

Health Literacy and Qualitative Research: Bridging Socio-Cultural Factors, Technology, and Policy

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ABSTRACT: Health literacy, defined as the ability to access, comprehend, evaluate, and apply health information, has emerged as a vital determinant of health outcomes. This narrative review aimed to explore how qualitative methodologies contribute to understanding health literacy. Specifically, it sought (1) to examine how qualitative methods capture the lived experiences shaping health literacy, (2) to analyze the role of socio-cultural and technological factors, and (3) to identify methodological gaps and innovations. A total of 58 peer-reviewed studies were included in this review. Inclusion criteria focused on English-language, peer-reviewed studies published within the last decade, with an emphasis on vulnerable populations. Findings reveal that in-depth interviews, focus group discussions, thematic analysis, and photovoice are widely used to capture the lived experiences and social contexts that shape health literacy. Results highlight the strong influence of socio-cultural norms, traditional practices, and social support networks, while digital innovations such as mobile health tools and online platforms offer promising but unevenly distributed benefits. Challenges persist, including methodological limitations, underrepresentation of vulnerable populations, and systemic barriers such as social inequality, weak infrastructure, and limited education. The discussion emphasizes the importance of participatory, community-based interventions, culturally sensitive communication, and equitable integration of digital technologies. Future research should prioritize longitudinal and cross-contextual studies to address gaps and evaluate long-term outcomes. Overall, qualitative approaches provide indispensable insights into health literacy and can guide the development of policies and interventions that are contextually relevant and globally applicable.

Keywords: Health Literacy, Qualitative Research, Socio-Cultural Factors, Digital Health, Participatory Methods, Global Health Policy, Vulnerable Populations.



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INTRODUCTION

Health literacy has emerged as a critical area of inquiry in public health research, defined as the ability of individuals to access, comprehend, evaluate, and apply health information to make appropriate decisions and take effective action in health contexts (Rostamzadeh et al., 2020; Machado & Vieira, 2020). Theoretical frameworks underlying health literacy encompass social,

cognitive, and emotional dimensions that influence a person's capacity to engage with and utilize health-related knowledge. Central to the concept are comprehension, communication skills, and the practical ability to use information in real-world health situations (Rostamzadeh et al., 2020; McKenna et al., 2017). These multidimensional attributes illustrate why health literacy is increasingly viewed as a determinant of health outcomes, influencing not only individual behaviors but also broader patterns of public health engagement.

Over the past decade, significant global and regional trends have emerged in applying qualitative methodologies to health literacy research. Qualitative approaches allow researchers to explore individual perspectives and the social contexts that shape how people understand and act upon health information (McKenna et al., 2017; Simkins et al., 2023). Studies have consistently shown that cultural and social factors strongly mediate interactions with health information, thereby shaping decision-making processes regarding healthcare (Tempes et al., 2023). For example, research in rural settings has illustrated how misconceptions about chronic conditions such as diabetes hinder effective disease management (Morrison et al., 2019; Leyns et al., 2021). Likewise, community-based interventions employing participatory methods have demonstrated positive outcomes in enhancing health literacy among vulnerable groups (McKenna et al., 2018; Wray et al., 2019). Such evidence underscores the value of qualitative inquiry in capturing the lived experiences of individuals navigating complex healthcare environments.

Epidemiological evidence further highlights the urgency of advancing health literacy, particularly among vulnerable populations. Low levels of health literacy have been linked with higher hospitalization rates and difficulties in managing chronic diseases (Negarandeh et al., 2024; Weller et al., 2021). Individuals with lower levels of education or socioeconomic disadvantage face significant barriers in understanding medical instructions, leading to poorer overall health outcomes (Naef et al., 2024; Howe et al., 2023; Virlée et al., 2020). These disparities indicate that health literacy is not evenly distributed across populations but is deeply stratified along socioeconomic, educational, and cultural lines. Consequently, addressing health literacy represents a means of reducing health inequities and improving population health.

The theoretical and empirical developments in health literacy research point to its critical importance in global and regional health contexts. By strengthening the ability of individuals, especially those who are underserved, to access and act upon health information, health literacy can contribute to improved health outcomes, enhanced quality of life, and more efficient use of health resources. Moreover, it can support the empowerment of communities to engage actively with healthcare systems, thereby contributing to more equitable and inclusive health service delivery.

However, significant challenges persist in measuring and improving health literacy across diverse cultural and social contexts. Understanding of health and illness is not uniform but shaped by cultural background, lived experiences, and educational attainment (McKenna et al., 2018; McKenna et al., 2017). In communities with distinctive health traditions and practices, approaches to health information and healthcare utilization often diverge from biomedical paradigms. These differences pose considerable challenges in developing universal measurement tools that can be valid across cultures (Simkins et al., 2023). Furthermore, structural factors such as access to

technology, language proficiency, and educational attainment influence individuals' abilities to comprehend and apply health instructions (Wray et al., 2019). Such disparities complicate the development of interventions that can be both culturally sensitive and broadly applicable.

A further challenge lies in the methodological complexity of qualitative research itself. While qualitative methods provide deep insights into lived experiences, issues such as sample size, representativeness, and cross-context comparability often limit their generalizability. Moreover, integrating qualitative findings into evidence-based policy frameworks remains a persistent difficulty, as policymakers often demand quantifiable indicators and standardized metrics.

The literature reveals notable gaps that justify the need for further review. First, there is a lack of studies that examine individual experiences of health literacy in diverse cultural and social contexts (Velardo & Drummond, 2019). Much of the research remains concentrated in specific geographic regions or population groups, leaving important variations unexplored. Second, while considerable attention has been given to physical health, mental health literacy remains relatively under-researched (Leyns et al., 2018; Simpson et al., 2017). Third, there is limited progress in translating qualitative findings into community-based interventions aimed at enhancing health literacy among vulnerable populations (Camargo-Plazas et al., 2023; Tempes et al., 2023). These gaps underscore the necessity for a comprehensive review that integrates methodological insights with practical applications.

The primary aim of this review is therefore to explore how health literacy can be understood and enhanced across different cultural and social contexts. It seeks to analyze key factors influencing health literacy, including sociocultural norms, community practices, and the effectiveness of interventions that have been implemented. By synthesizing insights from qualitative research, this study intends to provide a more nuanced understanding of health literacy that can inform future research, practice, and policy.

The scope of this review extends to populations that are economically and educationally disadvantaged, as these groups are often most at risk of poor health literacy outcomes. Specifically, the analysis considers populations with low educational attainment, migrant communities, and individuals with chronic health conditions in regions where healthcare access is limited (Witte & Handberg, 2019; Kaneoka & Spence, 2019; Tempes et al., 2023). By focusing on these groups, the review addresses both global health priorities and pressing social justice concerns, highlighting the intersection between literacy, equity, and health.

In identifying the challenges and gaps outlined above, this review aspires to contribute meaningful insights into how health literacy can be strengthened through qualitative research. Ultimately, the findings are intended to guide researchers, healthcare practitioners, and policymakers in developing interventions and policies that are both evidence-based and contextually relevant. By enhancing the understanding of how individuals interact with health information within their cultural and social environments, the review seeks to advance the broader goal of achieving equitable and sustainable health outcomes worldwide.

METHOD

The methodological approach employed in this study was designed to ensure comprehensive coverage of the relevant literature while maintaining rigor in the selection and evaluation process. A narrative review approach was chosen for its flexibility in synthesizing heterogeneous evidence across disciplines. Unlike systematic or scoping reviews, this approach emphasizes conceptual synthesis rather than exhaustive enumeration, acknowledging its limitations in replicability and objectivity. The primary aim was to identify, analyze, and synthesize qualitative research related to health literacy across diverse cultural and social contexts. Given the interdisciplinary nature of health literacy, which intersects with public health, education, sociology, and behavioral sciences, a systematic strategy was adopted to capture the breadth and depth of existing scholarship. Although this study did not involve human participants, it adhered to established ethical norms for secondary research, including responsible citation practices, avoidance of bias, and respect for the integrity of original studies.

The literature search was conducted across PubMed, Scopus, and Web of Science using full Boolean strings such as ('health literacy' AND 'qualitative research') OR ('health literacy' AND 'participatory methods') AND ('chronic disease'). A PRISMA-style flow diagram summarized identification, screening, and inclusion steps. These databases were chosen due to their extensive coverage of peer-reviewed articles and their relevance to both health sciences and interdisciplinary studies. PubMed, widely recognized as a premier database for biomedical literature, was essential for identifying clinical and health-related studies focusing on health literacy. Scopus was included because of its broad multidisciplinary scope and its utility in capturing studies that span the health, social, and behavioral sciences. Web of Science provided additional coverage and ensured that seminal works and citation patterns could be effectively traced. The inclusion of these three databases maximized the potential to identify high-quality and up-to-date studies on health literacy, particularly those employing qualitative methodologies (McKenna et al., 2017; Wray et al., 2019).

The search strategy relied on a carefully developed set of keywords and Boolean operators to capture the complexity of health literacy research. Core keywords included "health literacy," "qualitative research," "narrative review," "participatory methods," "chronic disease," and "health information." Boolean operators such as AND, OR, and NOT were employed to refine the results and expand or narrow the scope depending on the query. For example, searches such as "health literacy AND qualitative research" ensured the retrieval of articles explicitly addressing qualitative methodologies, while "health literacy OR chronic disease" broadened the search to capture studies examining literacy within the context of long-term health conditions. These combinations allowed for flexibility in targeting both the methodological focus and the substantive content of studies (Simkins et al., 2023; Virlée et al., 2020; Aiyub et al., 2023).

To enhance transparency and reproducibility, the inclusion and exclusion criteria were clearly defined prior to the screening process. Inclusion criteria required that articles be written in English and published within the last ten years to ensure the relevance and currency of the information. Studies had to employ qualitative or mixed-methods designs with a qualitative emphasis, focusing specifically on health literacy. Eligible studies included those involving diverse demographic groups but paid particular attention to vulnerable populations, such as individuals with chronic conditions, migrants, or those of lower socioeconomic and educational backgrounds. The

emphasis on these groups was informed by the well-documented disparities in health literacy outcomes across different strata of society (Naef et al., 2024; Howe et al., 2023).

Exclusion criteria were established to maintain focus and quality. Articles that did not employ qualitative or mixed-methods approaches were excluded, as were studies that addressed literacy in general without explicit attention to health literacy. Additionally, research that was not peer-reviewed or lacked rigorous methodological standards was excluded to ensure the reliability of the evidence base. Finally, articles not available in full text or not accessible through institutional subscriptions were excluded, although every effort was made to retrieve such studies through alternative means where possible (Hawkins et al., 2019; Albarqi et al., 2024).

The process of literature selection followed a structured sequence beginning with the identification of articles through database searches. Titles and abstracts were screened to assess their relevance to the research objectives, followed by a full-text review of eligible studies. Two reviewers independently conducted the screening to reduce bias and increase reliability, with discrepancies resolved through discussion and consensus. This multi-step process ensured that only the most relevant and methodologically sound studies were included in the review.

Articles that met the inclusion criteria were subsequently evaluated in greater depth. The evaluation process emphasized both methodological rigor and contextual relevance. Methodological rigor was assessed by examining the clarity of research design, data collection, and analytic procedures. Studies that explicitly described their qualitative methodologies, such as thematic analysis, grounded theory, ethnography, or participatory approaches like photovoice, were prioritized for inclusion. The contextual relevance was evaluated by considering whether the study addressed populations or settings that were particularly relevant to health literacy, including marginalized groups, rural communities, and those with chronic health conditions (McKenna et al., 2018; Morrison et al., 2019).

The synthesis followed an integrative thematic approach using inductive coding assisted by NVivo 12 software to identify recurring patterns and emergent categories across studies. Studies were categorized based on the methodological approaches employed and the populations examined. This enabled a comparative analysis of how different qualitative methods have been used to investigate health literacy across various cultural and social contexts. For example, thematic analysis was frequently employed to capture individual experiences and perspectives, while participatory methods such as photovoice highlighted community-level insights and collective understandings (Tempes et al., 2023; Wray et al., 2019).

Furthermore, the methodological diversity of the included studies allowed for a critical examination of both strengths and limitations. While many studies offered rich contextual insights, challenges such as small sample sizes, lack of generalizability, and limited reporting of theoretical frameworks were noted. These observations informed the identification of gaps in the literature and highlighted areas where methodological innovation or greater transparency is needed (Velardo & Drummond, 2019; Leyns et al., 2018).

The evaluation process also emphasized the importance of assessing how findings were linked to practical outcomes and policy implications. Studies that demonstrated clear connections between

qualitative insights and the design or evaluation of health literacy interventions were given particular attention. This focus reflects the review's overarching aim of not only synthesizing methodological trends but also identifying pathways for translating qualitative evidence into actionable strategies for improving health literacy.

Finally, the analysis incorporated a critical appraisal of the geographic and demographic scope of the literature. While studies conducted in high-income countries provided important insights, the review sought to foreground findings from low- and middle-income settings where health literacy challenges are often most pronounced. This emphasis ensured that the review captured a more balanced and globally relevant picture of the field, acknowledging both contextual specificities and universal themes (Camargo-Plazas et al., 2023; Tempes et al., 2023).

In sum, the methodology employed in this review combined a rigorous search strategy with clearly defined inclusion and exclusion criteria, systematic screening and evaluation processes, and integrative synthesis. By leveraging multiple databases, carefully selected keywords, and methodological appraisal, the review ensured comprehensive coverage of the existing qualitative literature on health literacy. This methodological rigor provided a robust foundation for the subsequent analysis of trends, gaps, and innovations in qualitative health literacy research, and allowed the study to contribute meaningfully to the broader academic and policy discourse on improving health outcomes through enhanced literacy.

RESULT AND DISCUSSION

The findings of this narrative review are presented according to four main thematic areas that emerged from the qualitative literature on health literacy: methodological trends, socio-cultural factors, technology and innovation, and gaps in existing research. These themes reflect the diversity of approaches and contexts in which health literacy has been studied, and they provide a structured basis for understanding how qualitative methodologies contribute to this evolving field.

Trends in Qualitative Methodologies

Qualitative methodologies have been widely employed to capture the complexity of health literacy across populations and contexts. Among the most frequently used methods are in-depth interviews, focus group discussions, thematic analysis, and photovoice. In-depth interviews provide researchers with highly personal accounts of how individuals experience and navigate health information, while focus group discussions allow for the exploration of collective perspectives and group dynamics (Nguyen et al., 2022; Joaquim et al., 2024). Thematic analysis, a method that identifies recurring patterns in qualitative data, has been particularly effective in synthesizing large amounts of interview or focus group material to reveal shared challenges and practices (Hawkins et al., 2021; Salim et al., 2021). Photovoice, by contrast, engages participants in documenting their health-related experiences visually, enabling a deeper understanding of health literacy through imagery and personal narratives (Nguyen et al., 2022; Salim et al., 2021).

These methodologies are not applied uniformly across global contexts. In high-income countries such as those in North America and Europe, researchers often have access to greater resources, enabling more complex and diverse methodological approaches (Andersen et al., 2021; Felix et al., 2021). For instance, focus group discussions in these contexts are typically highly structured and draw participants from diverse backgrounds, providing a rich cross-section of perspectives. By contrast, in low- and middle-income countries, researchers face challenges such as limited infrastructure, restricted access to communities, and fewer opportunities for advanced training. These limitations often result in the use of simpler, less resource-intensive methods, which may yield less depth in analysis (Dyke et al., 2024; Waltz et al., 2020). Additionally, vulnerable groups in these regions are frequently underrepresented in qualitative studies, reducing the inclusivity and generalizability of findings (Waltz et al., 2020).

Socio-Cultural Factors

Socio-cultural dynamics play a central role in shaping health literacy, influencing not only how individuals engage with health information but also how decisions are made within families and communities. Cultural norms often determine whether individuals seek medical advice independently or defer to family or community authorities. In many collectivist societies, health decisions are strongly mediated by familial or communal influence, which may restrict independent engagement with health information (Moise et al., 2024; Riley et al., 2024). Such dynamics underscore that health literacy cannot be understood purely as an individual skill but must also be analyzed as a social practice embedded in cultural expectations.

The importance of social support has also been emphasized in numerous studies. Individuals embedded in supportive networks demonstrate better comprehension and application of health information, highlighting the role of interpersonal and community relationships in fostering effective health literacy (Sodi et al., 2022; Valdivia et al., 2023). Cross-national comparisons further illustrate the powerful role of cultural norms, social support, and traditional beliefs in shaping health literacy outcomes. In several countries, reliance on traditional or alternative medicine competes with the adoption of biomedical healthcare practices. For example, in societies with strong beliefs in traditional healing, individuals often prefer consulting traditional practitioners over formal healthcare providers, which can limit access to accurate and timely health information (Ochieng & Crist, 2020; Paine et al., 2023). These dynamics are not inherently negative but point to the need for culturally sensitive approaches that bridge traditional and modern systems of care.

The interplay between social support and cultural practices also influences how health literacy interventions are received. Families and peers often provide the first line of guidance in interpreting medical instructions or understanding disease management strategies. As studies have shown, this relational dimension of health literacy can be a critical enabler of improved health outcomes, but it can also reinforce misinformation if the social networks themselves are misinformed (Aboye et al., 2024; Khanal et al., 2023). This duality underscores the necessity of tailoring health literacy interventions to local cultural and social realities.

Technology and Innovation

The role of digital technologies in supporting health literacy has grown significantly in recent years, introducing both opportunities and challenges. Mobile health (mHealth) platforms, social media, and digital ethnography are among the most prominent innovations leveraged to enhance health literacy. These technologies have expanded access to health information and facilitated communication between healthcare providers and patients, particularly in settings where traditional health services are limited (McKenna et al., 2018; Sung et al., 2022).

mHealth tools, such as medication reminders and disease education applications, have been shown to improve adherence to treatment and empower patients to manage their conditions more effectively (Albino et al., 2014). Social media platforms and digital ethnography, meanwhile, provide insight into how individuals engage with health information in everyday digital spaces, revealing both opportunities for health promotion and risks of misinformation (Wynn et al., 2018; Nguyen et al., 2022). However, the promise of these technologies is tempered by persistent digital divides. Inequalities in technology access, digital literacy, and infrastructure mean that certain populations remain excluded from the benefits of these innovations, thereby exacerbating health inequities (Nguyen et al., 2022).

Empirical evidence from various countries underscores the global relevance of digital interventions. In Peru, text message reminders significantly improved tuberculosis medication adherence and reduced the sense of isolation among patients (Albino et al., 2014). In Malaysia, photovoice methods integrated with digital tools helped identify community-based strategies for asthma management among individuals with low health literacy, reinforcing the importance of participatory and locally relevant approaches (Witte & Handberg, 2019). In other contexts, digital communities created through online support groups have provided cancer patients with opportunities to share experiences and receive psychosocial support, demonstrating the potential of digital spaces to complement traditional healthcare (Rossen et al., 2020).

These findings highlight the paradox of technology: while it has the capacity to enhance health literacy and democratize access to information, it can also reinforce existing inequities if digital access and literacy are not equitably distributed. Thus, interventions leveraging digital platforms must be carefully designed to account for contextual realities and ensure inclusivity.

Research Gaps

Despite growing interest in health literacy and the increasing application of qualitative methodologies, significant gaps remain. One of the most notable gaps is the underrepresentation of vulnerable populations such as individuals with intellectual disabilities, refugees, and pregnant women with obesity (McMullen et al., 2023; Aiyub et al., 2023). These groups face unique health literacy challenges, yet research on their experiences remains scarce. Studies on intellectual disability, for instance, are limited despite the recognition that individuals in this group often struggle to access and interpret health information, leaving them at heightened risk of poor health outcomes (Felix et al., 2021).

Similarly, while research on refugees has expanded in recent years, much of it has focused on immediate health needs rather than exploring deeper dimensions of health literacy. Refugee populations often encounter barriers related to language, cultural differences, and legal status, which profoundly affect their ability to engage with healthcare systems. However, few studies provide a comprehensive understanding of how these factors shape their health literacy in the long term (Rossen et al., 2020; Dabiri et al., 2024).

Methodological limitations further compound these gaps. Many studies report difficulties in recruiting representative participants, particularly from marginalized groups. Issues such as limited cultural sensitivity training among researchers and stigma surrounding certain health conditions hinder the collection of authentic and reliable data (David & Carignan, 2017; Blake et al., 2023). Translation of health concepts into culturally relevant terms also presents significant challenges, often reducing the accuracy and resonance of findings across diverse populations (Paine et al., 2023). These methodological constraints underscore the need for more inclusive research designs that engage marginalized voices and account for cultural complexity.

In summary, the results of this narrative review demonstrate that qualitative methodologies have provided invaluable insights into health literacy across diverse settings. They reveal important socio-cultural and technological influences while also exposing persistent gaps in representation and methodological practice. Addressing these gaps requires methodological innovation, greater cultural sensitivity, and deliberate inclusion of vulnerable populations. Together, these findings offer a foundation for advancing health literacy research and for informing interventions that are both evidence-based and contextually responsive.

The analysis of qualitative literature on health literacy demonstrates the critical importance of situating findings within established public health theories and global health policy frameworks. Theories such as the health promotion model and community-based approaches emphasize that sustainable improvements in health literacy require active engagement of communities and the tailoring of interventions to local cultural contexts. Evidence from participatory research approaches indicates that programs co-developed with communities are more likely to be effective and accepted, as they incorporate lived experiences, indigenous knowledge, and socio-cultural practices into intervention design (McKenna et al., 2018; McKenna et al., 2017). These observations align with broader calls for global health policies that are responsive to local realities, ensuring that evidence-based practices are adapted to the specific needs and constraints of different populations (Housen et al., 2019).

One of the central issues highlighted in the literature is the influence of systemic factors that perpetuate low health literacy. Social inequality, in particular, creates structural barriers that disproportionately affect vulnerable populations. Individuals from socioeconomically disadvantaged backgrounds often face restricted access to accurate health information and reliable healthcare services, contributing to disparities in health outcomes (David & Carignan, 2017; Dyke et al., 2024). These inequalities are compounded by limitations in healthcare infrastructure, particularly in rural or low-resource settings. In such contexts, deficiencies in staffing, facilities, and outreach capacity undermine efforts to deliver health information equitably, leaving marginalized groups without adequate support (Wray et al., 2019). Furthermore, educational

inequities play a central role in shaping individuals' ability to understand and act upon health information. Populations with limited formal education frequently lack the foundational skills required to navigate complex medical terminology or evaluate health-related information critically (Hurtienne et al., 2022). These systemic deficiencies create a cycle in which low literacy and poor health outcomes reinforce each other, entrenching inequalities across generations.

The findings also highlight the significant role of cultural and social determinants in shaping health literacy practices. As qualitative research consistently shows, health literacy cannot be reduced to an individual skill but is inherently relational, influenced by family structures, cultural norms, and community values (Moise et al., 2024; Riley et al., 2024). In collectivist societies, health decision-making often occurs at the family or community level, which can either facilitate or inhibit engagement with medical advice, depending on the quality of social support available (Sodi et al., 2022; Valdivia et al., 2023). This underscores the necessity of interventions that not only target individual knowledge and behavior but also account for the social ecosystems in which individuals are embedded. The tendency to rely on traditional healers in some cultural contexts illustrates the challenge of reconciling biomedical approaches with local practices (Ochieng & Crist, 2020; Paine et al., 2023). Instead of dismissing these traditions, effective strategies may involve integrating traditional beliefs with modern health education to foster trust and enhance acceptance.

The increasing role of digital technologies in health literacy further complicates the landscape. Digital platforms such as mHealth applications, online support groups, and social media offer new avenues for disseminating health information and fostering peer support (McKenna et al., 2018; Sung et al., 2022). Evidence from countries like Peru demonstrates that even simple technological interventions, such as SMS reminders, can significantly improve treatment adherence among patients with chronic conditions (Albino et al., 2014). However, these innovations also expose systemic inequities in digital access, as marginalized populations often lack reliable internet connections, digital literacy, or the financial resources to engage with digital tools (Nguyen et al., 2022). Consequently, while technology offers promising opportunities for scaling health literacy interventions, without deliberate strategies to address digital divides, it risks reinforcing existing inequities rather than reducing them (Wynn et al., 2018).

A recurring theme in the literature is the methodological strengths and weaknesses of existing research. Qualitative methodologies provide invaluable insights into lived experiences and contextual factors, yet limitations such as small sample sizes, challenges in achieving representativeness, and difficulties in cross-contextual comparison restrict their generalizability (Velardo & Drummond, 2019; Leyns et al., 2018). Cultural sensitivity in data collection also remains a significant challenge, with researchers sometimes struggling to translate abstract health concepts into locally meaningful terms (Paine et al., 2023). These limitations highlight the importance of methodological innovations and researcher training in cultural competence. Greater emphasis on longitudinal qualitative research could provide deeper insights into how health literacy evolves over time and across life stages, while multi-country comparative studies could help clarify the universal and context-specific elements of health literacy.

The literature also identifies clear policy and practice implications. First, there is strong support for the development of inclusive, community-based health education programs that actively

involve local populations in the design and delivery of interventions. Such participatory approaches not only enhance relevance but also foster community ownership, thereby improving sustainability (McKenna et al., 2018). Second, training healthcare professionals to recognize the social and cultural contexts of their patients is essential. Improved communication skills and the ability to translate complex medical jargon into accessible language can bridge significant gaps in patient understanding (Abay et al., 2016; Joaquim et al., 2024). Third, the integration of digital platforms into health literacy strategies should be pursued cautiously but proactively, ensuring that such tools are designed with inclusivity in mind and adapted to the realities of low-resource settings (Khanal et al., 2023; Choudhry et al., 2016).

Despite these promising directions, there are several critical areas where research remains insufficient. One notable gap concerns the intersection of culture and health literacy in minority and vulnerable populations. While existing studies highlight the influence of cultural norms, more nuanced investigations are needed to understand how these norms interact with structural inequities in shaping health literacy practices (Witte & Handberg, 2019; Sodi et al., 2022). Another underexplored area is the impact of national and global health policies on the development of health literacy in resource-constrained environments. Although some studies have documented the challenges posed by weak infrastructure and limited education, few have systematically analyzed how specific policy frameworks either mitigate or exacerbate these barriers (Mahmoodabad et al., 2020; Simkins et al., 2023). Finally, while technological innovation is a rapidly expanding area, more research is needed on how digital tools can be effectively deployed to reach populations with limited access to technology, ensuring that health literacy initiatives do not inadvertently exclude those most in need (Morrison et al., 2019).

Taken together, the findings suggest that improving health literacy requires a multifaceted strategy that addresses both individual and systemic determinants. Qualitative research offers vital insights into the lived realities of health literacy, but its utility is contingent upon addressing methodological limitations and translating findings into actionable strategies. The integration of community-based education, culturally sensitive communication, and equitable digital innovation provides a promising pathway for future policy and practice. Continued research and cross-sector collaboration are essential to deepen understanding and ensure that health literacy initiatives are inclusive, effective, and sustainable across diverse contexts.

CONCLUSION

This narrative review highlights the critical role of qualitative methodologies in advancing the understanding of health literacy across diverse cultural and social contexts. The findings indicate that techniques such as in-depth interviews, focus group discussions, thematic analysis, and photovoice provide valuable insights into how individuals and communities interpret and apply health information. Socio-cultural factors, including cultural norms, traditional practices, and social support networks, were shown to strongly shape health literacy outcomes, emphasizing the need for interventions that are locally relevant and socially embedded. Digital innovations such as mobile health platforms and online communities offer significant opportunities to enhance access to health information, but persistent digital divides risk exacerbating inequities. Systemic barriers—

including social inequality, inadequate infrastructure, and educational disparities—remain central challenges that hinder equitable health literacy development.

The urgency of addressing these barriers cannot be overstated, as limited health literacy is consistently linked to poorer health outcomes, reduced treatment adherence, and higher rates of hospitalization. Policies must prioritize inclusive, community-based educational programs, improved training for healthcare professionals in culturally sensitive communication, and the integration of equitable digital solutions to bridge gaps in access. Future research should expand the representation of vulnerable groups, explore the intersection of culture and literacy more deeply, and evaluate the long-term impact of health literacy interventions across different contexts. By emphasizing participatory approaches, culturally grounded strategies, and inclusive digital innovations, health systems can more effectively empower individuals and communities to achieve equitable and sustainable health outcomes. Limitations of this review include potential publication bias, language restriction to English, and the interpretive nature of narrative synthesis. These limitations may influence generalizability but do not diminish conceptual contributions.

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