicate, and apply digital health information. Higher digital health literacy helps individuals identify reliable information, avoid misinformation, make informed decisions, and engage in preventive health practices.

However, digital health literacy is influenced by social and demographic factors, including age, education, socioeconomic status, and access to digital technology. These factors may create disparities in digital health engagement and preventive behavior. Therefore, strengthening digital health literacy through education, community-based programs, and equitable access to digital health resources is essential for improving public health outcomes in the post-pandemic era.

METHODOLOGY

This study used a Systematic Literature Review (SLR) to synthesize empirical evidence concerning the association between digital health literacy and preventive health behavior in post-pandemic communities. To promote methodological transparency and enable replication, the review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2020 statement (PRISMA 2020) (Page et al., 2021). The study-selection procedure comprised four sequential phases: record identification, initial screening, full-text eligibility assessment, and final inclusion.

During the identification phase, relevant publications were retrieved from Scopus, Web of Science, PubMed, ScienceDirect, and Google Scholar. The search strategy combined terms related to the main concepts of the review, including "digital health literacy," "eHealth literacy," "health literacy," "preventive health behavior," "health promotion," "COVID-19," and "post-pandemic." Searches were restricted to studies published between 2020 and 2025. This process initially identified 247 records.

The retrieved references were subsequently examined for duplication using reference-management software, followed by manual checking. After 39 duplicate records were removed, 208 unique publications remained. Their titles and abstracts were then evaluated to determine their relevance to the objectives of the review. Studies were excluded at this stage when they primarily addressed clinical treatment outcomes, the development of medical technologies without a behavioral component, or general digital literacy outside the health context. A total of 150 records were excluded during title and abstract screening, leaving 58 articles for full-text assessment.

In the eligibility phase, the complete texts of the remaining publications were evaluated using predetermined selection criteria. Studies were considered eligible when they: (1) reported peer-reviewed empirical research; (2) were written in English; (3) examined digital health literacy and preventive health behavior, either directly or through related outcomes; (4) presented adequate information regarding their research methods; and (5) were available in full-text form. Review articles, editorials, commentaries, conference proceedings, book chapters, conceptual publications, and studies without findings relevant to the review topic were excluded.

Following the full-text assessment, 48 articles were removed because they did not sufficiently address the research question, provided inadequate methodological information, or failed to satisfy one or more eligibility requirements. The final sample consisted of 10 empirical studies that met all selection criteria and were included in the qualitative synthesis. These studies covered different geographical contexts, population groups, and methodological designs, allowing the relationship between digital health literacy and preventive health behavior to be examined from a broader perspective.

Data from the selected studies were analyzed using thematic analysis based on the procedures outlined by Braun and Clarke (2022). Relevant information was systematically extracted, coded, compared, and organized into recurring thematic categories. Particular attention was given to the dimensions

of digital health literacy, the factors associated with preventive behavior, the barriers and enabling conditions affecting engagement with digital health resources, and the broader public health implications of digital health literacy in post-pandemic settings. The resulting themes were integrated through narrative synthesis. This approach enabled the findings from studies with different populations and research designs to be compared while also highlighting consistent patterns, contextual variations, and gaps in the existing literature.

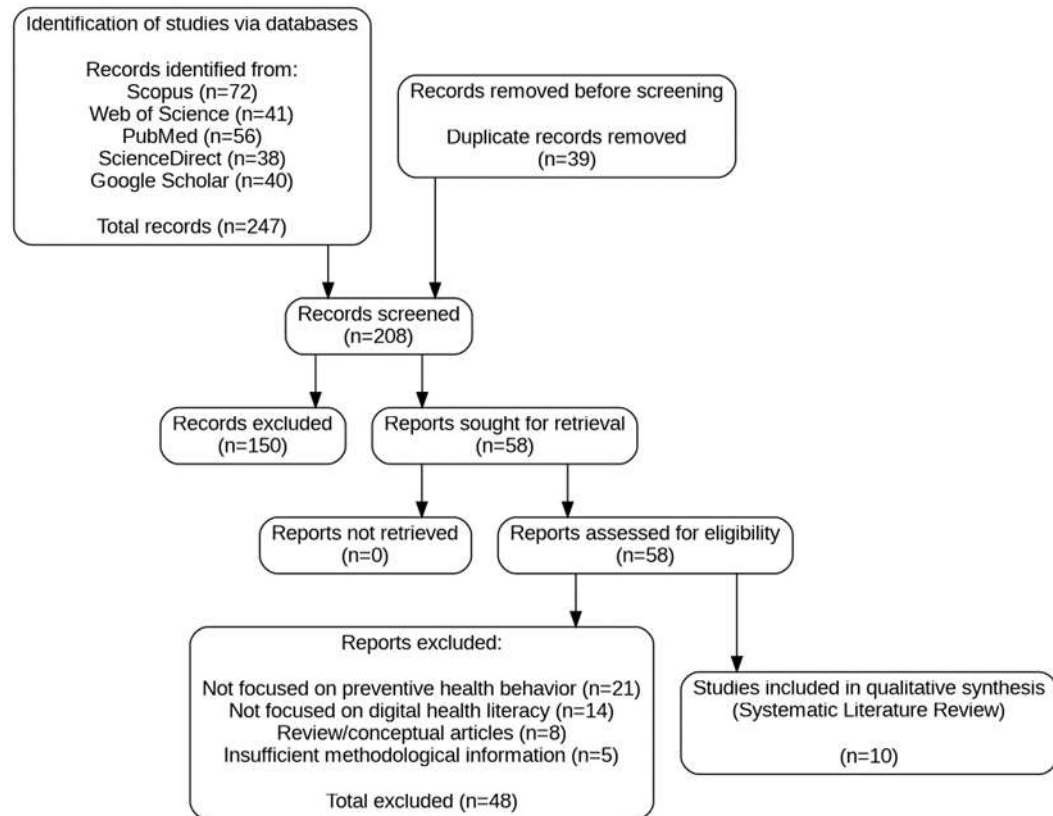


Figure 1. PRISMA 2020 Flow Diagram

RESULTS

Following the PRISMA 2020 screening process, a total of 10 empirical studies met the inclusion criteria and were included in the final qualitative synthesis. The selected studies were published between 2021 and 2025 and originated from various geographical contexts, including Asia, Europe, North America, and developing countries. Overall, the studies consistently highlighted the significant role of digital health literacy in shaping preventive health behaviors, health information-seeking practices, utilization of digital health services, and health-related decision-making in post-pandemic settings.

Table 1. Summary of Studies Included in the Systematic Literature Review

No.	Author(s) & Year	Country/Context	Study Design	Main Findings
1	Ban et al. (2024)	South Korea	Concept Analysis	Digital health literacy comprises multiple dimensions, including information access, evaluation, communication, and application.
2	Ji et al. (2024)	China	Cross-sectional	Higher digital health literacy significantly improves digital health behavior and preventive practices among rural residents.
3	Collet et al. (2024)	Brazil	Cross-sectional	Individuals with stronger digital health literacy are better equipped to critically assess online health content and translate reliable information into health-promoting practices.
4	Yuen et al. (2024)	Multiple Countries	Rapid Review	Digital health literacy is positively associated with healthcare utilization and improved health outcomes.
5	Paige et al. (2023)	Multiple Countries	Systematic Review & Meta-analysis	Age, education, and socioeconomic status are key determinants of digital health literacy.
6	Algifari et al. (2024)	Indonesia	Cross-sectional	Digital health literacy levels vary according to demographic characteristics and access to digital technology.
7	Dadaczynski et al. (2021)	Germany	Survey Study	Digital health literacy significantly influences compliance with preventive health measures during and after the pandemic.
8	Bittlingmayer et al. (2022)	Europe	Cross-sectional	Limited digital health literacy increases vulnerability to misinformation and unhealthy behaviors.
9	Nguyen et al. (2023)	Vietnam	Cross-sectional	Digital health literacy positively predicts preventive health behavior

				and trust in online health information.
10	Wiener & Abuhlimeh (2025)	Multiple Countries	Systematic Review	Digital health literacy is a crucial predictor of long-term health engagement and preventive healthcare utilization.

The thematic analysis identified four major themes across the selected studies: (1) dimensions of digital health literacy, (2) determinants of digital health literacy, (3) the relationship between digital health literacy and preventive health behavior, and (4) barriers and challenges in digital health engagement.

1. Theme 1: Dimensions of Digital Health Literacy

Several studies emphasized that digital health literacy is a multidimensional construct encompassing the ability to search, access, understand, evaluate, and apply digital health information effectively (Ban et al., 2024; Collet et al., 2024). Beyond technical competencies, individuals require critical appraisal skills to distinguish credible information from misinformation in digital environments.

2. Theme 2: Determinants of Digital Health Literacy

The reviewed studies consistently identified demographic and socioeconomic factors as important determinants of digital health literacy. Age, educational attainment, income level, digital access, and previous technological experience significantly influence individuals' ability to engage with digital health resources (Paige et al., 2023; Algifari et al., 2024). Older adults and socially disadvantaged populations generally exhibited lower levels of digital health literacy.

3. Theme 3: Digital Health Literacy and Preventive Health Behavior

The strongest and most consistent finding across the reviewed literature was the positive relationship between digital health literacy and preventive health behavior. Studies conducted in China, Brazil, Vietnam, and Germany demonstrated that individuals with higher digital health literacy were more likely to adopt preventive measures, seek reliable health information, participate in health screenings, engage in vaccination programs, and maintain healthy lifestyles (Ji et al., 2024; Collet et al., 2024; Nguyen et al., 2023; Dadaczynski et al., 2021).

4. Theme 4: Barriers and Challenges

Several studies reported persistent barriers that hinder the effective use of digital health information. These barriers include unequal access to digital technologies, low educational attainment, limited digital skills, and exposure to misinformation (Bittlingmayer et al., 2022; Paige et al., 2023). Such challenges contribute to disparities in health outcomes and reduce the effectiveness of digital health interventions.

The findings indicate that digital health literacy has become a fundamental determinant of preventive health behavior in post-pandemic communities. Across diverse settings and populations, individuals with higher levels of digital health literacy demonstrated greater capacity to access

trustworthy health information, evaluate its credibility, and translate knowledge into preventive actions. The review also reveals that digital health literacy is not merely a technological skill but a multidimensional competency that integrates information-seeking, critical evaluation, communication, and application abilities.

Furthermore, the results highlight the existence of substantial disparities in digital health literacy across demographic and socioeconomic groups. These inequalities may contribute to unequal health outcomes and limit the effectiveness of digital public health initiatives. Therefore, future health promotion strategies should focus not only on expanding digital health services but also on strengthening digital health literacy through targeted education, inclusive digital policies, and equitable access to health technologies. Overall, the evidence suggests that enhancing digital health literacy can serve as a strategic pathway for improving preventive health behavior and strengthening public health resilience in the post-pandemic era.

DISCUSSION

The synthesis of the ten selected studies indicates that digital health literacy plays an important role in shaping preventive health practices in post-pandemic communities. Participants with stronger digital health literacy were generally more active in searching for health information, accepting recommended vaccinations, following public health guidance, and using digitally delivered healthcare services. These patterns suggest that digital health literacy should not be viewed solely as the ability to operate technology. It also functions as a practical resource that helps individuals interpret health messages, assess available options, and make appropriate decisions within increasingly complex digital healthcare environments.

A central insight from the review is that digital health literacy comprises several related but distinct capabilities. Effective engagement with digital health information requires more than simply gaining access to websites or applications. Individuals must also be able to comprehend the information presented, evaluate the credibility of its source, communicate health-related knowledge, and use relevant evidence in everyday situations. This interpretation is consistent with the eHealth Literacy Model developed by Norman and Skinner (2006), which integrates traditional, health, information, media, computer, and scientific literacy. These interconnected competencies have become particularly important since the pandemic because health information is now distributed rapidly through numerous digital channels, often with considerable variation in quality and reliability.

The findings further show that digital health literacy is strongly shaped by social and demographic circumstances. Educational background, age, income, and access to appropriate technology were repeatedly identified as influential factors. Individuals with higher levels of education and stable access to digital devices and internet services were typically better prepared to navigate online health resources and participate in preventive activities. In contrast, older adults and people from economically disadvantaged backgrounds often experienced

difficulties in locating, understanding, or using digital health information. Such differences reflect the continuing digital divide and demonstrate how unequal technological opportunities may reinforce existing disparities in health knowledge and service use (Paige et al., 2023).

The association between digital health literacy and preventive behavior may also be interpreted through the Health Belief Model. According to this framework, health actions are influenced by how people perceive their susceptibility to illness, the seriousness of potential consequences, the expected benefits of preventive measures, and the barriers that may prevent action (Rosenstock et al., 1988). Digital health literacy can strengthen this decision-making process by helping individuals interpret risk information and compare the advantages of different preventive options. People who are able to evaluate digital health content critically may therefore be more likely to recognize credible recommendations and incorporate them into their behavior.

Another recurring concern is the widespread circulation of inaccurate and misleading health content. Social media platforms and other online environments enable information to spread quickly, but they do not always provide sufficient mechanisms for users to distinguish reliable evidence from unsupported claims. Individuals with limited digital health literacy may be especially vulnerable to such content, which can weaken confidence in healthcare institutions, reduce compliance with public health advice, and discourage participation in preventive programs. Strengthening digital health literacy may therefore serve two complementary purposes: improving access to useful information and increasing resistance to misinformation.

These findings have several implications for public health practice. Digital health literacy initiatives should be incorporated into health-promotion strategies rather than treated as separate technological programs. Possible approaches include community-based digital education, guidance on evaluating online sources, practical training in the use of telemedicine and mobile health services, and the inclusion of digital health competencies in formal education. Programs should be tailored to the needs of groups that face greater barriers, particularly older adults, residents of rural areas, people with limited education, and households with restricted access to technology.

This review expands the current understanding of the topic by bringing together evidence from different populations, countries, and socioeconomic conditions. Many previous studies have examined digital health literacy in relation to a single health outcome or a particular population group. In contrast, the present review considers the combined contribution of access, comprehension, critical evaluation, communication, technological ability, and practical application. This broader perspective helps clarify how digital health literacy may influence preventive behavior through multiple pathways rather than through information access alone.

Several limitations should be considered when interpreting the findings. The review was restricted to English-language studies published between 2020 and 2025, meaning that relevant evidence from other languages or publication periods may not have been captured. In addition, most of the included studies

used cross-sectional designs. Although these studies identified associations between digital health literacy and preventive behavior, they could not establish whether stronger literacy directly caused behavioral improvement. Differences in research instruments, study populations, and definitions of digital health literacy also limited the direct comparison of findings across studies.

Future investigations should use longitudinal designs to assess how changes in digital health literacy affect preventive practices over time. Mixed-method research would also be valuable because quantitative data could identify general patterns, while qualitative evidence could explain how personal experiences, cultural expectations, and local technological conditions influence digital health engagement. Greater consistency in measurement tools would further improve comparability across settings and populations.

The evidence suggests that digital health literacy is an important contributor to preventive health behavior in societies adapting to post-pandemic conditions. Individuals who can locate, understand, assess, and apply digital health information are better positioned to make informed decisions, respond appropriately to health risks, and participate in preventive services. At the same time, the benefits of digital health systems cannot be fully realized while substantial inequalities in access, education, and technological capability remain. Improving digital health literacy should therefore become an integral part of public health planning and digital healthcare transformation. Policies that combine reliable technological access with education in information evaluation and practical digital skills may reduce vulnerability to misinformation and support healthier behavior. Such efforts can contribute to communities that are not only more digitally connected, but also more capable of responding to future public health challenges in an informed and resilient manner.

CONCLUSIONS AND RECOMMENDATIONS

This study demonstrates that digital health literacy is a crucial determinant of preventive health behavior in post-pandemic communities. The findings indicate that individuals with higher levels of digital health literacy are more likely to access reliable health information, critically evaluate its credibility, and translate knowledge into effective preventive health actions. Digital health literacy extends beyond technical skills and encompasses information-seeking, comprehension, evaluation, communication, and application competencies that support informed health decision-making.

The review also highlights significant disparities in digital health literacy associated with age, educational attainment, socioeconomic status, and access to digital technologies. These inequalities contribute to variations in preventive health behaviors and may widen existing health disparities. Furthermore, exposure to misinformation remains a major challenge for individuals with limited digital health literacy.

Overall, enhancing digital health literacy should be regarded as a strategic priority for public health policy and digital health transformation. Efforts such as digital health education, community-based training programs, equitable access to technology, and targeted interventions for vulnerable populations are

essential for strengthening preventive health behavior, reducing health inequalities, and improving community resilience in the post-pandemic era.

FURTHER STUDY

Future research is recommended to use longitudinal and mixed-method approaches to examine the long-term influence of digital health literacy on preventive health behavior. Further studies may also focus on specific vulnerable groups, such as older adults, rural communities, and individuals with limited access to digital technology. In addition, future research should develop and evaluate digital health literacy intervention programs to determine their effectiveness in improving preventive health behavior and reducing health inequalities in post-pandemic communities.

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