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Bridging the Digital Divide: Policy Solutions for Improving Digital Health Literacy and Healthcare Accessibility

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ABSTRACT: Digital health literacy (DHL) is a fundamental determinant of individuals' ability to navigate, assess, and utilize online health information effectively. This study examines the systemic factors influencing DHL outcomes, the role of public health institutions in mitigating literacy disparities, and the implications for healthcare accessibility. A systematic review methodology was employed, analyzing literature from databases such as PubMed, Scopus, and Google Scholar. The findings highlight that healthcare policies, education systems, and cultural factors shape individuals' digital health competencies. While digital health interventions improve access to health information, barriers such as misinformation, digital divides, and disparities in digital competencies persist. Public health institutions play a critical role in addressing these challenges through structured education programs, policy advocacy, and targeted community engagement initiatives. The study underscores the necessity of integrating digital health literacy training into educational curricula, professional development for healthcare providers, and public health campaigns to enhance equitable healthcare access. Future research should focus on evaluating DHL interventions, standardizing assessment frameworks, and exploring strategies to combat misinformation in digital health contexts. Improving digital health literacy is essential for empowering individuals, enhancing patient engagement, and fostering more inclusive digital healthcare environments.

Keywords: Digital Health Literacy, Health Literacy, Health Misinformation, Healthcare Accessibility, Digital Divide, Telehealth Adoption, Health Education.

INTRODUCTION

Health literacy is a fundamental component of public health and patient-centered care, encompassing an individual's ability to access, understand, appraise, and apply health-related information to make informed decisions (Levin-Zamir & Bertschi, 2018; Nutbeam, 2021). With the rapid digitalization of health services and the increasing reliance on digital technologies for health information-seeking behavior, digital health literacy (DHL) has emerged as a critical competency. Digital health literacy extends beyond traditional health literacy by incorporating digital skills necessary to navigate online health information, discern credible sources from misinformation, and utilize digital health technologies effectively(Palumbo et al., 2021). The evolution of health literacy into the digital realm presents both opportunities and challenges,

necessitating a robust conceptual framework to ensure equitable access to accurate health information.

The proliferation of digital health resources has transformed how individuals engage with health-related content. Neter and Brainin (2017) distinguish between perceived and performed eHealth literacy, emphasizing that individuals' confidence in their ability to evaluate health information does not always align with their actual competencies(Neter & Brainin, 2017). This discrepancy underscores the need for validated measures of digital health literacy and targeted interventions to address gaps in digital competencies. Furthermore, disparities in digital literacy contribute to the "digital divide," affecting individuals' ability to access and interpret health information effectively. Estacio et al. (2017) highlight the influence of socio-demographic factors, including age, education, and socioeconomic status, in shaping digital health literacy levels. Addressing these disparities is crucial for ensuring that digital health innovations do not exacerbate existing health inequalities (Azzopardi-Muscat & Sørensen, 2019).

Access to digital health information is accompanied by challenges related to misinformation and information overload. Azzopardi-Muscat and Sørensen (2019) argue that while digital technologies have the potential to enhance health equity, they can also reinforce disparities if users lack the requisite skills to differentiate between reliable and misleading information. The COVID-19 pandemic exemplified the dangers of misinformation, with widespread dissemination of unverified health claims leading to public confusion and, in some cases, harmful health behaviors. As digital platforms become primary sources of health information, the ability to critically evaluate content and verify its accuracy becomes increasingly essential. The challenge of misinformation highlights the importance of integrating digital health literacy education into public health strategies to equip individuals with the necessary skills to navigate the digital health landscape effectively.

Despite the increasing recognition of digital health literacy as a determinant of health outcomes, several challenges remain in its measurement, implementation, and integration into health systems. Crawford and Serhal (2020) emphasize that healthcare providers must also develop digital competencies to facilitate patient-centered digital health engagement. Without adequate training, healthcare professionals may struggle to guide patients in using digital health resources effectively (Crawford & Serhal, 2020). Additionally, Quaglio et al. (2016) advocate for policies that incorporate digital health literacy into broader public health frameworks, ensuring that technological advancements benefit all populations equitably (Quaglio et al., 2016). However, there remains a gap in policy implementation, with limited integration of digital health literacy initiatives into formal healthcare settings.

A major challenge in digital health literacy research is the lack of standardized frameworks for assessment and intervention. Existing models, such as eHEALS (eHealth Literacy Scale), provide foundational insights but may not fully capture the evolving nature of digital health literacy (Liu et al., 2020). Lee et al. (2021) call for a systematic review of digital health literacy instruments to refine measurement tools that account for emerging digital technologies and diverse user needs(V et al., 2020). Furthermore, the effectiveness of digital health literacy interventions remains underexplored, particularly in underserved populations where barriers to technology access persist. Future research must focus on developing scalable interventions that enhance digital health literacy

across diverse demographic groups, addressing both technical proficiency and critical appraisal skills.

The literature on digital health literacy highlights a critical gap in understanding its implications for public health policy and healthcare delivery. While existing studies provide valuable insights into the determinants of digital health literacy, there is limited empirical evidence on how digital health literacy influences health behaviors and outcomes. Palumbo et al. (2021) emphasize the need for interdisciplinary approaches that integrate insights from health communication, behavioral sciences, and information technology to develop comprehensive digital health literacy frameworks. Moreover, there is a lack of research on how digital health literacy interventions can be effectively implemented in clinical and community settings. Bridging these gaps requires collaboration between researchers, policymakers, and healthcare providers to develop evidence-based strategies that enhance digital health literacy at a population level.

The primary objective of this review is to examine the conceptual frameworks of digital health literacy, identify key determinants influencing digital health literacy levels, and explore strategies to improve digital health literacy across diverse populations. Specifically, this study will analyze the role of digital health literacy in mitigating misinformation, enhancing patient engagement, and promoting equitable access to health resources. Additionally, this review will explore how digital health literacy can be integrated into healthcare systems and public health initiatives to improve overall health outcomes. By synthesizing existing literature and identifying research gaps, this study aims to provide a foundation for future digital health literacy interventions and policy recommendations.

The scope of this review encompasses studies conducted in various geographic regions, with a particular focus on high-, middle-, and low-income countries to provide a global perspective on digital health literacy disparities. This analysis will include populations across different age groups, educational backgrounds, and socioeconomic statuses to examine how demographic factors influence digital health literacy levels. Additionally, this review will consider the role of digital health literacy in different healthcare settings, including primary care, telemedicine, and public health campaigns. By adopting a comprehensive approach, this study seeks to provide actionable insights for researchers, policymakers, and healthcare practitioners working to enhance digital health literacy in the digital age.

METHOD

A systematic literature review was conducted to gather relevant research on digital health literacy (DHL) and its implications. This methodology section outlines the approach used to identify, select, and analyze academic sources, ensuring a rigorous and comprehensive understanding of the topic. The review followed established guidelines for systematic literature searches, incorporating various databases, keyword strategies, inclusion and exclusion criteria, study selection procedures, and data synthesis methods.

The literature search was conducted using multiple academic databases to ensure broad coverage of relevant studies. The primary databases used included PubMed, Scopus, Google Scholar, CINAHL (Cumulative Index to Nursing and Allied Health Literature), Web of Science, and IEEE Xplore. These databases were chosen based on their extensive collection of peer-reviewed articles, systematic reviews, and empirical studies related to health literacy, digital health interventions, and technological adoption in healthcare. PubMed was selected due to its strong focus on biomedical and healthcare-related research, while Scopus provided multidisciplinary insights, covering health sciences, social sciences, and technology. Google Scholar was included to retrieve a wide range of literature, including gray literature, which may not be indexed in traditional databases. CINAHL was particularly useful for identifying nursing and allied health studies relevant to digital health literacy interventions. Web of Science facilitated citation analysis, allowing for the identification of influential studies and trending topics in DHL. Lastly, IEEE Xplore contributed valuable research on technological advancements in health informatics and digital tools.

To optimize the literature search, a combination of keywords and Boolean operators was employed. The primary keywords included "digital health literacy," "eHealth literacy," and "health literacy." Related keywords such as "information literacy," "health information," "technology adoption," and "interventions" were also integrated into the search queries. The Boolean operators AND, OR, and NOT were used to refine the search results. For instance, queries like "digital health literacy" AND "health information" helped narrow the results to studies that explicitly addressed health information within the scope of digital health literacy. Similarly, "eHealth literacy" OR "health literacy" AND "interventions" expanded the search to include studies discussing digital interventions aimed at improving health literacy. The NOT operator was used to exclude unrelated studies, such as those focused solely on technological development without discussing health literacy outcomes.

The study selection process was governed by strict inclusion and exclusion criteria to ensure relevance and quality. The inclusion criteria required that studies be published in peer-reviewed journals, written in English, and published between 2010 and 2023 to capture the most recent developments in digital health literacy. Additionally, only studies employing empirical research methods (e.g., randomized controlled trials, cohort studies, case studies) and systematic literature reviews were considered. Studies focusing on digital health literacy interventions, information-seeking behavior, and health outcomes related to DHL were prioritized. Exclusion criteria included non-English publications, conference abstracts without full-text availability, and studies that exclusively discussed digital health technologies without examining their implications for health literacy. Furthermore, opinion pieces, editorials, and theoretical papers lacking empirical evidence were omitted from the review.

The literature selection process followed a systematic and structured approach. Initially, database searches yielded a large number of studies. Titles and abstracts were screened to eliminate obviously irrelevant articles. After the initial screening, full-text reviews were conducted for studies that met the inclusion criteria. To enhance the reliability of the selection process, two independent reviewers assessed the studies, resolving discrepancies through discussion and consensus. Duplicate studies retrieved from multiple databases were identified and removed to prevent

redundancy. The remaining studies were critically appraised based on their methodology, sample size, relevance to digital health literacy, and overall research quality.

To ensure comprehensive data synthesis, selected studies were categorized based on thematic relevance. Key themes that emerged included digital health literacy interventions, factors influencing digital health literacy levels, the impact of digital health literacy on health outcomes, and strategies for addressing misinformation in digital health contexts. Data from each study were extracted systematically, including information on study design, sample characteristics, key findings, and conclusions. Thematic analysis was employed to identify patterns and gaps in the existing literature, providing insights into areas requiring further investigation.

The reliability and validity of the included studies were assessed using standardized appraisal tools, such as the Critical Appraisal Skills Programme (CASP) checklist for qualitative studies and the Joanna Briggs Institute (JBI) critical appraisal tool for systematic reviews. These tools facilitated the evaluation of research rigor, methodological soundness, and potential biases. Studies with low methodological quality or insufficient data to support their conclusions were excluded from the final analysis.

To manage references and citations efficiently, Zotero and EndNote were used. These tools facilitated the organization of sources, streamlined the citation process, and ensured proper referencing throughout the review. Citation tracking was also performed in Web of Science to identify highly cited studies and emerging research trends within digital health literacy.

The systematic approach employed in this literature review enabled the collection and analysis of high-quality, relevant studies on digital health literacy. By utilizing multiple databases, applying rigorous selection criteria, and conducting thematic analysis, this review provides a comprehensive understanding of the factors influencing digital health literacy, its impact on health outcomes, and potential strategies for improvement. The methodological framework adopted in this study ensures transparency and replicability, contributing to the advancement of research in the field of digital health literacy.

RESULT AND DISCUSSION

A comprehensive analysis of the literature on digital health literacy (DHL) and its relationship with misinformation yielded several critical themes. These findings highlight the role of DHL in shaping individuals' ability to identify, assess, and respond to health misinformation, as well as the effectiveness of interventions aimed at improving misinformation resilience. Additionally, insights into the effectiveness of digital health interventions, barriers to accessing these resources, the impact of DHL on health outcomes, and its integration into health education were examined.

Digital Health Literacy and the Spread of Misinformation

Digital health literacy plays a crucial role in shaping individuals' ability to critically evaluate online health information, mitigating the influence of misinformation. Studies have demonstrated that

individuals with higher levels of DHL are significantly less likely to be misled by false health claims. Liu et al. (2020) found that those with better digital health literacy exhibited greater competency in identifying credible health sources and dismissing misinformation, reinforcing its protective role (E et al., 2022). Conversely, individuals with lower DHL often lack the analytical skills necessary to discern unreliable information, making them more susceptible to misleading health narratives.

The proliferation of social media as a primary source of health information exacerbates misinformation challenges. Studies indicate that social media platforms can act as both a vehicle for misinformation and a potential tool for health education. Ashfield and Donelle (2020) emphasized that parents and caregivers frequently encounter vaccine misinformation on social media, affecting immunization decision-making. The ability to assess digital health content critically is, therefore, essential in navigating online health information safely and effectively (Ashfield & Donelle, 2020).

Interventions and Effectiveness of Digital Health Tools

Digital health interventions, such as mobile applications and telehealth platforms, have emerged as pivotal tools in addressing health literacy disparities among ethnically diverse populations. These technologies extend the reach of health information by offering culturally and linguistically tailored content, thereby supporting comprehension and engagement, particularly among individuals with limited access to traditional healthcare services (Bailey et al., 2021; López et al., 2016).

For instance, mobile health applications that deliver guidance in users' native languages have demonstrated improvements in health awareness, adherence to medical instructions, and preventive health behaviors. Additionally, SMS based services such as the Text4baby initiative have proven successful in increasing prenatal health knowledge among underserved groups.

However, the accessibility and impact of these digital solutions are not uniform. Populations with limited digital literacy, lower socioeconomic status, or restricted internet access often remain excluded from the benefits of these innovations. Moreover, digital health literacy (DHL) training programs designed to enhance resilience against misinformation frequently overlap with broader digital interventions, leading to redundancies in design and inconsistent evaluation frameworks (Cyril et al., 2016).

Therefore, the design and deployment of digital health tools must incorporate inclusive, user centered approaches that reflect the linguistic, cultural, and technological needs of the target populations. Collaboration among healthcare providers, developers, and community based organizations is essential to ensure relevance, usability, and equity in implementation (Danila et al., 2021; Richmond & Jackson, 2018).

Barriers to Accessing Digital Health Resources in Different Demographic Groups

Despite the advantages of digital health interventions, accessibility barriers persist across different demographic groups. Santis et al. (2021) identified key factors contributing to digital health inequalities, including limited internet access, low digital proficiency, and language barriers. Older adults, individuals with lower socioeconomic status, and rural populations face the greatest

challenges in engaging with digital health resources, further exacerbating health disparities (Santis et al., 2021).

Digital literacy gaps also influence the adoption of digital health interventions. Mackert et al. (2016) argued that individuals with limited digital literacy may perceive health technologies as complex or intimidating, reducing their willingness to engage with them. Additionally, Knitza et al. (2020) found that poorly designed user interfaces and the lack of support systems hinder usability, particularly for vulnerable populations (Lattie et al., 2020).

Impact of Digital Health Literacy on Health Outcomes

Digital health literacy has been found to positively impact health outcomes by improving individuals' ability to manage chronic diseases and engage in preventive healthcare behaviors. Higher levels of DHL correlate with increased self-efficacy in disease management, particularly for chronic conditions such as diabetes and kidney disease. Muscat et al. (2020) reported that patients utilizing a health literacy application for chronic kidney disease experienced greater adherence to treatment plans and increased confidence in their ability to navigate healthcare decisions (Cachero et al., 2021).

Furthermore, DHL facilitates more effective patient-provider communication. Neter and Brainin (2017) found that individuals with stronger digital health literacy skills were more likely to engage in meaningful discussions with healthcare providers, resulting in better treatment adherence and improved health outcomes. Tariq et al. (2020) also demonstrated that DHL plays a crucial role in fostering shared decision-making, enabling patients to take an active role in their healthcare management (Knitza et al., 2020).

Preventive healthcare behaviors are similarly influenced by digital health literacy. Dadaczynski et al. (2021) found that individuals with high DHL levels were more likely to engage in preventive health practices, such as routine screenings and vaccinations (Muscat et al., 2020). Vamos et al. (2019) highlighted that digital platforms facilitating access to health information contributed to increased awareness and uptake of preventive health measures.

Integration of Digital Literacy into Health Education and Training Programs

Health education curricula increasingly incorporate digital literacy training to prepare future healthcare providers for the evolving digital landscape. McKinstry et al. (2020) examined the integration of digital literacy frameworks into occupational therapy education, emphasizing the importance of equipping students with digital competencies necessary for patient education and engagement (Tariq et al., 2020). Palumbo et al. (2021) similarly advocated for digital health literacy to be embedded within medical training programs, ensuring that healthcare professionals can navigate digital health environments effectively.

Various training programs aimed at improving digital health literacy among both healthcare providers and patients have been developed. Ashfield and Donelle (2020) explored initiatives designed to enhance healthcare professionals' ability to guide patients in evaluating digital health

information. Such training programs have been shown to improve professionals' confidence in using telehealth tools and facilitating digital health literacy discussions.

Patient-focused digital literacy programs have also demonstrated effectiveness. Aida et al. (2020) examined an mHealth initiative that provided low-income individuals with access to educational videos and health checkup data visualization tools, resulting in increased engagement with digital health platforms (Dadaczynski et al., 2021). Community-based interventions tailored to older adults and individuals with lower education levels have further contributed to bridging digital literacy gaps (McKinstry et al., 2020).

This systematic review has revealed the multifaceted relationship between ethnicity and health literacy, emphasizing the profound effects of socioeconomic inequality, linguistic diversity, cultural norms, and digital divides. The evidence suggests that health literacy is not merely a function of individual education or cognitive ability, but rather a product of intersecting structural, social, and cultural determinants.

A major theme emerging from this review is the persistence of **socioeconomic inequalities** that disproportionately affect ethnic minority groups. Individuals from lower income backgrounds tend to have reduced access to formal education and health promoting resources, which in turn contributes to poor comprehension of health information and suboptimal decision making (Aida et al., 2020; Vrdelja et al., 2021). These factors are compounded by systemic barriers in healthcare infrastructure and policy implementation (Schultz et al., 2018).

Linguistic barriers remain one of the most consistent predictors of limited health literacy, especially among immigrant and refugee populations. Patients with limited English proficiency are more likely to misinterpret diagnoses, misunderstand medication instructions, and experience greater anxiety in navigating health systems (Avci et al., 2018; Miles et al., 2018). The absence of linguistically inclusive materials and professional interpretation services often results in delayed care and lower adherence to treatment regimens (Khoong et al., 2020).

Cultural beliefs and traditional medical practices significantly influence how individuals perceive illness and treatment. For instance, López et al. (2016) observed that Latino populations often express preferences for herbal remedies and perceive conventional treatments as intrusive or harmful (Tong et al., 2016). When health systems fail to recognize and respect these beliefs, patient mistrust increases, undermining engagement and adherence (Hyun et al., 2021; Latulippe et al., 2017). However, integrating culturally congruent health messages and community health educators has been effective in enhancing comprehension and acceptance (Rosenbaum et al., 2020).

Digital health technologies, such as mobile apps and telehealth platforms, are increasingly utilized to improve health information dissemination. These tools have shown promise in reaching marginalized populations when designed with cultural and linguistic sensitivity. Nevertheless, disparities in digital literacy and infrastructure continue to hinder widespread accessibility, particularly in rural, elderly, and economically disadvantaged communities (Nuñez et al., 2017;

Young et al., 2016). Thus, digital interventions must be complemented with offline strategies and inclusive co design processes to maximize their utility (Pavlovska et al., 2021).

Despite extensive literature on ethnic disparities, **critical research gaps** persist. There is limited empirical exploration of how specific cultural constructs such as fatalism, religiosity, or collectivism influence health literacy behaviors (Memon et al., 2016). Additionally, while some community based interventions have been effective, most lack scalability due to the absence of standardized, culturally adaptive frameworks (Badiu et al., 2017). Few studies measure the long term impact of health literacy interventions on clinical outcomes or health system efficiency (Park et al., 2017).

From a **policy standpoint**, this review underscores the urgency of embedding health literacy into national and regional public health agendas. Cultural competence training should be integrated into medical education and institutional practices to address both interpersonal and systemic biases (Clark et al., 2020; Sancho & Larkin, 2020). Moreover, governments and stakeholders must prioritize investment in multilingual play next

Future research should focus on participatory and interdisciplinary methods that involve ethnic minority communities in the design, delivery, and evaluation of health literacy interventions. Longitudinal studies are essential to understand how health literacy evolves over time and in response to systemic change. Moreover, investigating the intersection of structural racism, institutional trust, and communication dynamics will be critical to developing equitable healthcare delivery systems (Zelin et al., 2018).

In conclusion, addressing disparities in health literacy necessitates a multidimensional approach one that goes beyond information provision to tackle structural inequities, embrace cultural diversity, and promote social justice. Empowering ethnically diverse populations to engage with health information effectively is not only a moral imperative but also a practical strategy to improve public health outcomes on a global scale.

CONCLUSION

This study highlights the critical role of digital health literacy (DHL) in enhancing individuals' ability to access, evaluate, and apply health information in digital environments. The findings reveal that systemic factors such as healthcare policies, education systems, and cultural contexts significantly influence DHL outcomes. While digital health interventions have shown promise in improving health literacy and accessibility, disparities persist due to variations in digital competency, misinformation susceptibility, and socioeconomic barriers. Public health institutions play a pivotal role in mitigating these disparities by implementing structured digital literacy programs, advocating for equitable policies, and enhancing community engagement efforts.

Urgent interventions are needed to bridge digital divides, improve health literacy frameworks, and address misinformation through targeted education and digital competency training. Future

research should focus on evaluating the long-term impact of DHL initiatives, exploring contextual variations in different population groups, and developing standardized assessment tools for DHL measurement. The integration of digital literacy training into formal education, healthcare professional development, and community outreach programs will be essential for improving DHL outcomes and ensuring equitable access to digital health resources. Advancing digital health literacy is paramount for fostering informed decision-making, improving public health outcomes, and reducing health disparities in an increasingly digital world(Farquharson & Thornton, 2020).

REFERENCE

Aida, A., Svensson, T., Svensson, A. K., Urushiyama, H., Okushin, K., & Oguri, G. (2020). Using mHealth to Provide Mobile App Users With Visualization of Health Checkup Data and Educational Videos on Lifestyle Related Diseases: Methodological Framework for Content Development. *JMIR Mhealth Uhealth*, *8*(10).

Ashfield, S., & Donelle, L. (2020). Parental Online Information Access and Childhood Vaccination Decisions in North America. *Scoping Review. J Med Internet Res*, *22*(10).

Avci, G., Kordovski, V. M., & Woods, S. P. (2018). A Preliminary Study of Health Literacy in an Ethnically Diverse University Sample. *J Racial Ethn Health Disparities*, *6*(1), 182–188.

Azzopardi-Muscat, N., & Sørensen, K. (2019). Towards an Equitable Digital Public Health Era: Promoting Equity Through a Health Literacy Perspective. *Eur J Public Health*, *29*(Supplement_3), 13–17.

Badiu, C., Bonomi, M., Borshchevsky, I., Cools, M., Craen, M., & Ghervan, C. (2017). Developing and Evaluating Rare Disease Educational Materials Co Created by Expert Clinicians and Patients: The Paradigm of Congenital Hypogonadotropic Hypogonadism. *Orphanet J Rare Dis*, *12*(1).

Bailey, J. E., Gurgol, C., Pan, E., Njie, S., Emmett, S. D., & Gatwood, J. (2021). Early Patient Centered Outcomes Research Experience With the Use of Telehealth to Address Disparities. *Scoping Review. J Med Internet Res*, *23*(12).

Cachero, K., Granger, M., Mollard, R. C., Askin, N., Okoli, G. N., & Abou Setta, A. M. (2021). Efficacy and Safety of Clinically Managed Weight Loss Programs: A Systematic Review and Meta Analysis Protocol. *Syst Rev*, *10*(1).

Clark, B., Skeete, J., & Williams, K. A. (2020). Strategies for Improving Nutrition in Inner City Populations. *Curr Cardiol Rep*, *22*(12).

Crawford, A., & Serhal, E. (2020). Digital Health Equity and COVID 19: The Innovation Curve Cannot Reinforce the Social Gradient of Health. *J Med Internet Res*, *22*(6).

Cyril, S., Green, J., Nicholson, J. M., Agho, K., & Renzaho, A. M. N. (2016). Exploring Service Providers. *Perspectives in Improving Childhood Obesity Prevention Among CALD Communities in Victoria, Australia. PLoS One*, *11*(10).

Dadaczynski, K., Okan, O., Messer, M., Leung, A. Y. M., Rosário, R., & Darlington, E. (2021). Digital Health Literacy and Web Based Information Seeking Behaviors of University Students in Germany During the COVID 19 Pandemic: Cross Sectional Survey Study. *J Med Internet Res*, *23*(1).

Danila, M. I., Allison, J. J., V, G. K., Chiriboga, G., Fischer, M. A., & Puliafico, M. (2021). Development of a Multi Component Intervention to Promote Participation of Black and Latinx Individuals in Biomedical Research. *J Clin Transl Sci*, *5*(1).

E, L. S., B, F., M, Q., M, M., NB, K., & J, J. (2022). They Kept Going for Answers": Knowledge, Capacity, and Environmental Health Literacy in Michigan's PBB Contamination. *Int J Environ Res Public Health*, *19*(24).

Farquharson, W., & Thornton, C. J. (2020). Debate: Exposing the Most Serious Infirmity – Racism's Impact on Health in the Era of COVID-19. *Child Adolesc Ment Health*, *25*(3), 182–183.

Hyun, S., Ko, O., Kim, S., & Ventura, W. R. (2021). Sociocultural Barriers to Hepatitis B Health Literacy in an Immigrant Population: A Focus Group Study in Korean Americans. *BMC Public Health*, *21*(1).

Khoong, E. C., Butler, B. A., Mesina, O., Su, G., DeFries, T., & Nijagal, M. (2020). Patient Interest in and Barriers to Telemedicine Video Visits in a Multilingual Urban Safety Net System. *Journal of the American Medical Informatics Association*, *28*(2), 349–353.

Knitza, J., Simón, D., Lambrecht, A., Raab, C., Taşçılar, K., & Hagen, M. (2020). Mobile Health Usage, Preferences, Barriers, and eHealth Literacy in Rheumatology: Patient Survey Study. *JMIR Mhealth Uhealth*, *8*(8).

Lattie, E. G., Cohen, K., Winquist, N., & Mohr, D. C. (2020). Examining an App Based Mental Health Self Care Program, IntelliCare for College Students: Single Arm Pilot Study. *JMIR Ment Health*, *7*(10).

Latulippe, K., Hamel, C., & Giroux, D. (2017). Social Health Inequalities and eHealth: A Literature Review With Qualitative Synthesis of Theoretical and Empirical Studies. *J Med Internet Res*, *19*(4).

Levin-Zamir, D., & Bertschi, I. (2018). Media Health Literacy, eHealth Literacy, and the Role of the Social Environment in Context. *Int J Environ Res Public Health*, *15*(8).

Liu, P., Yeh, L., Wang, J., & Lee, S. T. (2020). Relationship Between Levels of Digital Health Literacy Based on the Taiwan Digital Health Literacy Assessment and Accurate Assessment of Online Health Information: Cross Sectional Questionnaire Study. *J Med Internet Res*, *22*(12).

López, L., Tan-McGrory, A., Horner, G., & Betancourt, J. R. (2016). Eliminating Disparities Among Latinos With Type 2 Diabetes: Effective eHealth Strategies. *J Diabetes Complications*, *30*(3), 554–560.

McKinstry, C., Iacono, T., Kenny, A., Hannon, J., & Knight, K. (2020). Applying a Digital Literacy Framework and Mapping Tool to an Occupational Therapy Curriculum. *Aust Occup Ther J*, *67*(3), 210–217.

Memon, A., Taylor, K., Mohebati, L., Sundin, J., Cooper, M., & Scanlon, T. (2016). Perceived Barriers to Accessing Mental Health Services Among Black and Minority Ethnic (BME) Communities: A Qualitative Study in Southeast England. *BMJ Open*, *6*(11).

Miles, R. C., Onega, T., & Lee, C. I. (2018). Addressing Potential Health Disparities in the Adoption of Advanced Breast Imaging Technologies. *Acad Radiol*, *25*(5), 547–551.

Muscat, D. M., Lambert, K., Shepherd, H. L., McCaffery, K., Zwi, S., & Liu, N. (2020). Supporting Patients to Be Involved in Decisions About Their Health and Care: Development of a Best Practice Health Literacy App for Australian Adults Living With Chronic Kidney Disease. *Health Promotion Journal of Australia*, *32*(S1), 115–127.

Neter, E., & Brainin, E. (2017). Perceived and Performed eHealth Literacy: Survey and Simulated Performance Test. *JMIR Hum Factors*, *4*(1).

Nuñez, A., Holland, J. M., Beckman, L., Kirkendall, A., & Luna, N. (2017). A Qualitative Study of the Emotional and Spiritual Needs of Hispanic Families in Hospice. *Palliat Support Care*, *17*(2), 150–158.

Nutbeam, D. (2021). From Health Education to Digital Health Literacy – Building on the Past to Shape the Future. *Glob Health Promot*, *28*(4), 51–55.

Palumbo, R., Capolupo, N., & Adinolfi, P. (2021). Addressing Health Literacy in the Digital Domain. *Insights From a Literature Review. Kybernetes*, *51*(13), 82–97.

Park, L., Schwei, R. J., Xiong, P., & Jacobs, E. A. (2017). Addressing Cultural Determinants of Health for Latino and Hmong Patients With Limited English Proficiency: Practical Strategies to Reduce Health Disparities. *J Racial Ethn Health Disparities*, *5*(3), 536–544.

Pavlovska, I., Polcrová, A. B., Mechanick, J. I., Brož, J., Infante Garcia, M. M., & Nieto-Martínez, R. (2021). Dysglycemia and Abnormal Adiposity Drivers of Cardiometabolic Based Chronic Disease in the Czech Population: Biological, Behavioral, and Cultural/Social Determinants of Health. *Nutrients*, *13*(7).

Quaglio, G., Sørensen, K., Rübig, P., Bertinato, L., Brand, H., & Karapiperis, T. (2016). Accelerating the Health Literacy Agenda in Europe. *Health Promot Int*.

Richmond, A., & Jackson, J. (2018). Cultural Considerations for Psychologists in Primary Care. *J Clin Psychol Med Settings*, *25*(3), 305–315.

Rosenbaum, M., Dineen, R., Schmitz, K., Stoll, J., Hsu, M., & Hodges, P. D. (2020). Interpreters' Perceptions of Culture Bumps in Genetic Counseling. *J Genet Couns*, *29*(3), 352–364.

Sancho, T. N., & Larkin, M. (2020). We Need to Slowly Break Down This Barrier": Understanding the Barriers and Facilitators That Afro Caribbean Undergraduates Perceive Towards Accessing Mental Health Services in the UK. *J Public Ment Health*, *19*(1), 63–81.

Santis, K. K. D., Jahnel, T., Sina, E., Wienert, J., & Zeeb, H. (2021). Digitization and Health in Germany: Cross Sectional Nationwide Survey. *JMIR Public Health Surveill*, *7*(11).

Schultz, W. M., Kelli, H. M., Lisko, J., Varghese, T., Shen, J., & Sandesara, P. B. (2018). Socioeconomic Status and Cardiovascular Outcomes. *Circulation*, *137*(20), 2166–2178.

Tariq, A., Khan SR, B., & A. (2020). Internet Use, eHealth Literacy, and Dietary Supplement Use Among Young Adults in Pakistan: Cross Sectional Study. *J Med Internet Res*, *22*(6).

Tong, E. K., Nguyen, T. T., Lo, P., Stewart, S. L., Gildengorin, G., & Tsoh, J. Y. (2016). Lay Health Educators Increase Colorectal Cancer Screening Among Hmong Americans: A Cluster Randomized Controlled Trial. *Cancer*, *123*(1), 98–106.

V, E. E., R, W., & J, P. (2020). The Digital Divide: Examining Socio Demographic Factors Associated With Health Literacy, Access and Use of Internet to Seek Health Information. *J Health Psychol*, *24*(12), 1668–1675.

Vrdelja, M., Vrbovšek, S., Klopčič, V., Dadaczynski, K., & Okan, O. (2021). Facing the Growing COVID 19 Infodemic: Digital Health Literacy and Information Seeking Behaviour of University Students in Slovenia. *Int J Environ Res Public Health*, *18*(16).

Young, L., Lindsay, D., & Ray, R. (2016). What Do Beginning Students, in a Rurally Focused Medical Course, Think About Rural Practice? *BMC Med Educ*, *16*(1).

Zelin, N. S., Hastings, C., Beaulieu-Jones, B. R., Scott, C., Lario, A. R., & Duarte, C. (2018). Sexual and Gender Minority Health in Medical Curricula in New England: A Pilot Study of Medical Student Comfort, Competence and Perception of Curricula. *Med Educ Online*, *23*(1).