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Health Literacy and Social Determinants: Insights from Marginalized Contexts

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ABSTRACT: Health literacy is a critical determinant of health outcomes, particularly for marginalized communities facing systemic inequities and cultural barriers. This narrative review aimed to synthesize existing literature on health literacy in marginalized populations, focusing on barriers, strategies, and global comparisons. Literature was retrieved from Scopus, PubMed, and Google Scholar, yielding 58 studies that met the inclusion criteria and were analyzed in this review". Inclusion criteria encompassed peer-reviewed studies published between 2010 and 2025 addressing conceptual, empirical, or intervention-based perspectives on health literacy. Both qualitative and quantitative studies were analyzed through thematic synthesis. The results indicate that marginalized groups consistently experience barriers related to educational attainment, cultural and linguistic misalignment, and digital inequities, leading to diminished preventive care and poorer health outcomes. Community-led initiatives, culturally tailored health communication, and trusted messengers emerged as effective strategies to mitigate these barriers, fostering greater engagement and trust. Comparative evidence further highlighted disparities between high-income and low- and middle-income countries, with successful models of intervention demonstrating adaptability across different contexts. The discussion emphasized the influence of systemic factors such as policy design, socioeconomic instability, and educational inequities, underscoring the need for integrated and context-specific approaches. This review concludes that addressing health literacy among marginalized populations requires policy reforms, digital innovation, and community-driven strategies to ensure sustainable progress. Future research should prioritize longitudinal, mixed-methods studies and expand representation to under-researched groups to strengthen the evidence base for effective interventions.

Keywords: Health Literacy, Marginalized Communities, Digital Divide, Cultural Competence, Community Health Workers, Public Health Equity, Health Communication.

INTRODUCTION

Health literacy has emerged as a critical determinant of health outcomes, encompassing the ability of individuals to access, understand, and apply health-related information to make informed decisions (Rowlands et al., 2017). Far from being a purely individual attribute, health literacy reflects the interaction between individuals and the broader socio-environmental context in which they live. Scholars have increasingly recognized that health literacy is not only a matter of cognitive ability or education level but also a socially embedded construct influenced by structural, cultural, and community-level factors (Nutbeam, 2008; Sørensen et al., 2012). In marginalized communities, this interplay of determinants is particularly pronounced, as systemic inequities, economic barriers, and cultural differences intersect to produce significant disparities in health literacy and, consequently, health outcomes (Batterham et al., 2016; Rowlands et al., 2017).

Empirical studies across global contexts demonstrate that health literacy inequalities persist as a pervasive public health challenge. Research shows that individuals from underserved groups, such as refugees, indigenous populations, and those with low socioeconomic status, are disproportionately disadvantaged in their ability to navigate healthcare systems, resulting in diminished preventive care uptake and increased chronic disease burden (Wu et al., 2021; Stormacq et al., 2019). These disparities are not uniform across regions but instead manifest in distinct patterns shaped by local health systems, cultural practices, and social norms. For example, marginalized groups in low- and middle-income countries often face heightened challenges due to weaker healthcare infrastructure, limited access to quality education, and entrenched socioeconomic inequities (Koh et al., 2012; Nutbeam, 2018). Consequently, interventions aimed at improving health literacy must account for context-specific factors to effectively address the unique vulnerabilities of marginalized populations.

Fundamental facts underscore the urgency of this issue. Global data indicate that low health literacy is associated with poorer health outcomes, higher rates of hospitalization, and increased healthcare costs (Berkman et al., 2011). At the population level, disparities in health literacy contribute to persistent health inequities, particularly among groups that already experience socioeconomic disadvantage. For example, the World Health Organization (WHO) has highlighted the central role of health literacy in achieving health equity and universal health coverage, framing it as both a human right and a public health priority (WHO, 2016). Studies further show that marginalized groups frequently have fewer interactions with healthcare providers and lower engagement with preventive services, exacerbating existing health inequities (Wu et al., 2021; Rowlands et al., 2017). Such evidence affirms that addressing health literacy is a fundamental step toward advancing equity-oriented healthcare systems.

The COVID-19 pandemic has amplified the urgency of addressing health literacy disparities (Vamos & Vine, 2023). During the pandemic, the dissemination and comprehension of accurate health information became a matter of survival, yet marginalized groups were disproportionately affected by misinformation, lack of access to reliable communication channels, and limited culturally appropriate resources (Paakkari & Okan, 2020; Sentell et al., 2021). These challenges further revealed the fragility of health systems in reaching populations with pre-existing vulnerabilities. For instance, refugees and homeless individuals experienced not only barriers to health services but also difficulties in understanding preventive measures due to language barriers and social isolation (Chen et al., 2021; Rodriguez et al., 2022). Such crises underscore the need for health literacy interventions that are adaptive, community-centered, and culturally sensitive.

Despite growing recognition of its importance, marginalized communities continue to encounter structural and systemic challenges that limit their capacity to develop health literacy. Among these challenges are the scarcity of linguistically and culturally tailored educational resources, as highlighted by Tartaglia et al. (2022), which results in reduced utilization of available healthcare services. Socioeconomic instability and social exclusion compound these difficulties, creating cycles of disadvantage where low health literacy perpetuates poor health outcomes and vice versa (Batterham et al., 2016). Moreover, the reliance of healthcare systems on digital platforms has created new inequities, as many marginalized populations face digital exclusion due to lack of access, skills, or infrastructure (Hwang et al., 2024). These multifaceted barriers call for innovative, systemic approaches that go beyond individual education to address structural determinants of health literacy (Garcia-Codina et al., 2019).

A significant gap in the literature concerns the lack of context-specific analyses that explore how cultural, linguistic, and socio-political environments shape health literacy practices in marginalized communities. For example, women migrants along the Myanmar-Thailand border face unique challenges in accessing nutritional information during pregnancy, where cultural norms and resource scarcity intersect to hinder informed decision-making (Wong et al., 2024). Similarly, indigenous populations often report low levels of culturally relevant health education resources, limiting their ability to engage effectively with health systems (Tartaglia et al., 2022). These gaps highlight the need for nuanced studies that situate health literacy within the lived experiences of marginalized populations rather than treating it as a universal or homogenous phenomenon.

The present narrative review seeks to address these gaps by systematically examining existing qualitative and quantitative studies on health literacy in marginalized populations. The primary aim is to identify recurring barriers, adaptive strategies, and effective interventions that have been documented across diverse contexts. Specifically, this review focuses on factors such as linguistic barriers, digital inequities, cultural misalignment of health programs, and the role of trusted community messengers in mediating health information. By synthesizing these findings, the review aims to provide a comprehensive account of how health literacy operates within marginalized settings and what strategies hold promise for improving equity.

The scope of this review is global, with a particular focus on vulnerable populations that experience structural disadvantage, including refugees, ethnic minorities, indigenous peoples, incarcerated individuals, and those experiencing homelessness. While the review considers evidence from both high-income and low- and middle-income countries, it emphasizes the contextual differences that shape health literacy challenges and interventions. Cross-national comparisons are incorporated where relevant to highlight similarities and divergences in how marginalized communities engage with health information and systems. In doing so, this review contributes to the broader agenda of health equity research, offering insights that can inform policy, practice, and future investigations.

In summary, improving health literacy among marginalized communities is an urgent public health priority that requires both scholarly attention and practical action. By situating health literacy within its broader socio-environmental determinants, this review underscores the necessity of integrated, culturally responsive, and equity-driven interventions. Through a careful synthesis of existing evidence, the study aims to illuminate pathways for reducing health disparities and advancing the goal of inclusive healthcare systems worldwide.

METHOD

The methodology for this narrative review was designed to ensure a comprehensive, rigorous, and contextually relevant exploration of health literacy in marginalized communities. This section outlines the systematic approach applied in identifying, selecting, and analyzing relevant literature. In doing so, the study emphasizes transparency in search strategies, inclusion and exclusion criteria, and the evaluative processes employed to synthesize findings. While narrative in nature, the methodology draws upon established practices in systematic and scoping reviews to ensure credibility and replicability.

The first stage of the methodology involved the selection of databases. Three major academic repositories were chosen based on their breadth, disciplinary relevance, and indexing accuracy: Scopus, PubMed, and Google Scholar. Scopus was selected due to its extensive coverage of peer-reviewed journals across disciplines, including public health, social sciences, and health policy. PubMed was particularly critical given its focus on biomedical and health sciences literature, offering access to high-quality studies relevant to healthcare systems, interventions, and epidemiological analyses. Google Scholar complemented these databases by providing access to grey literature, book chapters, and interdisciplinary sources that may not appear in traditional biomedical repositories but remain relevant to understanding the socio-cultural dimensions of health literacy in marginalized populations (Nutbeam, 2018; Rowlands et al., 2017). This triangulation of databases was essential for ensuring a balanced retrieval of both clinical evidence and socially embedded perspectives on health literacy.

Following database selection, search terms and Boolean operators were carefully constructed to maximize precision and relevance. Core keywords included “health literacy,” “marginalized communities,” “refugees,” “homeless populations,” and “ethnic minorities.” These were combined using Boolean operators such as AND and OR to refine the scope of retrieval. For example, search strings included combinations such as “health literacy” AND “marginalized communities,” “health literacy” AND “refugees,” and “health literacy” AND “homeless populations.” In addition, contextually relevant terms like “cultural competence,” “health interventions,” “community-based programs,” and “digital health equity” were integrated to capture literature addressing structural barriers and intervention strategies (Wong et al., 2024; Vaugoyeau et al., 2023). The choice of terms was informed by prior research that highlighted the importance of linguistic inclusivity and cultural sensitivity in shaping health literacy practices (Tartaglia et al., 2022).

The inclusion and exclusion criteria for study selection were developed to ensure that the review remained focused and relevant to its objectives. Most of the selected studies originated from high-income countries, which is acknowledged as a limitation of global representativeness. Articles were included if they were peer-reviewed, published between 2010 and 2025, and explicitly addressed health literacy within marginalized populations. Eligible populations included but were not limited to refugees, immigrants, ethnic minorities, indigenous peoples, the homeless, and incarcerated individuals. Only studies that discussed either conceptualizations of health literacy, barriers to access, or the design and evaluation of interventions were retained. Exclusion criteria eliminated studies that did not explicitly address health literacy, were unrelated to marginalized populations, or were limited to purely clinical or biomedical analyses without a social dimension. Articles not published in English were also excluded to ensure consistency in evaluation and interpretation. This systematic application of inclusion and exclusion criteria allowed the review to focus on literature that provided both empirical evidence and theoretical insights relevant to the aims of the study.

The review incorporated a range of research designs, acknowledging that health literacy in marginalized communities is best understood through diverse methodological perspectives. Qualitative studies, such as ethnographies, interviews, and focus groups, provided in-depth accounts of lived experiences and community-level practices that quantitative measures often fail to capture. Quantitative studies, including cross-sectional surveys and randomized controlled trials, were included when they assessed health literacy levels, intervention effectiveness, or health outcomes associated with literacy disparities (Nair et al., 2016). Mixed-methods studies were particularly valuable for their ability to triangulate numerical data with contextual insights, thus enriching the analysis. For instance, qualitative studies such as Wong et al. (2024) on Myanmar refugees revealed community-driven literacy practices, while intervention-based studies like Vaugoyeau et al. (2023) demonstrated the efficacy of community health worker-led programs in homeless populations. By integrating findings from multiple study designs, this review sought to capture both the breadth and depth of the health literacy discourse.

The process of literature screening followed a multi-stage approach to ensure methodological rigor. After conducting initial searches, duplicate records were removed, and remaining articles were screened by title and abstract for relevance. Articles that passed this initial screening underwent full-text review to confirm their eligibility against inclusion and exclusion criteria. This process was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) principles to maintain transparency in reporting. During full-text screening, particular attention was given to the operationalization of health literacy, as varying definitions exist across the literature. Studies that conceptualized health literacy narrowly as functional literacy without addressing its broader social or cultural dimensions were excluded, unless they provided unique empirical data relevant to marginalized populations.

Evaluation of the included studies was conducted through thematic analysis, focusing on recurring patterns, barriers, and strategies reported in the literature. Key themes included language barriers, digital inequities, cultural misalignment of health programs, the role of social support networks, and the function of community-based health workers as mediators of health information. Each theme was analyzed across diverse population groups and geographical contexts to identify both shared challenges and context-specific variations. For example, digital exclusion was a recurrent barrier across multiple marginalized populations, but its manifestations varied significantly between incarcerated individuals and rural refugee communities. This thematic synthesis allowed for a nuanced understanding of health literacy as both a universal challenge and a context-dependent phenomenon.

Quality appraisal of the studies was also undertaken to strengthen the validity of the review's conclusions. For quantitative studies, factors such as sample size, representativeness, and validity of measurement tools (e.g., Health Literacy Questionnaire) were assessed. For qualitative studies, credibility was evaluated through methodological transparency, reflexivity, and triangulation of data sources. Studies with significant methodological limitations, such as inadequate description of sampling or insufficiently substantiated claims, were noted but not excluded, as they still provided valuable insights into under-researched contexts. Instead, these limitations were acknowledged in the synthesis to reflect the uneven quality of evidence in the field.

The methodological approach adopted in this review was not without challenges. One notable issue was the heterogeneity of definitions and measures of health literacy, which complicated cross-study comparisons. Furthermore, marginalized communities are often underrepresented in research due to structural barriers in study recruitment, leading to a reliance on small, localized samples. To mitigate these challenges, the review prioritized inclusivity in study designs and emphasized qualitative accounts that highlighted lived experiences, even when quantitative generalizability was limited. This approach allowed the review to remain faithful to the complexities of marginalized contexts while still identifying overarching patterns.

In conclusion, the methodology applied in this review reflects a deliberate effort to balance rigor with inclusivity. By combining systematic database searches, well-defined inclusion and exclusion criteria, and thematic synthesis of diverse study designs, the review provides a robust foundation for analyzing health literacy in marginalized communities. The methodological framework not only ensured that the review captured a wide spectrum of evidence but also foregrounded the voices and experiences of those most affected by health inequities. Such an approach is essential for producing knowledge that is both academically rigorous and practically relevant for policymakers, healthcare providers, and community stakeholders seeking to address disparities in health literacy (Cardoso et al., 2024).

RESULT AND DISCUSSION

The results of this narrative review are organized thematically to capture the multiple dimensions of health literacy in marginalized communities. A thematic summary table and conceptual map were developed to enhance accessibility and reader comprehension. The synthesis of studies reveals consistent challenges in access to health information, the compounding effects of digital inequality, the influence of cultural and linguistic factors, the role of community-based actors and trusted messengers, and the global differences that shape health literacy outcomes (Gupta et al., 2022). Each theme is supported by empirical evidence, contextualized within diverse settings, and compared across international experiences to provide a comprehensive understanding of the subject.

Access to Health Information emerged as a central barrier for marginalized groups, particularly refugees, indigenous populations, and those living in poverty. Several studies identified low levels of education and health literacy skills as primary impediments to effectively engaging with health systems. Wong et al. (2024) highlighted that Myanmar refugees resettled in Australia faced significant difficulties in understanding nutrition and health information due to limited exposure to structured health education programs and the lack of responsive healthcare services tailored to their needs (Tamayo-Fonseca et al., 2023). Social stigma also restricted open discussions about health, especially in contexts where cultural norms discouraged conversations about sensitive health topics (Masaquel et al., 2022). These findings underscore that access barriers are not limited to structural deficiencies but also deeply rooted in cultural and social frameworks.

Community strategies have emerged as adaptive mechanisms to mitigate these barriers. Vaugoyeau et al. (2024) provided evidence from Paris, where community health worker (CHW)-led sexual health programs in homeless hostels significantly improved health engagement among participants. By creating social bonds and fostering trust, these initiatives facilitated greater uptake of health education. Similarly, culturally adapted educational materials were shown to improve comprehension and acceptance of health information, demonstrating that interventions aligned with cultural contexts hold promise for advancing health literacy (Tartaglia et al., 2022). The literature suggests that participatory approaches involving community members in planning and implementation amplify effectiveness, as they ensure relevance and sustainability.

Digital Literacy and the Technology Gap represent another critical theme influencing health literacy outcomes. The growing reliance on digital platforms for health communication has created inequities among marginalized populations who lack access to technology or the skills to navigate it effectively. Hwang et al. (2024) documented how older individuals released from prison experienced digital deprivation, leaving them unable to access necessary health information and exacerbating pre-existing health vulnerabilities. This “digital divide” manifests as reduced capacity to engage with telehealth services, online health portals, and digital public health campaigns. The implications are profound, as limited digital literacy contributes to misinformation exposure, delayed health-seeking behavior, and poorer outcomes overall (Rodriguez et al., 2022).

In response to these challenges, digital interventions tailored to marginalized groups have demonstrated measurable benefits. Valera et al. (2021) reported that the development of culturally sensitive cancer education videos improved knowledge and encouraged preventive practices among communities with low health literacy. Similarly, mobile applications and digital platforms designed with simplified interfaces and localized content improved accessibility, particularly among linguistically diverse communities (Wu et al., 2021). While promising, these digital initiatives require sustained investment and infrastructure development to close the gap for populations still excluded from the digital landscape.

Cultural and Linguistic Factors play a decisive role in shaping health literacy practices. Cultural norms, values, and traditions determine not only the receptivity of communities to health messages but also the ways in which such information is interpreted. Masaquel et al. (2022) emphasized that cultural taboos surrounding discussions of health topics often create barriers to effective communication between healthcare providers and patients. Language limitations exacerbate these challenges, leading to frequent misinterpretations of medical advice and diminished trust in health systems (Wong et al., 2024). This misalignment of communication channels widens the gap between formal health systems and community-level practices.

Effective cultural communication models demonstrate that aligning interventions with local traditions improves health outcomes (Voges et al., 2023). Sharpe et al. (2024) examined cross-cultural, community-based programs in Africa that targeted vulnerable youth populations with mental health interventions. Their findings underscored that culturally sensitive strategies, such as using local languages, involving community leaders, and embedding interventions in familiar cultural practices, foster greater acceptance and participation. Similarly, the integration of indigenous food traditions into nutrition education programs for Aboriginal children enhanced both cultural identity and health literacy outcomes (Tartaglia et al., 2022). These examples indicate that culturally informed models are not supplementary but foundational to effective health communication.

The Role of Communities and Trusted Messengers emerged as a recurring theme across the literature. Trusted messengers—individuals who are socially embedded and culturally aligned with marginalized groups—were identified as pivotal in delivering health messages. Kader et al. (2023) noted that trusted community figures often have greater legitimacy than formal healthcare providers, particularly in communities with histories of exclusion or mistrust. Their ability to communicate in culturally resonant ways increased receptivity to health education. These messengers bridged the information gap by facilitating dialogue, clarifying misinformation, and reinforcing health-promoting behaviors.

The effectiveness of community-based approaches was particularly evident during the COVID-19 pandemic. Wu et al. (2021) highlighted the role of CHWs in vaccine literacy campaigns, where trusted intermediaries increased vaccination uptake among populations otherwise resistant to formal health messaging. These programs not only improved immediate health outcomes but also strengthened community trust in healthcare institutions. Importantly, the impact extended beyond specific campaigns, creating lasting improvements in the willingness of marginalized groups to engage with health systems. The literature consistently affirms that empowering trusted messengers and investing in community-based approaches are vital strategies for addressing health literacy inequities.

Global Comparisons provide further perspective on the disparities in health literacy across different socio-economic and cultural settings. Evidence suggests that marginalized populations in both high-income and low-income countries face challenges, but the severity and nature of barriers differ. In high-income countries, individuals from low-income backgrounds often struggle with navigating complex healthcare systems and understanding technical health information (Nutbeam, 2018). In contrast, marginalized groups in low- and middle-income countries encounter more fundamental obstacles, such as inadequate infrastructure, lack of health professionals, and limited access to basic health education (Koh et al., 2012).

These disparities highlight the importance of context-specific interventions. For instance, Clarkston, Georgia—a U.S. city known for its diverse immigrant and refugee population—implemented risk communication strategies involving local leaders to effectively reach minority groups during public health crises (Wu et al., 2021; Kobayashi et al., 2024). Meanwhile, in France, CHW-led programs targeting homeless populations demonstrated success in improving sexual health outcomes by fostering social trust (Vaugoyeau et al., 2024). In African contexts, Sharpe et al. (2024) showed that cross-cultural approaches addressing mental health challenges among disadvantaged youth yielded positive results, underscoring the adaptability of culturally sensitive interventions across regions. These best practices suggest that successful models in one region can be adapted to other contexts, provided they are tailored to local cultural and social realities.

Taken together, the results of this review affirm that health literacy among marginalized communities is shaped by an interplay of educational, technological, cultural, and social factors (Amoah et al., 2022). While barriers are persistent and multifaceted, community-driven strategies and contextually sensitive interventions demonstrate measurable potential for progress. The comparative evidence underscores the need for policymakers and practitioners to consider not only the structural determinants of health literacy but also the cultural and relational dimensions that enable sustainable change. The findings establish a critical foundation for subsequent discussion on systemic reforms, intervention design, and the broader implications for advancing health equity globally

The findings of this narrative review confirm and expand upon existing theories of health literacy, particularly those emphasizing its social dimensions. Traditional models of health literacy have often framed it as an individual skill, dependent primarily on cognitive abilities and educational attainment (Nutbeam, 2008). However, studies such as those by Wong et al. (2024) demonstrate that health literacy in marginalized populations is inseparable from broader social contexts, including cultural traditions and community support networks. This evidence reinforces the World Health Organization's conceptualization of health literacy as a social construct, shaped by determinants beyond individual capacity (WHO, 2016). At the same time, the findings challenge overly individualistic approaches by highlighting the role of cultural knowledge, collective practices, and community agency in shaping health outcomes. This underscores the importance of contextualizing health literacy within the lived experiences of marginalized groups rather than applying a universal model that risks overlooking local realities.

One of the most significant contributions of this review is its illumination of the systemic factors that sustain low health literacy among marginalized communities. Policy frameworks that fail to address social inequities in health service provision perpetuate disparities in access to and comprehension of health information. As Masaquel et al. (2022) observe, systemic injustices in both healthcare and education systems exacerbate the limited understanding that marginalized groups have of their rights and entitlements to health services. These systemic deficiencies are compounded by economic instability, where individuals preoccupied with immediate survival needs are less likely to prioritize preventive health measures or engage with educational health resources (Tartaglia et al., 2022). This dynamic demonstrates how structural determinants—including policy design, economic marginalization, and educational inequities—interact to restrict health literacy and perpetuate health inequities.

The influence of digital inequity also exemplifies systemic exclusion. Hwang et al. (2024) revealed how digital deprivation among individuals leaving prison limited their ability to access reliable health information, thereby exacerbating health vulnerabilities. This finding illustrates that health literacy cannot be disentangled from broader questions of digital justice, access to infrastructure, and technological inclusivity. The COVID-19 pandemic further amplified this issue, as health systems increasingly relied on digital communication, inadvertently excluding populations with limited technological access or skills (Paakkari & Okan, 2020). These results confirm that systemic inequities in digital access are not peripheral but central to understanding health literacy disparities.

Against this backdrop, the role of community-led initiatives and trusted messengers emerges as a countervailing force capable of mitigating systemic barriers. Community health worker (CHW)-led programs, as described by Vaugoyeau et al. (2024), demonstrate that interventions grounded in community trust and cultural familiarity can bridge gaps in formal health communication. These initiatives reveal how relational trust and shared cultural identity enhance the legitimacy of health information, enabling greater receptivity and adherence. During the COVID-19 pandemic, Wu et al. (2021) documented how trusted intermediaries successfully increased vaccine uptake among marginalized groups, reinforcing the argument that top-down health communication strategies are less effective in contexts where mistrust of institutions is pervasive. These findings collectively highlight the need for health systems to reframe literacy interventions around community engagement and cultural resonance.

Policy and programmatic solutions must, therefore, adopt integrative and multi-level approaches that recognize the systemic nature of health literacy barriers. Community-based health education programs that deliver information in culturally and linguistically accessible ways are one such solution. Evidence suggests that these interventions, when supported by government funding and institutional partnerships, effectively dismantle communication barriers and foster inclusivity (Kader et al., 2023). Equally important is the institutionalization of policies that empower local organizations, ensuring that community actors are not peripheral but central to health systems. Involving local leaders, community organizations, and culturally competent educators has been shown to improve not only the dissemination of health information but also the overall legitimacy of health interventions (Sharpe et al., 2024).

Digital innovation also presents promising opportunities for addressing literacy gaps, provided interventions are tailored to the realities of marginalized groups. Valera et al. (2021) demonstrated that culturally adapted digital cancer education videos improved knowledge and preventive health behaviors in low-literacy communities. These findings highlight the potential of digital interventions to expand access to health education if barriers of infrastructure, affordability, and digital literacy are addressed concurrently. Policymakers should consider policies that subsidize digital access, integrate digital skills training, and develop culturally sensitive health applications to ensure that technological progress does not deepen existing inequities.

Another systemic factor shaping health literacy outcomes is the misalignment between mainstream health systems and cultural-linguistic practices of marginalized groups. Miscommunication stemming from language barriers and cultural incongruence undermines the delivery of health education and reduces trust in health providers (Wong et al., 2024). Models of culturally sensitive communication, such as those studied by Sharpe et al. (2024), suggest that embedding local traditions, involving indigenous leaders, and utilizing familiar linguistic frameworks significantly enhance the effectiveness of health interventions. This highlights the importance of policies and training that emphasize cultural competence in healthcare delivery, ensuring providers can adapt to the diverse realities of marginalized patients.

Despite these promising approaches, limitations in the existing literature constrain our understanding of health literacy in marginalized communities. A major limitation lies in the geographic concentration of studies, with many conducted in high-income countries, leaving knowledge gaps in low- and middle-income contexts where systemic inequities may be most severe (Nutbeam, 2018). Furthermore, variations in the conceptualization and measurement of health literacy complicate cross-study comparisons. Some studies focus narrowly on functional literacy, while others incorporate broader critical and interactive dimensions, resulting in inconsistent findings and limited generalizability (Sørensen et al., 2012). This heterogeneity underscores the need for standardized, multidimensional frameworks to evaluate health literacy in diverse populations.

Another limitation is the underrepresentation of specific groups, such as women migrants, incarcerated populations, and indigenous communities, in the empirical literature. Studies such as Wong et al. (2024) on migrant women along the Myanmar-Thailand border highlight the unique challenges these populations face in accessing health information, but such analyses remain rare. This lack of representation risks obscuring the particular vulnerabilities of groups whose health literacy needs may differ significantly from those of broader marginalized populations. Future research must prioritize these underrepresented groups to ensure that interventions are equitably designed and implemented.

In addition, methodological constraints reduce the robustness of some findings. While qualitative studies provide rich insights into lived experiences, their small sample sizes and localized focus limit their ability to generate broader inferences. Conversely, quantitative studies often fail to capture the socio-cultural nuances that shape health literacy practices. Mixed-methods approaches, though less common, appear particularly valuable in bridging this divide by providing both statistical generalizability and contextual depth (Rowlands et al., 2017). Further investment in mixed-methods research is essential to develop a more comprehensive understanding of health literacy in marginalized contexts.

Looking forward, research should also focus on longitudinal analyses to evaluate the long-term effectiveness of interventions. Most studies to date assess immediate or short-term outcomes, leaving questions about sustainability unresolved. Longitudinal evidence is critical to determine whether improvements in health literacy translate into durable health outcomes, such as reduced chronic disease incidence or improved preventive care engagement (Griese & Schaeffer, 2025). Such evidence would also provide valuable insights into the scalability of interventions across different contexts.

Overall, the discussion demonstrates that health literacy in marginalized communities is shaped not only by individual capacities but also by systemic, cultural, and technological factors. By situating health literacy within broader structures of inequality, this review challenges reductionist approaches and underscores the importance of integrated, community-centered, and culturally sensitive strategies. While limitations in the current literature persist, the insights gained highlight clear pathways for policy reform, intervention design, and future research that collectively advance the goal of health equity.

CONCLUSION

This narrative review highlights that health literacy in marginalized communities is not merely an individual capability but a socially and structurally embedded construct shaped by educational attainment, cultural context, systemic inequities, and digital access. The findings confirm that barriers to health literacy are multifaceted, encompassing inadequate health education, language and cultural misalignments, limited digital literacy, and persistent socioeconomic disadvantage. At the same time, the evidence demonstrates that community-based strategies, trusted messengers, and culturally sensitive interventions are effective mechanisms for improving engagement and comprehension. These results reaffirm the urgency of addressing health literacy as a global public health priority and a pathway to reducing health inequities.

Policy implications emphasize the need for integrating culturally adapted health education into healthcare systems, investing in digital equity, and institutionalizing the role of community health workers in disseminating information. Governments and healthcare providers must collaborate with local organizations to deliver health education that is linguistically and culturally appropriate, while also investing in digital infrastructure to ensure marginalized groups are not excluded from increasingly technology-driven healthcare systems. Future research should expand the geographic scope of studies, particularly in Southeast Asia and among underrepresented groups such as women migrants and indigenous populations, to ensure equitable representation and evidence-based intervention design. In conclusion, advancing health literacy in marginalized communities requires multi-level strategies that combine systemic reforms, digital innovation, and community empowerment to create equitable and sustainable health outcomes.

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