

DOI: 10.5281/zenodo.19511897

HEALTH LITERACY AS CULTURAL CAPITAL FOR SUSTAINABLE COMMUNITY HEALTH: A SOCIO- CULTURAL SYNTHESIS

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Received: 21/01/2026

Accepted: 25/03/2026

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ABSTRACT

Despite growing recognition of its public health importance, health literacy continues to be conceptualized predominantly as an individual cognitive skill, with insufficient attention paid to the social networks, cultural contexts, and structural conditions through which health knowledge is acquired, shared, and applied. This systematic review and qualitative thematic synthesis, conducted in accordance with PRISMA 2020 guidelines, synthesized 62 peer-reviewed studies retrieved from Scopus, Web of Science, PubMed/MEDLINE, and Google Scholar (2000–2025) to reconceptualize health literacy as a form of cultural capital embedded within community health systems. Thematic synthesis identified three interdependent domains: cognitive health knowledge resources, encompassing the individual competencies required to access and critically appraise health information; social knowledge networks, through which health knowledge is distributed, mediated, and co-produced across families, peer groups, and community organizations; and culturally embedded health practices, which reflect the beliefs, traditions, and interpretive frameworks through which communities make sense of health and illness. Together, these domains constitute a multilayered community health knowledge ecosystem shaped by social inequality and cultural context. The findings indicate that health literacy disparities are not merely individual deficits but structural and relational phenomena. Sustainable improvements in community health require interventions that move beyond individual education to strengthen social networks, build institutional trust, engage local cultural knowledge systems, and address the upstream determinants that constrain health-related cultural capital.

KEYWORDS: Health Literacy, Cultural Capital, Bourdieu, Community Health, Socio-Cultural Determinants.

1. INTRODUCTION

Health literacy (HL) has emerged as a foundational concept in global public health, recognized for its pervasive influence on health outcomes, healthcare utilization, and health-related behaviors across diverse populations. Broadly defined as the capacity to access, understand, evaluate, and apply health information in ways that promote informed decision-making (Sørensen et al., 2012), health literacy shapes how individuals and communities engage with healthcare systems at every level. Evidence consistently demonstrates that those with limited health literacy face compounding disadvantages: they are significantly more likely to mismanage chronic conditions, misinterpret clinical instructions, and make less effective use of available health services (Berkman et al., 2011).

Early conceptualizations of health literacy were anchored firmly in an individual cognitive paradigm, equating it with the reading comprehension and numeracy skills required to understand medical texts and follow clinical instructions. This functional framing, while operationally convenient, reduced a multidimensional phenomenon to a set of discrete and measurable competencies. A significant reconceptualization came with Nutbeam's (2000) landmark framework, which distinguished three progressively advanced levels—functional, interactive, and critical health literacy—signaling an important shift from health literacy as mere skill toward health literacy as a capacity for personal and collective empowerment. This framework has since been elaborated and extended across two decades of scholarship (Nutbeam, 2008, 2017, 2019; Nutbeam & Lloyd, 2021a), progressively situating health literacy within broader social and institutional contexts.

Despite this conceptual progress, the dominant research tradition continues to treat health literacy primarily as an individual attribute to be measured, assessed, and remediated. Comparatively little attention has been paid to the social and cultural environments in which health information is encountered, interpreted, and acted upon. Yet health knowledge does not operate in a social vacuum; as Abel and Frohlich (2012) argue, it is consistently mediated through webs of social relationships, cultural norms, and institutional structures that vary substantially across communities. Addressing health literacy without accounting for these contextual factors risks reproducing an individualist framework that misidentifies systemic inequities as personal deficiencies.

A growing body of scholarship challenges this individualist bias by demonstrating that health

literacy is, in many respects, a collective and distributed phenomenon. Edwards et al. (2012) introduced the concept of distributed health literacy to describe how health knowledge is shared, negotiated, and co-produced within social networks—including families, peer groups, community organizations, and healthcare teams. Rather than residing exclusively within individuals, health literacy is carried and transmitted through these relational structures, which serve as critical conduits for interpreting health information, mediating institutional communication, and supporting health-related decision-making in everyday life.

Scholarship on the social determinants of health provides a complementary lens for understanding why health literacy is so unevenly distributed across populations. Health literacy is increasingly recognized as a social determinant of health in its own right—shaped by, and simultaneously shaping, broader structural factors such as educational attainment, socioeconomic position, language, and cultural context (Kickbusch et al., 2013). Inequalities in these upstream determinants translate into differential access to health information and unequal capacity to navigate health systems, thereby contributing to persistent and patterned disparities in health outcomes across social groups.

Theoretical resources from sociology offer a powerful framework for integrating these insights. Pierre Bourdieu's (1986) concept of cultural capital—encompassing the knowledge, skills, dispositions, and cultural competencies that individuals acquire through their social position and educational experiences—has been productively applied to health contexts. Health-related cultural capital comprises the embodied knowledge and communicative confidence that enable individuals to interpret medical information, engage effectively with healthcare professionals, and utilize health services in ways that align with institutional norms. Crucially, cultural capital is not randomly distributed; it accumulates along lines of social class, educational background, and cultural belonging, helping to explain why health literacy disparities so reliably track social inequality.

Reframing health literacy as cultural capital redirects analytical attention from individual cognitive deficits toward the socially embedded and collectively maintained knowledge systems that communities develop over time. Communities construct shared frameworks for understanding health and illness—frameworks that reflect their historical experiences, cultural values, and ongoing

relationships with healthcare institutions. These shared understandings profoundly shape how individual members encounter, evaluate, and respond to health information, as well as whether they adopt, adapt, or resist the health behaviors and interventions promoted by external authorities.

A further layer of complexity is introduced by the rapid proliferation of digital health information. Online platforms and social media have dramatically expanded the channels through which individuals access health knowledge, yet they have simultaneously amplified the circulation of health misinformation and deepened existing inequalities between digitally connected and digitally excluded populations (Norman & Skinner, 2006). Digital health literacy—the ability to locate, critically evaluate, and apply online health content—has consequently become an indispensable dimension of contemporary health-related cultural capital, particularly as communities increasingly turn to digital networks for guidance on health and illness.

Despite the convergence of evidence around these socio-cultural dimensions, the field remains theoretically fragmented. Public health research, medical sociology, and health communication scholarship have each developed distinct conceptual vocabularies and methodological traditions for investigating health literacy, often addressing overlapping questions without meaningful cross-disciplinary dialogue. This fragmentation has impeded the development of integrative frameworks capable of capturing the relational, cultural, and structural dimensions of health literacy in tandem, and has consequently limited the translation of theoretical insights into coherent and actionable public health policy.

This gap represents a critical impediment to the development of effective community health interventions—particularly in contexts where health literacy inequalities are entrenched and where conventional individually targeted approaches have demonstrably failed to produce equitable outcomes. Accordingly, this review aims to synthesize interdisciplinary evidence to reconceptualize health literacy as cultural capital embedded within community knowledge systems, and to examine its implications for the design of sustainable and equitable community health interventions. The relationships among the three analytical domains identified in this review are illustrated in Figure 1.

2. METHODS

This review followed the PRISMA 2020 guidelines for systematic reviews (Page et al., 2021). This

methodological framework was selected to ensure transparency, reproducibility, and rigor in the identification and selection of relevant literature. Given the interdisciplinary and theoretically complex nature of the research question, the review adopted a qualitative thematic synthesis approach, which enabled the integration of conceptual, empirical, and policy-oriented evidence from diverse disciplinary traditions into a coherent analytical framework. The synthesis was designed not merely to aggregate existing findings but to generate higher-order conceptual interpretations capable of advancing theoretical understanding of health literacy as a form of socially and culturally embedded knowledge.

2.1. Data Sources

A systematic literature search was conducted across four major electronic databases—Scopus, Web of Science, PubMed/MEDLINE, and Google Scholar—selected for their complementary disciplinary coverage spanning public health, biomedical sciences, social sciences, and health communication. The search was restricted to publications from 2000 to 2025, a period that encompasses both the consolidation of multidimensional health literacy frameworks following Nutbeam's (2000) foundational contributions and the subsequent emergence of socio-cultural, community-based, and digital health literacy perspectives that are central to this review.

2.2. Search Strategy

Search terms were constructed to capture the full conceptual breadth of the review, spanning individual-level, social, cultural, and community-oriented dimensions of health literacy. Primary search terms included “health literacy,” “distributed health literacy,” “community health literacy,” “cultural capital,” “socio-cultural determinants,” and “community health,” which were used both individually and in combination. Boolean operators (AND, OR) were systematically applied across title, abstract, and keyword fields to construct targeted search strings. Supplementary terms—including “eHealth literacy,” “health empowerment,” “health knowledge networks,” and “community-based health promotion”—were incorporated in secondary searches to ensure comprehensive coverage of related constructs. Reference lists of key articles were additionally hand-searched to identify any relevant studies not captured through the electronic database searches.

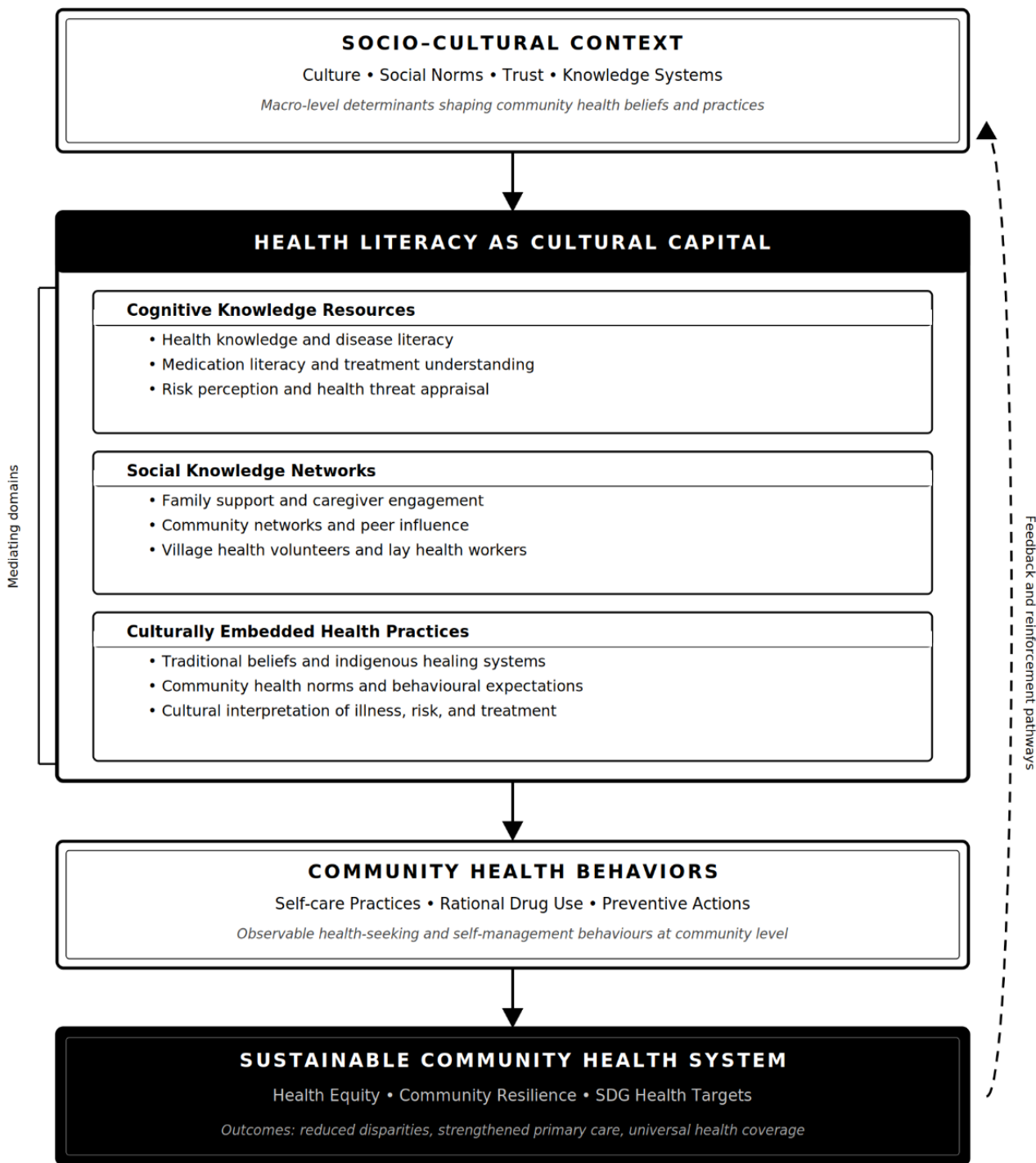


Figure 1: Conceptual Framework: Health Literacy as Cultural Capital for Sustainable Community Health.

The four domains – Cognitive Health Knowledge Resources, Social Knowledge Networks, Culturally Embedded Health Practices, and Digital Health Literacy – are depicted as overlapping circles within a larger oval representing the Community Health Knowledge Ecosystem. Two-way arrows between domains indicate dynamic interaction. The Ecosystem oval is embedded within a broader

rectangle labelled "Structural Determinants (Education, Socioeconomic Position, Language, Institutional Trust)" and Bourdieu's three capitals (embodied, objectified, institutionalized) are annotated as mechanisms running through all domains. HL = health literacy.

2.3. Inclusion Criteria

Studies were eligible for inclusion if they satisfied all of the following criteria: they addressed health literacy or related constructs, including distributed health literacy, eHealth literacy, health empowerment, or community health knowledge; they examined social, cultural, or structural determinants of health knowledge, health behavior, or healthcare utilization; they discussed community health practices, health-related behaviors, or health outcomes in relation to social or cultural factors; and they were published as peer-reviewed journal articles in the English language, encompassing any study design including conceptual analyses, systematic reviews, empirical studies, and policy analyses.

2.4. Exclusion Criteria

Studies were excluded from the review if they met any of the following conditions: they focused exclusively on the development or psychometric validation of clinical health literacy measurement instruments without engaging with social, cultural, or community-level dimensions; they did not engage with socio-cultural context, community settings, or structural determinants in their analysis or discussion of health literacy; or they were published in non-peer-reviewed formats, including editorials, opinion pieces, conference abstracts, book chapters, or grey literature reports without original empirical or theoretical contribution.

2.5. Study Selection

Study selection followed the four-phase PRISMA 2020 process. In the identification phase, all records retrieved from the four databases were compiled and de-duplicated using reference management software. During the screening phase, titles and abstracts were independently evaluated against the inclusion and exclusion criteria. Full-text articles were then retrieved for all potentially eligible records and subjected to comprehensive eligibility assessment. Decisions regarding borderline cases were resolved through discussion and consensus. The selection process yielded a final corpus of 62 studies that met all inclusion criteria and were retained for qualitative synthesis. It should be noted that this review was not prospectively registered in PROSPERO or an equivalent systematic review registry; this represents a limitation that should be considered when interpreting the findings.

2.6. Data Extraction and Synthesis

For each included study, data were systematically extracted using a standardized template covering study design and methodological approach; study

population, geographic context, and setting; theoretical or conceptual framework employed; and principal findings and conclusions relevant to health literacy, cultural capital, social knowledge networks, or community health. Extracted data were analyzed using a qualitative thematic synthesis approach, following the three-stage process described by Thomas and Harden (2008): (i) line-by-line coding of primary study findings; (ii) development of descriptive themes through the grouping of related codes; and (iii) generation of analytical themes representing higher-order conceptual interpretations that extended beyond the findings of individual studies. Thematic development was guided by the central research question concerning health literacy as a form of cultural capital embedded within community health systems. Throughout the synthesis process, attention was paid to convergence and divergence across studies, enabling the identification of robust patterns as well as context-specific variations in how health literacy operates as a social and cultural resource.

3. RESULTS

The systematic search yielded 842 records across the four databases. Following de-duplication, 610 records were screened by title and abstract, of which 146 were advanced to full-text review. After applying the inclusion and exclusion criteria, 62 studies were retained for qualitative thematic synthesis. The selection process is reported in accordance with PRISMA 2020 guidelines (Page et al., 2021) and a summary of included studies is presented in Appendix1.

The methodological and geographical diversity of the included studies strengthens the breadth and generalizability of this synthesis. Studies spanned conceptual and theoretical analyses, systematic reviews, cross-sectional surveys, longitudinal qualitative studies, and policy analyses (Appendix1), enabling the integration of evidence across epistemological traditions. Geographically, the literature encompassed North America, Europe, Asia, and global comparative contexts, providing a cross-cultural foundation for the theoretical framework developed here. The theoretical frameworks drawn upon across the included studies ranged from Nutbeam's (2000) functional-interactive-critical model and Sørensen et al.'s (2012) integrated health literacy model to Abel and Frohlich's (2012) cultural capital perspective and Edwards et al.'s (2012) distributed health literacy framework, as detailed in Table 1. A wide range of socio-cultural determinants identified across the

literature are summarized in Table 2. This diversity of methodological, geographic, and theoretical perspectives provided a rich empirical foundation from which to develop an integrated socio-cultural framework for understanding health literacy as cultural capital.

Thematic synthesis of the included studies revealed three major domains that characterize health literacy as a form of cultural capital embedded

within community health systems. These domains – cognitive health knowledge resources, social knowledge networks, and culturally embedded health practices—are analytically distinct but functionally interdependent, collectively illuminating how health literacy operates as a socially distributed and culturally conditioned resource rather than a fixed individual attribute. Each domain is discussed in turn below.

Table 1: Theoretical Frameworks of Health Literacy Identified in the Literature.

Framework / Model	Key Author(s)	Core Concept	Key Components	Relevance to Community Health
Functional-Interactive-Critical Health Literacy Model	Nutbeam (2000)	HL as progressive skills enabling empowerment	Functional, interactive, critical literacy	Supports community participation in health
Health Literacy Integrated Model	Sørensen et al. (2012)	HL as interaction between individuals and systems	Access, understand, appraise, apply health information	Explains HL within health systems
Health Literacy Pathway Model	Paasche-Orlow & Wolf (2007)	HL influences health outcomes through mediating pathways	Access to care, patient-provider interaction, self-care	Explains mechanisms linking HL to health outcomes
Distributed Health Literacy	Edwards et al. (2012)	HL distributed within social networks	Family knowledge sharing, peer support	Highlights collective knowledge processes
Public Health Literacy Model	Freedman et al. (2009)	HL applied to population-level decision making	Civic engagement, community participation	Supports public health policy and advocacy
Cultural Capital Perspective	Abel & Fröhlich (2012)	HL as cultural resource shaped by social inequality	Knowledge, social resources, cultural practices	Explains HL disparities across social groups
eHealth Literacy Model (eHEALS)	Norman & Skinner (2006)	HL in digital health environments	Information literacy, media literacy, digital literacy	Important in online health information era
Organizational Health Literacy Framework	Brach et al. / Dodson et al. (2015)	HL shaped by healthcare system communication	Accessible communication, patient-centered systems	Improves health system responsiveness
Critical Health Literacy Model	Sykes et al. (2023)	HL enabling civic engagement and empowerment	Critical evaluation of health information	Encourages community action
Social Determinants of Health Literacy Framework	Kickbusch et al. (2013)	HL shaped by social and structural determinants	Education, social environment, policy context	Links HL to health equity
Multidimensional Health Literacy Framework	Zarcadoolas et al. (2005)	HL as multidimensional literacy construct	Fundamental, science, civic, cultural literacy	Integrates science and culture
Health Literacy Questionnaire Framework	Osborne et al. (2013)	Operationalization of HL dimensions	Nine domains of HL capability	Measurement in population studies

Table 2: Socio-Cultural Determinants of Health Literacy.

Determinant Category	Key Factors	Description	Example Implications
Education	Educational attainment, literacy level	Education influence's ability to interpret health information	Higher education associated with higher HL
Socioeconomic status	Income, employment	Limited resources reduce access to health information	Low-income populations often have lower HL
Culture and belief systems	Traditional medicine beliefs, cultural norms	Cultural interpretation of illness and treatment	Beliefs may influence medication adherence
Language and communication	Language barriers, communication styles	Language differences affect comprehension of medical information	Immigrant populations may face HL challenges
Social networks	Family support, peer influence	Health knowledge often shared within social networks	Family members assist in health decision-making
Community knowledge systems	Local knowledge, community health workers	Communities develop shared health knowledge	Village health volunteers disseminate information
Trust in health institutions	Trust in healthcare providers and systems	Trust affects acceptance of medical advice	Low trust may reduce healthcare utilization
Media and digital information	Internet access, digital literacy	Digital platforms influence health information access	Digital HL important for evaluating online information
Healthcare system accessibility	Access to health services and providers	Limited access restricts exposure to health education	Rural areas may have limited HL resources

Policy and governance	Health literacy policy, public health programs	Policies influence health education and communication	National HL strategies improve population HL
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3.1. Cognitive Health Knowledge Resources

The first thematic domain encompasses cognitive health knowledge resources, which refer to the individual-level capacities required to access, critically appraise, and apply health-related information in everyday contexts. This domain corresponds most directly to the traditional conceptualization of health literacy, which has historically been operationalized as a measurable cognitive skill involving reading comprehension, numeracy, and the ability to interpret clinical and public health materials. Early studies treated these competencies primarily as stable individual attributes subject to standardized measurement (Berkman et al., 2011; Baker, 2006).

The most influential reconceptualization of this domain came through Nutbeam's (2000) progressive three-level framework, which distinguished functional, interactive, and critical health literacy as qualitatively different forms of engagement with health information. Functional health literacy encompasses the foundational skills required to comprehend written health materials and follow clinical instructions. Interactive health literacy involves the communicative and adaptive competencies that enable individuals to engage productively with healthcare providers, extract meaning from health encounters, and apply information across varying contexts. Critical health literacy, the most advanced level, enables individuals to critically evaluate health information in relation to social and political structures, and to participate actively in collective health decision-making. Crucially, this framework—subsequently elaborated in Nutbeam (2008, 2017, 2019) and reviewed comprehensively in Nutbeam and Lloyd (2021a)—reframes health literacy not as a deficit to be remediated but as a dynamic capacity that can be cultivated through enabling social and institutional conditions, supporting community participation and health empowerment.

Empirical evidence from the included studies consistently confirms the association between cognitive health knowledge resources and a wide range of health-related outcomes. Berkman et al. (2011) demonstrated in a large-scale systematic review that individuals with adequate health literacy are significantly more likely to engage in preventive health behaviors, maintain medication adherence, and navigate healthcare systems effectively.

Conversely, limited health literacy was associated with poor glycemic control among diabetes patients (Schillinger et al., 2002), increased hospitalization rates, and reduced uptake of health screening behaviors (Lee et al., 2015). At the population level, Rowlands et al. (2015, 2017) identified a consistent socioeconomic gradient in health literacy, with lower health literacy levels concentrated among groups with limited educational attainment and lower income—a pattern that aligns with findings from the large-scale European Health Literacy Survey (Sørensen et al., 2012, 2015) and reflects the role of structural determinants in shaping cognitive health knowledge resources.

Despite the robust empirical evidence linking cognitive competencies to health outcomes, a growing number of studies challenge the adequacy of purely individual-level frameworks. Paasche-Orlow and Wolf's (2007) pathway model illustrates that the relationship between health literacy and health outcomes is mediated through multiple pathways—including access to care, the quality of patient-provider interaction, and the capacity for self-care—none of which are reducible to individual cognitive skill alone. Zarcadoolas et al. (2005) similarly proposed a multidimensional framework that situates cognitive literacy alongside scientific literacy, civic literacy, and cultural literacy, arguing that health understanding is constituted by knowledge drawn from multiple domains simultaneously. Taken together, these studies indicate that cognitive health knowledge resources, while foundational, represent only one component of a broader and more complex health knowledge ecosystem.

A further extension of cognitive health knowledge resources has emerged in response to the digitalization of health information. Norman and Skinner's (2006) eHealth literacy model—operationalized through the eHealth Literacy Scale (eHEALS)—conceptualizes digital health literacy as the synthesis of traditional literacy skills with information literacy, media literacy, and computer literacy competencies applied to online health contexts. Studies by Okan et al. (2019) and Levin-Zamir and Bertschi (2018) identified digital health literacy as increasingly critical, particularly as individuals navigate complex and often unreliable online health information environments. Diviani et al. (2015) further demonstrated that higher health literacy is associated with greater capacity to

evaluate and resist health misinformation, a competency of growing salience in contexts marked by the rapid proliferation of unverified health content. The concept of eHealth literacy, as elaborated through the eHEALS model, has therefore become a constitutive element of contemporary health knowledge, particularly relevant in communities where digital platforms serve as primary channels for health information access.

Notwithstanding the importance of cognitive health knowledge resources, the reviewed literature consistently demonstrates that such competencies alone are insufficient to explain observed variations in health behaviors and health outcomes across social groups. Disparities in health literacy persist even after controlling for individual educational attainment (Sentell et al., 2017; Sentell & Braun, 2012), suggesting that structural and relational factors exert independent influence over health knowledge acquisition and application. This evidence underscores the need to extend analysis beyond the individual and into the social and cultural contexts in which health knowledge is developed, shared, and enacted. The following domain examines how social networks constitute a primary vehicle through which this collective dimension of health literacy is realized.

3.2. Social Knowledge Networks

The second thematic domain concerns the fundamental role of social knowledge networks in shaping health literacy. A substantial body of evidence challenges the assumption that health literacy is a purely individual attribute, demonstrating instead that health knowledge is routinely distributed, co-produced, and sustained across social networks comprising family members, peers, community leaders, local health workers, and healthcare professionals. This perspective represents a fundamental shift in the unit of analysis—from the individual to the network—with significant implications for how health literacy interventions should be designed and evaluated.

The concept of distributed health literacy, developed through longitudinal qualitative research by Edwards et al. (2012, 2015), posits that health knowledge is not simply held by individuals but is shared, negotiated, and transmitted across relational networks. In many contexts, individuals rely on trusted network members—whether family caregivers, peers, community health workers, or healthcare professionals—to interpret clinical information, provide advice, and support health-related decisions. This phenomenon is especially pronounced among populations with limited formal

education, language barriers, or restricted access to healthcare services (Wills, 2009), where the mediation of health literacy through social ties becomes not merely complementary but essential.

The mediating role of family networks in health literacy is particularly well documented. Qualitative studies reviewed here, including Edwards et al. (2015) and Wills (2009), consistently illustrate how family caregivers serve as active intermediaries between patients and healthcare systems—translating clinical instructions, managing medication schedules, accompanying patients to consultations, and helping to interpret and contextualize medical information. In these relational settings, health literacy ceases to be a property of an individual and becomes instead a shared household resource, distributed across caregiving relationships and sustained through ongoing dialogue and mutual support. The capacity of any given individual to make informed health decisions is therefore deeply contingent on the quality and health literacy of their immediate social network.

Beyond the household, community-level networks play an equally significant role in facilitating the circulation of health knowledge. Community health workers, peer health educators, village health volunteers, and local health advocates function as critical bridges between formal healthcare systems and community members, particularly in underserved or rural settings. As documented in studies reviewed here—including Freedman et al. (2009) and Kickbusch (2001)—these lay intermediaries translate complex biomedical information into culturally and linguistically accessible messages, and support individuals in applying health knowledge within the practical realities of their everyday lives. Their effectiveness derives precisely from their embeddedness within community social networks, which confers the cultural credibility and social trust necessary for health communication to be received and acted upon. Table 3 documents the key categories of community knowledge systems—including local knowledge, community health worker networks, and peer influence—as identified across the reviewed literature.

A cross-cutting determinant identified consistently across the included studies is the role of institutional trust in shaping the effectiveness of social knowledge networks. Kickbusch et al. (2013) and Sørensen et al. (2012) both highlight that communities characterized by high levels of trust in healthcare providers and public health institutions demonstrate greater engagement with health

information, higher uptake of preventive health behaviors, and stronger adherence to clinical recommendations. Conversely, historically rooted distrust of health systems—arising from experiences of institutional neglect, discrimination, or policy failures—can substantially undermine health communication efforts. As documented in Table 3, trust in health institutions is identified as a major socio-cultural determinant of health literacy, mediating the translation of health knowledge into health action at the community level.

The significance of social knowledge networks has been rendered particularly visible during infectious disease outbreaks and public health emergencies. Studies by Okan et al. (2020, 2022) and Okan and Bauer (2020), examining health literacy in the context of the COVID-19 pandemic, demonstrate that individuals' behavioral responses to public health guidance—including preventive measures such as vaccination uptake and physical distancing—were strongly shaped by the health literacy of their social networks, as well as by the level of trust they placed in governmental and institutional sources. Individuals with access to socially networked sources of health literacy were better positioned to critically evaluate rapidly evolving health information, to resist misinformation, and to translate evidence-based guidance into practice. These findings underscore the importance of conceptualizing health literacy as a dynamic, relational process that is continuously shaped and reshaped through social interaction, rather than as a static individual trait. Yet social networks do not operate in a cultural vacuum; the norms, beliefs, and interpretive frameworks that pervade these networks are themselves culturally constituted—a dimension explored in the third domain.

3.3. Culturally Embedded Health Practices

The third thematic domain concerns culturally embedded health practices, defined as the health-related knowledge systems, interpretive frameworks, and behavioral patterns that are anchored in shared cultural beliefs, traditions, and values. This domain directs analytical attention to the ways in which cultural context shapes not only what individuals know about health and illness, but how they make sense of that knowledge and the actions they consider appropriate or legitimate. Culture functions as a primary interpretive lens through which health information is encountered, evaluated, and integrated into everyday life—mediating the relationship between health knowledge and health behavior in ways that cannot be reduced to

individual cognition or social network dynamics alone.

Several studies included in the review document how communities maintain culturally specific frameworks for understanding the etiology of illness, the appropriateness of treatment options, and the legitimate role of healthcare institutions. Abel (2008) and Frohlich and Abel (2014) demonstrate that these cultural frameworks are not peripheral to health literacy—they are constitutive of it. Communities possess shared narrative explanations of illness causation that may draw on spiritual, environmental, ancestral, or biomedical concepts, and these narratives structure whether and how individuals seek care, the credibility they assign to different knowledge sources, and their willingness to engage with health promotion messages. As documented in Table 3, cultural and belief systems—encompassing traditional medicine beliefs, religious frameworks, and community health norms—represent a major category of socio-cultural determinants of health literacy.

One of the most consistently documented manifestations of culturally embedded health practices is the coexistence of traditional and biomedical health systems within the same communities. Across diverse geographic and cultural contexts, individuals integrate herbal remedies, spiritual healing practices, dietary prescriptions, and community-based healing rituals alongside biomedical treatment—not as a result of ignorance, but as an expression of culturally coherent health epistemologies that assign different forms of legitimacy to different healing traditions. Recognizing the validity and internal logic of these practices is therefore essential to understanding the health literacy of communities, and to designing health interventions that can engage productively with existing local knowledge systems rather than simply displacing them.

The concept of cultural capital provides an analytically powerful framework for theorizing these dynamics. Cultural capital refers to the knowledge, skills, dispositions, and social competencies that individuals accumulate through their socialization within particular cultural and class contexts (Bourdieu, 1986). When applied to health, cultural capital encompasses the embodied familiarity with biomedical concepts and institutional norms, the communicative confidence required to engage effectively with healthcare professionals, and the practical know-how needed to navigate healthcare systems. As Abel and Frohlich (2012) argue, and as Abel and Benkert (2022) have more recently

extended, health-related cultural capital is not equally distributed across social groups—it accumulates preferentially among those with higher educational attainment, greater socioeconomic resources, and closer alignment with the cultural norms of dominant healthcare institutions, thereby generating and reproducing health literacy inequalities across generations.

Evidence from the included studies corroborates this theoretical account. Individuals with greater health-related cultural capital—characterized by biomedical familiarity, communicative confidence, and informational access—demonstrate significantly higher rates of health service utilization, preventive health behavior engagement, and medication adherence (Abel & Frohlich, 2012; Chen et al., 2018). Conversely, individuals whose cultural backgrounds are less aligned with the dominant norms of biomedical healthcare systems face compounding barriers: their health knowledge may be dismissed or rendered invisible by healthcare providers, their communication styles may be misread as non-compliance, and their legitimate engagement with alternative health frameworks may be pathologized as lack of health literacy. Such dynamics reveal how the cultural capital framework exposes the structural and relational mechanisms through which health literacy inequalities are produced and sustained.

Cultural context also exerts a specific influence on attitudes toward pharmaceutical treatments and patterns of medication adherence—a dimension of health literacy with direct clinical relevance. Studies reviewed here document that in some communities, skepticism toward pharmaceutical interventions reflects not ignorance but historically grounded wariness of healthcare institutions, rooted in experiences of medical experimentation, inadequate informed consent, or systematic undertreatment. In others, cultural beliefs about bodily integrity, the appropriate relationship between individuals and medicinal substances, or the primacy of natural healing led to deliberate preferences for herbal, dietary, or spiritual interventions. Ishikawa and Yano (2008) demonstrate that communicative health literacy—the ability to engage in shared decision-making with healthcare professionals—is essential to bridging these cultural perspectives and supporting individualized, culturally sensitive medication management.

The literature further demonstrates that culturally responsive health communication strategies significantly enhance the effectiveness and reach of health promotion interventions. Sykes et al. (2023) show that critical health literacy approaches—which

engage communities as active agents in the analysis and transformation of health-relevant social conditions—achieve substantially greater acceptance and sustained behavior change than messaging that fails to account for local cultural frameworks. Kickbusch and Maag (2008) and Kickbusch (2021) similarly argue that health literacy should be treated as a societal asset and governance priority, with policy interventions designed to strengthen the cultural and social resources through which communities build, sustain, and mobilize health knowledge. Programs that integrate culturally relevant content, community co-design, and respect for local knowledge systems not only improve health communication outcomes but also contribute to the long-term sustainability of community health systems, as reflected in the community knowledge system determinants summarized in Table 3.

3.4. Integrating The Thematic Domains

The three thematic domains identified through this synthesis—cognitive health knowledge resources, social knowledge networks, and culturally embedded health practices—are analytically distinct but functionally interdependent. Cognitive resources provide the informational substrate upon which health decisions are built, yet their acquisition and application are consistently shaped by the social networks through which health information is shared and negotiated, and by the cultural frameworks through which it is interpreted and assigned meaning. Social networks amplify, filter, and translate health knowledge across community boundaries, while cultural contexts determine the normative and relational conditions under which such knowledge is regarded as credible, actionable, and worthy of adoption. No single domain operates in isolation; rather, they interact dynamically within a complex community health knowledge ecosystem that reflects the intersection of individual capacities, relational resources, and structural determinants.

The integration of these domains across the reviewed literature points toward a reconceptualization of health literacy as a form of cultural capital that is simultaneously cognitive, social, and cultural in character. This synthesis aligns closely with the frameworks presented in Table 2—from the Health Literacy Pathway Model (Paasche-Orlow & Wolf, 2007), which maps the mediating mechanisms connecting health literacy to health outcomes, to the Cultural Capital Perspective (Abel & Frohlich, 2012), which situates health literacy within structures of social inequality, and the Social Determinants of Health Literacy Framework

(Kickbusch et al., 2013), which embeds health literacy within education, policy, and institutional context. Effective health promotion strategies must therefore address not only individual knowledge deficits but also the relational, cultural, and structural environments that condition how health information is received, interpreted, and translated into health-sustaining action. Organizational health literacy approaches – as articulated by Dodson et al. (2015) – further emphasize that healthcare systems themselves bear institutional responsibility for creating accessible, culturally responsive, and patient-centered communication environments that meet communities where they are.

This synthesis underscores that a socio-cultural perspective on health literacy is not merely a theoretical refinement but a practical imperative. By situating health knowledge within the social networks that sustain it and the cultural frameworks that give it meaning, this review identifies the mechanisms through which health literacy inequalities are produced, reproduced, and potentially transformed. Communities that are supported in developing and mobilizing shared health knowledge – through culturally appropriate communication, strengthened social networks, and institutional trust – are better positioned to achieve sustainable improvements in population health. These insights provide an empirical foundation for the policy and practice recommendations elaborated in the discussion that follows.

4. DISCUSSION

The three-domain framework emerging from this synthesis advances a reconceptualization of health literacy that challenges both its theoretical foundations and its practical applications. By demonstrating that cognitive competencies, social networks, and cultural practices are not independent variables but mutually constitutive dimensions of a single knowledge ecosystem, the findings contribute to a growing body of scholarship that repositions health literacy as a structural and relational phenomenon rather than an individual trait. This theoretical shift carries profound methodological implications: it challenges the dominant measurement paradigm that reduces health literacy to individually administered screening scores, and demands instead frameworks capable of capturing the distributed, culturally embedded, and institutionally shaped processes through which health knowledge is collectively generated, contested, and applied. The discussion that follows interprets these findings in relation to key theoretical

frameworks, extracts implications for policy and practice, and identifies the principal limitations of the review.

The persistence of individually oriented health literacy models in both research and clinical practice reflects a broader tendency in biomedicine to locate health problems – and their solutions – within individuals rather than within the social and structural conditions that produce them. While functional health literacy competencies undeniably influence health outcomes, as demonstrated by Berkman et al. (2011), Schillinger et al. (2002), and multiple subsequent studies, the evidence reviewed here shows consistently that these individual-level effects are moderated and mediated by social and cultural factors that are not captured by conventional measurement approaches. The Health Literacy Questionnaire (HLQ) developed by Osborne et al. (2013), which operationalizes nine distinct HL domains including social support and engagement with healthcare providers, represents an important step toward a more multidimensional measurement approach. Nevertheless, existing instruments still largely fail to capture the fundamentally relational character of health literacy as it operates within communities and across social networks. This gap between the complexity of health literacy as a lived social phenomenon and the reductionism of existing measurement tools constitutes one of the most pressing methodological challenges in the field.

The application of Bourdieu's (1986) cultural capital framework to health literacy, as advanced theoretically by Abel and Frohlich (2012) and extended more recently by Abel and Benkert (2022) and Frohlich and Abel (2014), provides a powerful analytical lens for understanding why health literacy disparities so reliably track patterns of social inequality. Health-related cultural capital – encompassing biomedical familiarity, communicative confidence, institutional navigational competence, and the internalized dispositions that enable effective engagement with healthcare systems – is not randomly distributed across populations. It accumulates preferentially among those with higher educational attainment, greater economic resources, and closer cultural alignment with the norms of dominant healthcare institutions. This accumulation is self-reinforcing: individuals with greater health-related cultural capital are better positioned to benefit from health information and services, thereby widening the gap with those who lack equivalent resources. Critically, this theoretical perspective shifts analytical responsibility from individuals who lack health

literacy to the social structures and institutions that produce and reproduce those deficits—a shift with profound implications for how health literacy interventions should be designed, targeted, and evaluated.

The distributed health literacy framework developed by Edwards et al. (2012, 2015) further advances the reconceptualization of health literacy by foregrounding the relational and networked processes through which health knowledge is shared, negotiated, and co-produced within communities. Where the cultural capital perspective emphasizes the social structuring of individual competencies, the distributed health literacy model attends to the active processes through which health knowledge circulates across social ties—through family caregiving relationships, peer support networks, community health worker intermediaries, and digital social communities. These processes are not merely supplementary to individual health literacy; in many contexts, they are its primary vehicle. Studies by Wills (2009) and Edwards et al. (2015) demonstrate that for many populations—including the elderly, migrants, individuals with limited formal education, and those managing chronic conditions—the quality and health literacy of their social networks may be a more decisive determinant of health behavior than their own measured health literacy level. This finding has direct implications for how community-based health promotion programs should be conceptualized: not as vehicles for raising the health literacy of isolated individuals, but as interventions that strengthen the social and relational structures through which health knowledge collectively flourishes.

The third dimension of the reconceptualization advanced by this review—culturally embedded health practices—has important implications for understanding both the causes of health literacy inequalities and the conditions under which health interventions can achieve sustained community impact. The evidence reviewed here consistently demonstrates that cultural beliefs, values, and healing traditions are not obstacles to health literacy but constitute legitimate and internally coherent knowledge systems through which communities make sense of health and illness. Treating cultural health practices as deficits to be corrected, rather than resources to be engaged, has historically undermined the effectiveness and acceptance of health promotion efforts. Institutional trust—identified across multiple studies as a critical mediating variable linking cultural context to health literacy outcomes (Kickbusch et al., 2013; Sørensen et al., 2012)—is itself

a product of the historical relationship between communities and healthcare institutions, and cannot be assumed or manufactured through communication alone. Building institutional trust requires sustained, respectful, and participatory engagement with communities over time—engagement that acknowledges the validity of local knowledge systems and treats communities as co-producers of health knowledge rather than as passive recipients of biomedical expertise. As Sykes et al. (2023) demonstrate, critical health literacy approaches that empower communities to analyze the social determinants of their health, and to take collective action in response, achieve substantially greater and more durable outcomes than those premised on one-way knowledge transmission.

The integrated findings of this review carry clear and concrete implications for public health policy and practice. The three-domain framework illustrated in Figure 1 provides an actionable map for intervention design: cognitive resources, social networks, and cultural practices must be addressed simultaneously rather than in isolation. At the programmatic level, health literacy interventions must be redesigned to move beyond individual knowledge transfer toward approaches that deliberately strengthen the social networks, community institutions, and cultural knowledge systems through which health literacy is collectively sustained. This includes investing in community health worker programs that recruit, train, and support individuals who are already embedded within target communities; developing health communication materials that are not merely translated but genuinely co-designed with communities to reflect local cultural frameworks; and creating peer education platforms that harness the demonstrated power of social networks as vehicles for health knowledge dissemination. At the systems level, Dodson et al.'s (2015) organizational health literacy framework provides a practical roadmap for making healthcare institutions themselves more health literacy responsive—through accessible communication practices, culturally competent clinical interactions, and patient-centered service designs that reduce the burden placed on individuals with limited health literacy. Kickbusch (2021) and Sørensen (2017) further emphasize that health literacy must be integrated as a governance priority within national health systems, with dedicated policy frameworks, accountability mechanisms, and intersectoral strategies that address the upstream educational, socioeconomic, and digital determinants

documented in Table 3.

Several limitations of this review should be acknowledged. First, the restriction of the search to English-language publications may have excluded relevant research conducted in other languages, particularly studies from contexts in Asia, Latin America, and sub-Saharan Africa where community health literacy dynamics may take distinctive forms. Second, the heterogeneity of methodological approaches—spanning conceptual analyses, systematic reviews, cross-sectional surveys, and qualitative studies—limits the comparability of findings and precludes quantitative meta-analytic synthesis. Third, as a qualitative thematic synthesis, the review reflects the interpretive judgments of the analytical process; while efforts were made to ensure systematic and transparent coding, the thematic categories identified should be understood as constructs that reflect particular theoretical commitments rather than as natural or exhaustive divisions of the literature. Fourth, the rapid pace of change in digital health environments means that some findings related to eHealth literacy and online health information access may require updating as this field evolves. These limitations notwithstanding, the breadth and disciplinary diversity of the included literature provide a robust empirical foundation for the conceptual framework advanced here. A further consideration concerns reflexivity: the interpretive lens applied in this synthesis reflects a critical social science perspective that foregrounds structural and relational determinants of health. While this perspective enables a nuanced account of how inequality shapes health literacy, it may place comparatively less emphasis on clinical or behavioral dimensions. Readers should interpret the findings in light of this analytical orientation, recognizing that alternative theoretical traditions—including cognitive and biomedical approaches—offer complementary insights that this synthesis does not fully address.

Future research should pursue several directions suggested by this synthesis. Methodologically, there is a pressing need to develop and validate measurement tools that move beyond individual screening instruments toward assessments capable of capturing the relational, distributed, and culturally embedded dimensions of health literacy at the community level. Instruments that measure the health literacy capacity of social networks, the cultural responsiveness of healthcare institutions,

and the community-level accumulation of health-related cultural capital would substantially advance the field. Substantively, longitudinal research designs are needed to trace the dynamic processes through which health literacy develops, is transmitted across social generations, and responds to health system and policy interventions over time. Comparative cross-cultural studies—particularly those conducted in partnership with communities in low- and middle-income countries—would enrich understanding of how health literacy as cultural capital manifests across diverse structural and epistemic contexts. Finally, intervention research should evaluate community-based health literacy programs that explicitly operationalize the socio-cultural framework advanced here, testing whether approaches that engage social networks and cultural knowledge systems as assets produce more equitable and sustainable health outcomes than conventional individually targeted approaches.

5. CONCLUSION

This review reconceptualizes health literacy as a form of cultural capital—encompassing embodied, objectified, and institutionalized dimensions—embedded within the social networks, interpretive frameworks, digital environments, and structural conditions through which communities develop and apply health knowledge. The four interdependent domains identified—cognitive health knowledge resources, social knowledge networks, culturally embedded health practices, and digital health literacy—constitute a community health knowledge ecosystem shaped by structural inequality rather than individual deficit. Empirical evidence consistently demonstrates that health literacy disparities are relational and structural phenomena, reproduced through unequal distributions of cultural capital across social groups. Achieving equitable and sustainable community health outcomes requires a fundamental shift: from correcting individual knowledge gaps toward strategies that strengthen social networks, honour cultural knowledge systems, expand digital equity, build institutional trust, and dismantle upstream structural conditions. Developing community-sensitive measurement tools and co-designed, culturally responsive interventions remains the field's most urgent priority.

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